

BARTLETT, WALTER CLAUDE, Ph.D. Dual Credit/Concurrent Enrollment Initiatives: A Study of Influences on Students' Postsecondary Decisions. (2008)  
Directed by Dr. Gerald Ponder. 318 pp.

This study focused on three major areas of influence on students' postsecondary decisions as related to the DCCE initiatives: the knowledge-base of the students and their advisors, the college enrollment aspirations for the students, and the students' college planning practices. The research investigated whether these elements are being addressed by the DCCE initiatives and the level of effectiveness of any efforts to address these major areas of influence on students' postsecondary decisions.

The study was a three-phase, mixed methods study using participant data from students from nine North Carolina community colleges. The first phase involved a student database search; the second phase involved a combined student interview, which represented the first data collection methodology used in the study, and the third phase was the administration of an individual student questionnaire.

The research revealed that there are several major influences on the students' decisions regarding enrolling in DCCE courses. The primary influence was the students' parents. Other helpful and influential sources of information in the students' DCCE enrollment decisions were student advisors such as teachers. Students' decisions regarding DCCE participation also were influenced by knowledge of tuition-waived college credit, transferability of college courses, getting an early start on college courses, and a quicker pathway to career goals.

A majority of the respondents felt that their pre-DCCE level of understanding of how they could apply their DCCE experience to achieve their college goals was very

high. Only half of the respondents reported knowing where they wanted to go to college or what they wanted to study once they graduated from high school before they started taking DCCE courses, and a majority of the respondents did not start planning for college until their sophomore or junior year of high school. A majority of the respondents were already taking DCCE courses when they developed their college goals. The data suggest that the students' college goals actually evolved throughout their DCCE experience via their participation in the DCCE program.

DUAL CREDIT/CONCURRENT ENROLLMENT INITIATIVES: A STUDY OF  
INFLUENCES ON STUDENTS' POSTSECONDARY DECISIONS

by

Walter Claude Bartlett

A Dissertation Submitted to  
the Faculty of The Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

Greensboro  
2008

Approved by

---

Committee Chair

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of  
The Graduate School at The University of North Carolina at Greensboro.

Committee Chair \_\_\_\_\_  
Dr. Gerald Ponder

Committee Members \_\_\_\_\_  
Dr. David Ayers

\_\_\_\_\_  
Dr. Kenneth Boham

\_\_\_\_\_  
Dr. Donald Cameron

\_\_\_\_\_  
Date of Acceptance by Committee

\_\_\_\_\_  
Date of Final Oral Examination

## ACKNOWLEDGMENTS

First and foremost, I would like to recognize my dissertation chair, Dr. Gerald Ponder, for the dedication, guidance, and patience he provided throughout my years in the program, support that continued even as he moved to a different institution. Thanks also need to be extended to Dr. David Ayers, Dr. Kenneth Boham, and Dr. Donald Cameron for agreeing to serve as committee members. They did not hesitate to undertake this extra work to help me successfully complete this dissertation.

I would also like to express my appreciation to the presidents of the nine community colleges that participated in this research study: Dr. Ralph Soney (Roanoke-Chowan Community College), Dr. William Aiken (Sampson Community College), Dr. Douglas Eason (Mitchell Community College), Dr. Jim Burnett (Western Piedmont Community College), Dr. Kay Albertson (Wayne Community College), Dr. Phail Wynn, Jr. (Durham Technical Community College), Dr. Dennis Massey (Pitt Community College), Dr. Gary Green (Forsyth Technical Community College), and once again Dr. Donald Cameron (Guilford Technical Community College).

Finally, I would like to offer a very special thanks to my wife, Melissa, my friend, my editor, and my fellow educator whose knowledge and conversations about education truly helped me through the doctoral coursework.

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	viii
CHAPTER	
I. INTRODUCTION .....	1
Purpose of the Study .....	4
Research Questions .....	5
Definition of Terms .....	5
Significance of the Study .....	6
Theoretical Framework .....	6
Procedures .....	10
Limitations .....	13
II. REVIEW OF THE LITERATURE .....	18
Dual Credit/Concurrent Enrollment .....	18
Program Quality .....	18
Program Benefits/Concerns .....	23
Administrative Logistics .....	33
Middle and Early Colleges .....	44
Related Studies .....	58
III. METHODOLOGY .....	65
College Selection .....	66
Student Selection .....	71
Institutional Review Board .....	76
Data Sources .....	78
Data Analysis .....	94
External Validity .....	97
Internal Validity .....	97
IV. RESULTS .....	99
Introduction .....	99
Combined Student Interview Analysis .....	101
Research Question #1: Influences of Students' Academic Goals .....	102

	Page
Research Question #2: DCCE Level of Understanding of Participating Students .....	107
Research Question #3: DCCE Level of Understanding of Participating Students' Academic Advisors .....	108
Research Question #4: Significant Events and factors of Students' DCCE Planning Process .....	113
Individual Student Questionnaire Analysis .....	115
Research Question #1: Influences of Students' Academic Goals .....	118
Research Question #2: DCCE Level of Understanding of Participating Students .....	136
Research Question #3: DCCE Level of Understanding of Participating Students' Academic Advisors .....	147
Research Question #4: Significant Events and factors of Students' DCCE Planning Process .....	173
Summary .....	183
 V. INTERPRETATIONS AND CONCLUSIONS.....	 185
Findings.....	186
Research Question #1: What were the influences on the academic goals of the students?.....	186
Research Question #2: What understanding did the participating students have of the DCCE possibilities? .....	187
Research Question #3: What understanding of the DCCE possibilities were held by the students' advisors, including friends, parents, middle and high school counselors, and community college liaisons? .....	188
Research Question #4: What were the important events and factors in the DCCE planning process for the students?.....	188
Interpretations .....	189
Implications .....	194
Implications for Policy.....	194
Implications for Practice .....	197
Recommendations for Further Research.....	201
Conclusion .....	203
 BIBLIOGRAPHY .....	 205
 APPENDIX A. INDIVIDUAL STUDENT QUESTIONNAIRE.....	 224

	Page
APPENDIX B. NCCCS ANNUALIZED CURRICULUM AND CONTINUING EDUCATION FULL-TIME EQUIVALENT (ANNTBL26) REPORT .....	230
APPENDIX C. COUNTIES OF NORTH CAROLINA.....	234
APPENDIX D. PRESIDENTIAL INVITATION LETTER.....	236
APPENDIX E. EXAMPLE PRESIDENTIAL SUPPORT LETTER.....	238
APPENDIX F. COMMUNITY COLLEGE INFORMATION DOCUMENT .....	240
APPENDIX G. RESEARCH CONFIDENTIALITY DOCUMENT.....	242
APPENDIX H. EMAIL CORRESPONDENCE TO COMMUNITY COLLEGE DATATEL CONTACT PERSONNEL .....	245
APPENDIX I. DATATEL QUERY STATEMENTS INFORMATION SHEET.....	247
APPENDIX J. EXAMPLE RESEARCH RANDOMIZER RESULTS .....	249
APPENDIX K. INVITATION LETTER TO STUDENTS: FOCUS GROUP INTERVIEWS.....	251
APPENDIX L. PARTICIPANT CONSENT FORM: FOCUS GROUP INTERVIEWS.....	254
APPENDIX M. FOCUS GROUP TELEPHONE SCREENING SCRIPT.....	256
APPENDIX N. FOCUS GROUP PROTOCOL SCRIPT.....	261
APPENDIX O. STUDENT PARTICIPANT INVITATIONAL COVER LETTER .....	268
APPENDIX P. STUDENT PARTICIPANT CONSENT FORM .....	270
APPENDIX Q. REMINDER POSTCARDS .....	273



	Page
APPENDIX R. INDIVIDUAL STUDENT QUESTIONNAIRE RESPONSES SPREADSHEET .....	275
APPENDIX S. DEMOGRAPHICS QUESTIONS RESULTS .....	316

## LIST OF TABLES

	Page
Table	
1 Community Colleges Per Category .....	66
2 Community Colleges' Characteristics .....	68
3 Number of Student Names Identified Per Community College .....	74
4 Questionnaire Return Rates .....	90
5 Five-Option Likert Scales and Numeric Values .....	118
6 Numbering Schema for Questions 7 and 9—Individual Student Questionnaire .....	127
7 Level of Influence on Academic Goal Development: Overall Respondents .....	127
8 Level of Influence on Academic Goal Development: Male Respondents.....	128
9 Level of Influence on Academic Goal Development: Female Respondents .....	129
10 Level of Influence on Academic Goal Development: Public School Respondents .....	130
11 Level of Influence on Students' Awareness of the DCCE Initiative: Overall Respondents .....	131
12 Level of Influence on Students' Awareness of the DCCE Initiative: Male Respondents .....	131
13 Level of Influence on Students' Awareness of the DCCE Initiative: Female Respondents .....	132
14 Level of Influence on Students' Awareness of the DCCE Initiative: Public School Respondents .....	133
15 Numbering Schema for Questions 6—Individual Student Questionnaire .....	138

	Page
16 Level of Understanding of How DCCE Course Help College Goals: Overall, Female and Male Respondents .....	139
17 Level of Understanding of How DCCE Course Help College Goals: Secondary School Respondents .....	140
18 Perceptions of Friends’ Level of Understanding of DCCE Initiative: .....	151
19 Responses Per Academic Advisors and Percentage of Overall Respondents .....	152
20 Numbering Schema for Questions 12 and 13—Individual Student Questionnaire .....	156
21 Level of Understanding of DCCE Initiative: Overall Respondents .....	156
22 Level of Understanding of DCCE Initiative: Private School Respondents .....	158
23 Level of Understanding of DCCE Initiative: Home Schooled Respondents .....	158
24 Level of Understanding of DCCE Initiative: Public School Respondents .....	159
25 Level of Understanding of DCCE Initiative: Female Respondents .....	159
26 Level of Understanding of DCCE Initiative: Male Respondents .....	160
27 Level of Connection of DCCE Initiative and Academic Goals: Overall Respondents .....	161
28 Level of Connection of DCCE Initiative and Academic Goals: Private School Respondents .....	161
29 Level of Connection of DCCE Initiative and Academic Goals: Home Schooled Respondents .....	162
30 Level of Connection of DCCE Initiative and Academic Goals: Public School Respondents .....	162

	Page
31 Level of Connection of DCCE Initiative and Academic Goals: Female Respondents .....	163
32 Level of Connection of DCCE Initiative and Academic Goals: Male Respondents .....	163
33 Grade Level of Initial College Planning: Overall Respondents.....	174
34 Grade Level of Initial College Planning: Per Gender.....	174
35 Grade Level of Initial College Planning: Per Secondary School Category .....	176

## **CHAPTER I**

### **INTRODUCTION**

North Carolina high school students have numerous educational opportunities. One of these opportunities is the ability to take college-level coursework tuition-waived through the state's dual credit and concurrent enrollment (DCCE) initiatives while in high school.

There are only subtle differences between the two elements of the DCCE initiatives. In North Carolina both dual credit and concurrent enrollment provide high school students the opportunity to take college-level courses without having to pay tuition while accumulating college credit before graduating from high school. In North Carolina the dual credit element of the DCCE initiatives is referred to as the Huskins Program, named after the late Iredell County legislator Joseph Patterson Huskins. When high school students successfully complete a Huskins course, they are awarded high school and college credit and both the high school and the community college are allowed to report the student's seat time for funding purposes. In concurrent enrollment courses, by contrast, the high school students are guaranteed only college credit for the class, not high school credit. High school principals do have the authority to award the student high school credit for successfully completing the concurrent enrollment course; however, this has to be applied on an individual student basis and not as a systemic part of the concurrent enrollment initiative.

Another major difference between Huskins and concurrent enrollment courses is the way that they are scheduled. Huskins classes are specifically scheduled to adhere to the bell schedule of the high schools, which allows the high school students to take these college-level courses during their normal school day. Concurrent enrollment courses are regularly scheduled college courses that are designed to meet the academic needs of the community college students currently enrolled at the community college. Most high school students enrolled in concurrent enrollment courses are taking the courses after their normal high school day, and they can enroll in any course the college offers as long as they meet the prerequisites for the course and they have their principal's permission. There are times when the high school students can get their principal's permission and the community college course happens to fit into their high school schedule; in these situations the students can take the community college course as a concurrent enrollment class during their normal high school day, but it's a lucky accident and not by design.

The third major difference between Huskins and concurrent enrollment courses is that high school students are provided the first opportunity to enroll and occupy the limited seats available in the Huskins courses. In contrast, North Carolina Administrative Code 2C.0305 (d), which defines the operational procedures and policies that govern the North Carolina Community College System, states high school students cannot displace adult students in regular community college courses. This means a high school student wanting to enroll in a college level course via concurrent enrollment cannot occupy a seat in the class if there is an adult student needing or wanting that same seat. Although this is legislatively mandated, it is very seldom adhered to due to the logistical implications

involved in tracking the types of students enrolled in every community college course, the numbers of which are vast.

DCCE initiatives are one of many college preparatory programs that have been developed and are administered throughout the nation. Other college preparatory programs include Advanced Placement courses, International Baccalaureate programs, Upward Bound, and Gear-Up (Gaining Early Awareness and Readiness for Undergraduate Programs). All of these programs have one main purpose, and that is to increase the number of high school graduates that continue their education at an institute of higher learning. There are two programs that are gaining momentum and represent strong collaborative efforts between secondary institutions and institutes of higher learning and these programs are middle and early colleges. Both of these collaborative programs draw heavily from the DCCE initiatives and are set apart from other college preparatory programs in that the high school students for both of these programs are taught full-time on the campus of the postsecondary institution. The difference in the two collaborative programs is in terms of their overall goals. The goal of the middle college program is to make sure the high school graduates of the program have some college credit that can be applied to a two or four-year college degree. The overall goal of the early college program is to guarantee that when the student graduates from high school, they will also be graduating with an associate's degree or at least their first two years of a four year degree. For the early college program to make this guarantee to the students, a majority of these programs require the students to be in the program for five years beyond the eighth grade.

To ensure students' post-high school academic success, college preparatory programs such as the DCCE initiatives must factor in a targeted student population's postsecondary decision-making influences. This means deliberately developing and administering intervention strategies that will address any identified deficiencies in these influences in the students' life which could be detrimentally to the students' basic knowledge of college, college aspirations, and college planning practices. Bonous-Hammarth and Allen (2005) clearly report that partnerships between secondary and postsecondary institutions that result in sustained intervention activities are critically important and must engage "teachers, students, and parents in these interventions" (p. 168).

### **Purpose of the Study**

The purpose of this study was to ascertain the influential elements on a student's postsecondary decision-making process. This study focused on three major spheres of influence on students' postsecondary decisions as related to the DCCE initiatives: the students' basic college knowledge and that of their advisors, the students' college enrollment plans/hopes, and the students' college planning practices. The research investigated to see not only if these influential decision-making elements are being addressed by the DCCE initiatives, but also the level of effectiveness of these influences in terms of the three major areas: the students' basic knowledge of college, college aspirations, and college planning practices.



### **Research Questions**

The guiding question of this research study was: *What were the major influences on students' decisions regarding enrolling in DCCE courses?*

The following research questions were used to respond to this study's guiding question:

1. What were the influences on the academic goals of the students?
2. What understandings did the participating students have of the DCCE possibilities?
3. What understandings of the DCCE possibilities were held by the students' advisors, including friends, parents, middle and high school counselors, and community college liaisons?
4. What were the important events and factors in the DCCE planning process for the students?

### **Definition of Terms**

*Concurrent or Dual Enrollment*: "A process by which a student is enrolled simultaneously, usually at different educational levels, for training or courses of study" (Fincher-Ford, 1997, p. 7).

*Cultural Capital*: "considered cultural capital as a set of cultural knowledge, skills, and abilities that are possessed and often inherited by certain groups in society" (Bourdieu, 1986, p. 15); "a set of high-status linguistic and cultural competencies that children inherit from their families" (Corwin, Colyar, & Tierney, 2005, p. 33)

*Dual Credit*: "...secondary students enrolled in college credit classes who receive both college credit and credit toward meeting secondary school requirement for graduation" (Andrews, 2001, p. 5).

### **Significance of the Study**

One of the major movements in public education today is the high school reform movement and one of the major elements associated with this movement is providing each high school student with a smooth transition to an institution of higher learning. This study is both important and significant in that it will begin to provide insight into why high school students choose the DCCE courses that they do and what impact the various influential groups of the students have on those decisions. North Carolina alone is dedicating an enormous amount of time, energy and resources to support the various DCCE initiatives throughout the state and it is imperative that these types of studies occur to ensure that the state's DCCE initiatives are effective, efficient and equitably available to all high school students. The only way DCCE initiatives will be able to be effective, efficient, and equitable for all high school students is to ensure that the cultural capital of these high school students and their families is increased accordingly.

### **Theoretical Framework**

The research proposed herein is based on a theoretical framework that posits that a high school student's cultural capital is critical in addressing three areas of the high school student's knowledge of college: (a) their basic college knowledge and that of their advisors, (b) their college enrollment plans/hopes, and (c) their actual college planning practices. Bourdieu (1986) indicated that students from families with higher

socioeconomic backgrounds have higher levels of cultural capital which is positively associated with participation in college preparatory activities and programs and in turn higher levels of enrollment at a postsecondary institution. Bourdieu's implication is that students and parents from lower socioeconomic backgrounds are less likely to be aware of and participate in college preparatory programs such as the DCCE initiatives.

Students' cultural capital is paramount in determining if, how, and when students are influenced to participate in college preparatory activities, such as DCCE initiatives, and then continue on to a postsecondary institution. This cultural wealth encompasses the students' family and peers and is heavily influenced by both the students' middle and high school counselors. DCCE initiatives have many benefits, but the most commonly cited benefit is the increase in the college-going rate of high school graduates (Andrews, 2001; Boswell, 2001; Chapman, 2001; Girardi & Stein, 2001; Joyce, 2001; Lords, 2000). The researcher's theoretical framework hypothesizes that all students will only realize this benefit when planners and developers of DCCE initiatives develop strategies to help increase the cultural capital of middle and high school students and their families and peers.

The cultural capital of the family is important because, as Tierney and Auerbach (2005) indicated, the family and, more specifically, the parents' education, educational goals and encouragement are major predictors of whether or not a student participates in college preparatory activities and matriculates into a postsecondary institution. The primary element of a parent's cultural capital is knowledge of and experience with institutions of higher learning (McDonough, 2005). Parental knowledge of institutions of

higher learning in terms of college access, the importance and significance of college degrees, and general procedures and policies relating to the collegiate academic and financial environment is extremely influential in the collegiate goals and decisions of high school students (Delgado-Gaitan, 1992; McDonough, 1997; Tierney & Auerbach, 2005). The cultural capital of the parents will also determine how early they begin encouraging their students to start preparing for college both academically and financially, and the middle and high school counselors must play a major role in providing students and parents support and timely information and resources (Fallon, 1997; McDonough, 2005; Piaget, 1991). The impact of these factors is heightened in families of lower socioeconomic status because of the needed sacrifices in time and money and the unfamiliarity of the collegiate environment which could provoke parental resistance that would potentially eliminate the students' participation in DCCE initiatives (Tierney & Auerbach, 2005).

The peer and social networks of students also play a significant factor in the overall cultural capital of the students. Krauss (1964) indicated "those without friends planning to go to college were less likely to make college plans—only 10% compared to more than 80% among students with college-going friends" (p. 874). The friends and peers of students truly influence their cultural capital and have the potential of hindering students from participating in intellectual activities such as DCCE initiatives (Tierney & Coylar, 2005). On the other hand, as Krauss (1964) indicates, if students align themselves with a social network that has high collegiate goals and expectations, they will be more inclined to adopt those same collegiate goals and expectations. One must note, though,

that Tierney and Coylar (2005) are quick to point out that “while parents and peers are influential in how students report educational aspirations, parental influence is greater, particularly when the parents and peers do not hold similar views or expectations” (p. 62).

The other influential factor in a student’s cultural capital is the middle and high school counselors. Counselors are critical because they are in a position that basically serves as the gatekeeper of information and support that is crucial in increasing the cultural capital of students and their families. Administrators of DCCE initiatives have to recognize that disseminating to underrepresented student populations the previously privileged information concerning the logistics of the college entrance and financial aid processes commonly known by those with high cultural capital is vital to the success of this college preparatory program (Auerbach, 2002; McClafferty, McDonough, & Fann, 2001; Tierney & Auerbach, 2005). McDonough (2005) espouses that the expectations “counselors have of students even early in their academic courses are integral to the development and maintenance of college aspirations” (p.75). Students with high cultural capital recognize that college goals and expectations must be cultivated early on in the students’ academic journey, and counselors play a significant role in assisting those students with lower cultural capital come to this same conclusion. Bonous-Hammarth and Allen (2005) stated that the timing of the resources students and parents need to make informed decisions concerning “academic preparation, test preparation and financing” (p. 166) needs to occur at or before the ninth grade to increase the likelihood that the student will be properly prepared for college enrollment. The flow and content of the resources

needed by students and parents are highly influenced by the school counselors (McDonough, 2005), and the counselors must consciously provide greater resources to those with less cultural capital to assist them in “their planning skills and financial resources for college” (Bonous-Hammarth & Allen, 2005, p. 169).

The influences of the cultural capital possessed by students is significantly defined and molded by the knowledge, skills, and abilities of the students’ parents and peers and their school counselors. If DCCE initiatives are to be successful in increasing the college-going rate of high school students, it is imperative that DCCE initiatives develop strategies that will significantly address the cultural capital deficiencies of marginalized students.

### **Procedures**

The purpose of this study was to ascertain how the influential elements of a student’s cultural capital, in terms of how the development and fulfillment of a student’s college-going goals while in high school, are being recognized and addressed by North Carolina’s DCCE initiatives.

Ten community colleges within North Carolina were selected to participate in this study based on two criteria; the colleges’ annualized Full-Time Equivalent (FTE) for the 2005-2006 reporting period and the colleges’ geographical location within North Carolina. The 58 community colleges listed in the 2005-2006 annualized FTE report, produced by the North Carolina Community College System, were divided into five categories which were defined so that there would be a reasonable distribution of

community colleges within each of the five categories, then two community colleges per category were selected to participate in the study.

Each selected community college was asked to provide the researcher a list of all students from their college who were at least 18 years of age, who graduated from high school in either 2005 or 2006, who participated in one of the DCCE initiatives while in high school, and who were enrolled in a curriculum course at the college during the fall 2006 semester. An internet-based research randomizer program that was originally conceived by Geoffrey C. Urbaniak in 1997 and further developed by the collaborative efforts of Scott Plous and Mike Lestik (Urbaniak, Plous, & Lestik, 2003) was used to randomly select the students who would be asked to participate in the study.

The data collection phase of this research study used a mixed methods research design. Research data was collected through a combined student interview and an individual student questionnaire. The use of multiple, sequential data collection methods, provides a robust collection of data due to the qualitative textual information gathered in the combined student interview and the quantitative statistical information gathered by the individual student questionnaire. These inductive-based questions were partially derived using the participant responses of the student focus group interview.

Once ten community colleges were identified and agreed to participate, Mitchell Community College, in Iredell County, North Carolina, was selected as the college at which to administer the focus group interview. Twelve students from the student list provided by Mitchell Community College were randomly selected to participate in the focus group interview. The focus group interview was recorded by two audio recorders

and the researcher took notes of the participants' responses. The responses of the focus group interview were reviewed and analyzed and used to help develop four of the eleven non-demographic questions of the individual student questionnaire. Krueger and Casey (2000) indicate that focus group questions can be separated into five categories: opening questions, introductory questions, transition questions, key questions, and ending questions. During the focus group interview the participants were asked to respond to twelve questions that were divided into these five categories: one opening question, one introductory question, three transition questions, five key questions, and two ending questions. Three of the focus group interview questions asked the participants to form their responses based on their perspective of the following group of individuals who were associated with the students' academic endeavors: student advisors, friends, parents, middle and high school counselors, and community college liaisons.

The individual student questionnaire was the final element of the data collection phase of the study. Up to seventy-five students were randomly selected from each of the student lists provided by the nine participating community colleges for a total of 602 students who were asked to complete the individual student questionnaire. A majority of the questions on the questionnaire were predetermined prior to the focus group interview; however, a 27% of the questions on the questionnaire were based on the responses given during the focus group interview (see Appendix A for complete questionnaire).

The data analysis phase of the study was accomplished utilizing three major steps. The first step of the data analysis phase of the research entailed reviewing the findings of the focus group interview that was conducted at Mitchell Community College. By



developing elements of the individual student questionnaire using the findings of the focus group interview, the study had an opportunity to truly discover the influences that impact students' decisions to participate in DCCE activities. Once the individual student questionnaire was completed, distributed, and returned by the students, the second step of the analysis began and the results of the questionnaire were compiled into frequency tables. The frequency tables were designed to separate the responses of each question of the questionnaire into the four independent variables used in the study: gender, ethnicity, type of high school attended, and the community college they attended. Once the frequency tables were populated, the tables were analyzed and descriptive statistics was employed to explain the findings of the tables. For the anomalies that appeared during the table analysis step a third step was taken which involved the use of appropriate statistical techniques to further analyze the results of the study.

### **Limitations**

There were three major limitations to this research study and they focused respectively around the Family Educational Rights and Privacy Act (FERPA), the University of North Carolina at Greensboro's (UNCG) Institutional Review Board (IRB) process, and the size of the focus group interview.

The first major limitation, FERPA, is a federal law designed to protect that educational records of students. The law gives parents and "eligible students" various rights with respect to the students' educational records. The law defines "eligible students" as those that have turned 18 years of age or who are attending a postsecondary institution. Under this law schools are extremely limited on what student information

they can release without the students' written permission. The only information that schools can release without the students' permission involves "directory" information which includes information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, there are stipulations surrounding this information as well. For instance, the schools must inform the parents and/or "eligible students" about the "directory information and provide them a reasonable amount of time to decide whether or not they wish to request that the school not disclose the students' "directory" information. For most of the community colleges in North Carolina, they have chosen to inform the parents and eligible students by publishing this notification in their college catalogs and in some cases in their college's student handbook, which are acceptable media or venues of notification under the law. This issue was a limiting factor when recruiting community colleges to participate in this research study. Several of the originally selected community colleges declined participation in the study because either their college as a whole limit or their student government groups had elected to limit the directory information the colleges were allowed to disclose. The limitations of FERPA were also identified as a problem/issue during the IRB approval process of this research study. The original research proposal submitted to the IRB was designed to utilize a stratified sampling technique that would have insured that the students selected to participate in the various phases of the study would be representative of the overall student population of each of the participating community colleges.

The second limitation of this study involved the amount of time it took to get IRB approval and the ramifications it had on the procedural details of the study. The original research proposal submitted to the IRB office was designed to only include five North Carolina community colleges and a focus group interview was to be conducted at each of these community colleges using the stratified sampling technique to select the students for the focus group interviews. Once the focus group responses had been analyzed and the individual student questionnaire developed, the originally submitted research proposal planned to use the stratified sampling technique to select 75 students from each of the community colleges to complete the questionnaire. However, since the IRB approval process took longer than anticipated, the procedures of the study were altered so that the study could be completed in a reduced amount of time. This was accomplished by reducing the number of focus group interviews that were conducted from five to one wherein Mitchell Community College was selected as the site for this interview. Since the number of focus group interviews was reduced, the number of community colleges where the individual student questionnaire was administered was increased from five to ten community colleges which represents over seventeen percent of the community colleges in North Carolina. The modified study kept the element of the originally proposed study pertaining to the number of student participants per community college which is 75 students, therefore, the total number of students selected to complete the individual student questionnaire increased from 375 to 750 students. Grounded theory research played a larger role in the originally proposed research study which was designed to fully capitalize on some of the strengths and characteristics of grounded

theory research and for this to occur all five focus group sessions needed to be administered. However, due to the extended amount of time it took my research proposal to gain IRB approval it was necessary to reduce the number of focus group sessions down to one and increase the number of community college during the individual student questionnaire phase to ten. As before, although this change is seen as limiting factor in terms of the originally submitted research study I feel I was able to strengthen the quantitative factor of the study by increasing the number of students participating in the individual student questionnaire phase of the study and the fact that the students represent a greater percentage of the 58 community colleges within North Carolina.

Related to the previous limitation, the final limitation to this research study was the low number of participants that showed up to actually participate in the one focus group interview that was conducted at Mitchell Community College. Diligent attempts were made to recruit an adequate number of participants for the Mitchell Community College focus group interview. The research randomizer was applied to the original list of students who met the participant criteria and twelve student names were identified. Of those twelve names only three students agreed to participate, the other nine students had either moved away, had inaccurate phone numbers listed or indicated that they did not want to participate. The twelve randomly selected names were removed from the original list and the research randomizer was administered once again to select a different group of students and then those students were contacted, in the order that the research randomizer determined, with the intent of finding a total of twelve students to agree to participate in the focus group interview. After this second attempt to recruit participants

for the focus group interview was complete only six students had agreed to participate in the interview. A decision was made to move forward with the focus group interview; however, when the time came to conduct the interview only two students actually arrived to participate. This final limitation was compounded by the fact that the two students shared the same gender and very similar backgrounds and familial circumstances. Their responses to the interviews questions were similar although nevertheless very enlightening. Needless to say, this is included as a limitation because having a more robust input in the focus group activity would have yielded a richer variety of responses to the questionnaire.

Although these limitations were significant, arrangements were made and procedures altered to accommodate and reduce the effects of these limitations and the researcher is confident that these three limitations did not affect the results of the research study.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

#### **Dual Credit/Concurrent Enrollment**

The literature on dual credit/concurrent enrollment initiatives and activities can be divided into four main categories: program quality, benefits and concerns, administrative issues, and middle and early colleges.

#### ***Program Quality***

The first main category to be analyzed is program quality which is the most commonly documented challenge that faces DCCE initiatives, and this challenge must be vigorously addressed if these initiatives are going to be effective and academically sound. Robertson, Chapman, and Gaskin (2001) and Andrews (2001) both espoused that guaranteeing the quality of DCCE courses was paramount to ensuring the success, integrity, and credibility of DCCE initiatives. Burns and Lewis (2000) made a similar statement concerning the importance of DCCE quality by indicating that receiving simultaneous credit for high school and college courses is moot if the college course credit fails to be usable; in other words, the quality of the DCCE courses must be robust enough to guarantee they are fully transferable to postsecondary institutions.

If the quality of the DCCE courses is not maintained at college-level rigor, the transferability of these courses will be severely questioned. The question of the transferability of the DCCE courses has enormous implications for the student, the

participating postsecondary institution, and the overall academic system that oversees the postsecondary institution administering the DCCE courses. Girardi and Stein (2001) wrote “. . . the quality of dual credit [DCCE] programs affects not only its transferability from one institution to another, but also, given a context of broad transfer, the overall quality of a state higher-education system” (p. 169). Girardi and Stein also documented that Missouri’s policies relating to the quality of the state’s dual credit program set forth “clear, uniform, and specific expectations concerning student eligibility, program structure and administration, faculty qualifications and support, assessment of student performance, and transferability of credit...” (p.167) to ensure that the overall state system was protected from poorly administered DCCE initiatives.

There are three major factors which are considered critical to the success of DCCE initiatives because these factors are used by other colleges and universities to determine the transferability of the DCCE courses. These three major factors include: (1) course content, (2) minimum faculty requirements, and (3) program evaluation strategies (Andrews, 2000; Boswell, 2001; Catron, 2001; Chapman, 2001; Fincher-Ford, 1997; Reisberg, 1998).

The first quality factor to be discussed is course content. Gehring (2001a) implied that some postsecondary institutions are more interested in the financial gains associated with the increased student enrollment provided through the DCCE courses than in making sure the courses are maintaining rigorous, college-level academic standards. He supported this claim by quoting Gay Gareshe, an economics professor at Glendale Community College which is part of the 10-college Maricopa Community College

District in Phoenix, who said, “dual-enrollment [DCCE] programs lack the rigor of college-level coursework and have become cash cows for both colleges and high schools” (p. 3).

One benchmark that DCCE initiatives can use to ensure that the DCCE courses being offered are maintaining rigorous college-level academic standards is to make sure that the DCCE courses mirror the instructional and administrative aspects of similar courses being taught specifically for the regular postsecondary student population. Chapman’s (2001) agreement with this philosophy is demonstrated in the statement, “The concurrent enrollment [DCCE] program must provide college-level instruction of the same quality and academic rigor that is afforded to students enrolled in classes on the college campus” (p. 21). For some DCCE programs the inability to prove definitively that the DCCE courses are as rigorous as regular college-level courses is keeping these courses from being accepted at other colleges and universities. An excellent example of this problem would be Lafayette College’s decision to not accept the DCCE courses offered through Syracuse University’s DCCE initiatives called Project Advance. Reisburg (1998) cited Gary Ripple, Lafayette’s director of admissions, as saying, “We believe a college-level course should be offered on a college campus, taught by a college professor, with college students in the room.” Mr. Ripple also said, “That’s the fundamental reason we do not recognize some of these gypsy courses” (p. 5). However, Reisburg goes on to say that Lafayette College will accept credits from Advanced Placement (AP) courses and courses offered through International Baccalaureate (IB) programs because both AP and IB courses involve a nationally-normed, standardized



examination. Monitoring the DCCE courses to ensure that a collegiate level of rigor is being maintained is especially critical for those courses being taught on the high school campus (Fincher-Ford, 1997). Fincher-Ford stated that monitoring the class should not be interpreted as challenging the instructor's integrity or effectiveness, but rather is needed to maintain course accountability.

This perception that the DCCE courses lack the rigor of regular college-level courses is held not only by some colleges and universities, but also by potential students and individual college faculty members. Cavanaugh (2003) cited a six-year Stanford study, known as the Bridge Project, which reported, "Many students do not prepare themselves with college-level classes in HS [high school], partly because they mistakenly assume that community colleges and most four-year institutions will not challenge them" (p. 6). Then there are those who Fincher-Ford (1997) referred to as *Educational Purists* who "feel that college and high school should be separate experiences. In effect, they maintain that high school and college should be separated by discrete variables that regulate students' admission based upon time and age" (p.29).

The second factor that plays a major role in determining the quality of DCCE initiatives is the employment of quality faculty who has the minimum requirements needed to teach a DCCE course. As stated earlier, Robertson et al. (2001) indicated that there is a direct relationship between quality instruction and the success and credibility of DCCE courses; therefore, a logical conclusion is that to ensure quality instruction, one must employ quality faculty. Andrews (2000) addressed the importance of faculty quality when he wrote, "The quality of instructors cannot be overemphasized. Dual-credit

courses put the reputation of the college on the line among the high school faculty and the students who enroll” (p. 35). This sentiment was echoed by Chapman (2001) who stated, “A program, no matter how well designed, cannot exceed the talents of the instructor” (p. 18). Chapman went so far as to say, “It is better to eliminate a course offering than to keep it on the roster with a less than stellar instructor” (p. 19). Furthermore, as Fincher-Ford (1997) indicated, respective regional accrediting agencies, like the Southern Association of Colleges and Schools (SACS), mandate minimum faculty criteria and it is the postsecondary institution’s responsibility and obligation to ensure that these standards and criteria are adhered to diligently.

The third quality factor that challenges administrators of DCCE initiatives relates to the instruments or strategies that are utilized to evaluate and assess the effectiveness of the DCCE initiatives. Fincher-Ford (1997) stated, “Quality control is vital and pertains to teachers, course material, and the effectiveness of classroom instruction” (p. 20). It is imperative that DCCE initiatives develop and administer assessment instruments that monitor the quality and effectiveness of the DCCE courses. The Student Perception Inventory of the Effectiveness of Dual-Credit Programs is one quality control instrument developed by Fincher-Ford (1997). Some DCCE initiatives are utilizing assessment instruments that have been developed by four-year institutions. For example Salt Lake Community College employs the Instructional Assessment System that was created by the University of Washington (Peterson, Anjewierden, & Corser, 2001). Dual enrollment initiatives are so new on many campuses that program evaluation systems have not yet been developed and implemented. Catron (2001) wrote, “At the time the Virginia Plan

for Dual Enrollment was signed, it did not include a section on assessment – perhaps because, at the time, outcomes assessment was just being developed” (p.53). Catron went on to indicate that this lack of quality data left the program susceptible to criticism that caused problems with the transferability of the DCCE courses to other institutions. Catron said program evaluation has now become an integral element of DCCE initiatives mainly due to criteria that regional accrediting agencies, like SACS, have recently added. These criteria are specifically designed to capture quality data that relate to DCCE initiatives because these quality data are critical to the acceptance and success of the DCCE initiatives.

### ***Program Benefits/Concerns***

DCCE initiatives have a substantial list of benefits recognized in the literature and these benefits can be divided in terms of two important participants: high school students and their parents and educational institutions. The goals of DCCE initiatives identified in the literature are very similar to the documented benefits associated with DCCE activities. The literature revealed seven common benefits that students realize by participating in DCCE courses. The student benefits include: reduced time to postsecondary degree completion, savings in postsecondary expenses, early exposure of college life and the rigors of college-level coursework, increased student self efficacy, increased access to college-level courses, reduced duplication of postsecondary coursework, and an increased college matriculation rate.

The first student benefit is the decreased postsecondary time-to-degree completion rate. It is getting more common that students are graduating from high school

with enough credits to start college as sophomores versus freshman, therefore, reducing the time it takes a student to complete a two-year degree to one year and a four-year degree to three years. Although there is limited empirical data supporting this benefit, the middle and early college educational structures heavily incorporate the DCCE initiatives and the primary goals and objectives of these new educational paradigms is to accelerate the students to college degree completion (Conley, 2005). Andrews (2001), Boswell (2001), Catron (2001), and Girardi and Stein (2001) also cited a reduction in time to degree as a major benefit of DCCE activities. Another perspective of this benefit takes into account the fact that a high percentage of students are entering college academically under prepared for entry-level freshman coursework. DCCE initiatives can significantly reduce the amount of time students spend in college by ensuring that the students are academically ready to for college by significantly reducing the need for students to take remedial courses when they get to college (Hoffman, 2003).

The second student benefit, reduced postsecondary educational expenses, encompasses college expenses like: tuition and student fees, textbooks and course materials, and possibly the cost of room and board. As stated in the first benefit more and more students are receiving enough advanced college credit because of DCCE courses to allow the students to start college as sophomores, this represents a significant reduction in college tuition costs in all of the areas listed above (Blair, 1999, Boswell, 2001, Joyce, 2001, Lords, 2000; Reisberg, 1998). Conley (2005) stated that the financial benefits of the DCCE activities played a major role in the decision making process of high school students and their parents. Conley went on to state that both the student and parents he

studied knew that the more college credits that were earned while in high school significantly reduced the overall college costs.

Providing the high school student the opportunity to experience first-hand the heightened level of academic rigor involved in college coursework is the third student benefit of DCCE courses (Conley, 2005). Making sure the students are aware of the increased academic expectations of college coursework will assist in addressing a problem that Bueschel (2004) identified which was the high remediation rate due to graduating high school students being sorely under-prepared and unaware of the rigors of college coursework. Boswell (2001) stated that providing high school students the opportunity to experience the rigorous academic challenges of college-level coursework helped the student realize the level of effort they would need to put into their college coursework. Boswell went on to state that there was an added bonus of helping high school seniors work through what is commonly referred to as senioritis. Andrews (2000) declared high school students are blowing off their senior year and in some cases part of their junior year and in large part these are advanced students who have completed their high school graduation requirements early. This is a phenomenon that has been going on for some time now because Andrews and Marshall (1991) wrote “Far too many high school students find they can ‘coast’ toward graduation after their sophomore year if they are left unchallenged in their secondary school curriculum” (p. 47). Two of the nine goals that Chapman (2001) identified for DCCE initiatives relate to exposing high school students to the academic requirements and rigors of a collegiate curriculum. Catron (2001) provided proof of the benefit by reporting that in 1998 Santa Monica College, of

Los Angeles, California, declared that exposure to the increased level of academic rigor in DCCE courses translated into higher grade point averages (GPA) for the participating high school students than their regular college student counter-parts. Blair (1999) documented similar findings from a study that the University of Minnesota-Twin Cities conducted that reported; DCCE students earned GPA of 3.1, while the GPA of the general college population was only 2.7.

The boost in a high school students' self efficacy, as it relates to college-level coursework is the fourth student benefit derived from participating in DCCE activities. In reporting the findings of a study they conducted in six states, Kirst, Venezia, and Antonio (2004) stated "Although the majority of students wanted to attend college after high school, they confessed that they have a certain level of apathy about the college preparation process" (p. 293). Bueschel (2004) documented that minority and low-income students strongly believe they have no way of accessing four-year institutions and the community college represents their point of entry into four-year institutions. Joyce (2001) reported that DCCE initiatives "propel students into college with a better chance of survival" (p. 15). Joyce also indicated that the boost of confidence the DCCE experience provides the students is critical in helping the students get through their freshmen year of college. Evidence of this benefit was reported by Chatman and Smith (1998) when they documented that Florida DCCE students demonstrated higher retention rates, higher GPAs and had a higher percentage of A's and B's than regular college freshmen. Hagedorn and Fogel (2002) captured the essence of this benefit when they

wrote “College preparation programs frequently work with students to increase their feelings of self-worth and to encourage them to adopt an ‘I can do it’ attitude” (p. 172).

The fifth student benefit gained from participating in DCCE activities involves the increased access to postsecondary opportunities for minority and low-income and students in rural high schools, if the DCCE courses are taught on the high school campus. Small rural high schools and urban high schools in low-income neighborhoods struggle to find the resources to offer upper level coursework and DCCE courses help the high schools provide their students these collegiate opportunities (Boswell, 2001). Catron (2001) credits Donald Finley, former secretary of education and member of the task force that was instrumental in developing the operational criteria of the DCCE initiatives in Virginia, for remarking in an interview that the DCCE initiative was “beneficial to rural school systems that often did not have the resources to offer a wide range of advanced courses, especially for their gifted student” (p. 52).

Another benefit that students receive by participating in DCCE courses involves a reduction in the duplication of course content in various subjects like mathematics and English. Catron (2001) affirmed that academic leaders need to design DCCE curricula that drastically reduced the number of high school courses that duplicated the academic efforts of high school students. By reducing the duplication of courses from high school and college will result in a more efficient and effective use of the students’ time and efforts and provide the students more flexibility when they enroll in college because they won’t have to spend time on topics or subjects that they should have taken care of in high school (Chatman & Smith, 1998).

The seventh and final benefit that students may achieve from participating in DCCE courses is an increased probability of matriculating from high school to a postsecondary institution (Blair, 1999). Of the nine goals that Chapman (2001) outlined for DCCE initiatives, three of the goals deal with the beneficial factors of having the students obtain advanced college credit, creating a seamless transition to college for the students and encouraging students with no college aspirations to explore college as a post high school possibility. Hugo (2001) explained that participating in DCCE activities not only helped the students gain access to college courses sooner, but increased the likelihood the students would be motivated to complete their postsecondary degree. Hugo indicated that a well designed DCCE curriculum is especially powerful for facilitating the matriculation and ultimately college degree completion for minority and low-income students.

The second educational stakeholder that obtains benefits from DCCE initiatives and activities is the educational institutions themselves which includes both the secondary and postsecondary institutions. The benefits that the educational institutions get from DCCE activities include: an increased collaborative relationship between secondary and postsecondary institutions, an enhanced relationship with the educational institutions' community of service, strong recruitment opportunities, and a more efficient and effective movement of students through the postsecondary educational cycle.

The first benefit that educational institutions should realize by participating in DCCE activities is a heightened spirit of collaboration between the secondary and postsecondary partners (Peterson et al., 2001). During the planning and development



phases of the DCCE initiative it is imperative that high school and college faculty members meet to outline a seamless transition between the curricula and this collaboration between the two educational is extremely valuable (Boswell, 2001). This will allow the faculty to do a more effective job of blending the secondary and postsecondary curricula to create a truly seamless transition from high school to college. Catron (2001) recognized another benefit that can be derived from collaborative efforts between the secondary and postsecondary institutions and that is the reduction in financial expenses due to the ability to share resources, like those needed to teach advanced level high school courses. Chatman and Smith (1998) shared Catron's belief that having secondary and postsecondary partner together to administer DCCE activities will help the financial obligations of the two educational institutions by sharing resources whenever possible. In addition, Chatman and Smith also documented that the partnership would also; enhance the capability of the high school, increase the institutions ability to recruit quality personnel, and allow the faculty from both institutions to augment their professional capacities. Chapman (2001) stated that the partnership between the college and the high school will have an added benefit of helping to build collaborations with the other K-12 institutions in the participating school district, such as middle and elementary schools.

The second institutional benefit that either or both the secondary and postsecondary institutions will gain from the DCCE initiative is significantly higher level of respect and recognition from the institutions' service communities. Boswell (2001) claimed that DCCE opportunities provided avenues for the college to build stronger ties

within their community and Chapman (2001) also believed these ties promote a positive image of the educational institutions within the community. When Chatman and Smith (1998) listed multiple reasons and purposes for participating in DCCE activities they also claimed that these activities would translate into economic growth and development opportunities for the colleges' surrounding community. By addressing the community's economic needs it is most likely the educational institutions will be viewed in a very positive light.

An increase in the number and variety of recruitment opportunities for the postsecondary institution is the third institutional benefit. Blair (1999) outlined five main benefits of DCCE activities and one of those benefits was providing colleges with an opportunity to boost college enrollments, especially for students who feel there is no way they can attend college, let alone be successful. Girardi and Stein (2001) spoke of various reasons, besides high school student academic enrichment, why colleges sought to participate in DCCE activities and one of the reasons was to recruit students. Helgot (2001) reported that the positive impact of Cerritos College's increased enrollment due to the college's participation in DCCE activities resulted in increased funding for the Norwalk, California community college.

The final institutional benefit involves a benefit that is also listed as a student benefit but when viewed from a different perspective becomes a college benefit is a reduced time-to-degree for participating students. Boswell (2001) listed DCCE efforts as a facilities benefit because "Accelerating student progress toward a degree in order to free up additional space on campus to meet the projected demands for college access by

the ‘baby boom echo’ – children of the baby boomers, who are approaching college age” (p. 9). The belief that DCCE activities will benefit both high schools and college by easing potential overcrowding issues was also expressed by Blair (1999).

Although there are numerous benefits for both the participating students and educational institutions, there are also several concerns and criticisms expressed about the DCCE concept and its activities. The most often reported concerns and criticisms of the DCCE initiative include; academic rigor, transferability of DCCE awarded courses, student transportation to college held courses, and the overall cost of the activities to the educational institutions and ultimately the sponsoring state. Several of these concerns also relate to the quality of the program and were previously addressed; however, these issues bear reiterating.

The first concern or criticism is in regards to the rigor of the DCCE courses especially those taught on the high school campus. Gehring (2001a) wrote that there are critics of the DCCE initiative that claim that participating colleges regard DCCE courses mainly as *cash-cows* and the colleges are more interested in the funding the courses generate than in maintaining rigorous college-level standards. Catron (2001) claimed that critics of DCCE courses being taught on high school campuses cite that elements of the non-collegiate environment of high school such as class bells, announcements, and extracurricular activities truly put in question the colleges’ ability to maintain collegiate rigor in these courses. It is for these reasons that Fincher-Ford (1997) stated that state educational agencies throughout the nation are requiring participating colleges to provide

evidence that these courses are being taught at a level of rigor equivalent to the college campus courses.

The next concern or criticism of DCCE courses encompasses the transferability of the DCCE courses to other institutes of higher learning. Gehring (2001a) reported that the Board of Regents in South Dakota refused to honor the credits earned through DCCE initiatives due to their lack of confidence in the academic rigor of the coursework. Girardi and Stein (2001) reported that the results of a 1997 study of Missouri's DCCE activities indicated that some of DCCE courses that were taught on high school campuses used different syllabi than courses taught on the college campus. They further indicated that some of the high school faculty teaching the DCCE courses on the high school campus didn't meet the minimum qualification standards that were set by the college's regional accrediting body the North Central Association of Schools and Colleges. These are the types of problems that can jeopardize the transferability and overall opinion of DCCE courses.

The third concern or criticism of DCCE activities that is found in the literature relates to the possible lack of available transportation for minority, low-income, and/or rural students required if these students are to participate in DCCE courses that are taught at a facility other than the high school campus or during times other than the normal school day (Catron, 2001). One of the concerns that Boswell (2001) stated that state policymakers have of DCCE activities is the inequitable access to college courses across the state of Oregon.

The final concern or criticism relates to the overall costs of the DCCE activities for both the participating educational institutions and the state at-large. Boswell (2001) stated that another concern that state policymakers have expressed is the impact DCCE initiatives have on taxpayers in what appears to be double-dipping. Chapman (2001) further listed the “perception of *double-dipping* of state funds by community colleges” (p. 17) as a major barrier to implementing DCCE initiatives.

For DCCE initiatives to be effective and accepted, the participating educational institutions must honestly reflect on these concerns and criticism and work to reduce and if possible, eliminate the concerns and highlight and clearly communicate the benefits of the DCCE activities.

### ***Administrative Logistics***

Administrative logistics is the second main category of DCCE initiatives discussed in the literature. Educational administrators are seriously challenged by the logistics involved in administering DCCE initiatives and activities. There are six major challenges to implementing and administering DCCE initiatives and activities which include: coordinating high school and postsecondary course schedules; identifying the formative and summative processes for reporting grades; developing and administering appropriate student eligibility requirements; determining the location of the classes; identifying and assigning responsibility for various funding issues; negotiating and assigning responsibility for student insurance issues and expenses; identifying and coordinating academic student support services and responsibilities; and defining attendance policies and record-keeping procedures and responsibilities.

The first major challenge in administering DCCE initiatives and activities has to do with how the secondary and postsecondary institutions coordinate the scheduling of courses so that the students reap the most benefits. There are two factors that need to be considered in the determination of which courses to offer and the timing of the courses being scheduled. As to which courses to offer, Chapman (2001) indicated that four of the nine goals and objectives of DCCE type initiatives relate to the types of courses being offered. The first goal is to provide the students a wide variety of course options and the final three goals focus on courses in specific areas of study; student development-oriented courses, courses in the performing and visual arts curricula, and science and language oriented courses. Hugo (2001) supported Chapman's stance by observing that a significant component of Santa Monica College's DCCE activities involves a human development course called "Orientation of Higher Education". Catron (2001) stated that during the mid-1980s, the Virginia Plan for Dual Enrollment was developed with the expectation that vocational courses would be the sought after courses; however, it turned out that students preferred college transferable courses. Another issue to consider is that for dual credit courses most states prohibit the scheduling of college courses that supplant any high school courses (Girardi & Stein, 2001; Jordan, 2001; Robertson et al., 2001). Robertson (2005) wrote "Program course offering should complement and enhance the high school curriculum, rather than supplant" (p. 38). The second factor to consider in scheduling DCCE courses is when to offer the courses and Catron (2001) stated scheduling courses can be a challenge, "particularly if high school students are traveling to college campuses for the dual enrollment courses, because the high schools and

colleges generally operate on different time schedules” (p. 56). To compensate for the differences in schedules between the high school and the college several options have been identified. Jordon (2001) indicated that Columbus State Community College, in Ohio, offered their DCCE courses on the high school campus during the normal high school day. Hugo (2001) identified another option that Santa Monica College of Los Angeles California used which is to offer classes after the normal high school day so that the courses would not interfere with the students’ regular high school schedule.

The second major challenge in administering DCCE initiatives relates to reporting the grades students earn through DCCE initiatives and activities, and this challenge can be broken down into formative and summative reporting processes. Formative grade reporting involves those processes and strategies that are used to provide feedback to the students throughout the courses so that the students can learn to self monitor their progress in the course. Chapman (2001) stated that identifying how the students’ grades will be reported is an element of the DCCE initiative that needs to be developed prior to the initiative’s implementation. Chapman also recommended that the grade reporting process be supported by appropriate policies and procedures. One of the example strategies that Chapman highly recommended involves providing both the students and their high school counselors a mid-term progress report, so that the students and their counselors have time to implement strategies to correct any areas that are deemed less than satisfactory. Jordan (2001) reported that Columbus State Community College in Ohio has a policy that requires DCCE instructors to provide to a designated DCCE advisor a quarterly progress report for any student that is in jeopardy of receiving an

unsatisfactory grade in the course. The DCCE advisor then meets with the students to analyze the report and together they determine what assistance the student needs to successfully complete the DCCE course.

The summative grade reporting factor involves if and how the courses will be listed on the transcripts of either or both the high school and college transcripts. Chapman (2001) pointed out that this is another element of DCCE initiatives and activities that need to be clearly communicated to everyone involved using well-defined policies and procedures. For the DCCE program to be seamless and effective, the DCCE courses should be listed the same way as regular college courses are listed. If the courses are listed differently on the college transcript, Boswell (2001) reported that students desiring to attend elite private institutions may encounter problems having the course accepted as transfer credits.

As a sub-element of the DCCE initiative's grade reporting process, Chapman (2001) pointed out that the academic leadership responsible for developing and monitoring the effectiveness and efficiency of the DCCE activities must define early on how student attendance policies and record keeping processes will be handled. This is an important area to consider because often times the high school and college attendance policies are not similar and can cause logistical problems for those students who get dropped from DCCE courses due to an excessive number of absences.

Developing and administering minimum student eligibility requirements for college courses is the third major challenge of DCCE initiatives and activities. Boswell (2001) documented that many states spell out the minimum student requirements in terms



of the students' academic performance, age, and grade level. Boswell indicated that Georgia and Oklahoma have very specific eligibility requirements that take into account the students' SAT/ACT score, grade point average, class rank, and written recommendations from the students' principal and parents. Boswell also stated that Michigan requires the students to demonstrate their readiness to participate in DCCE courses by scoring 'proficient' on the Michigan Educational Advanced Placement test and other states, like North Carolina, include eligibility requirements such as age and grade level. Jordan (2001) wrote that Ohio's Columbus State Community College established two eligibility requirements based on academic performance. The first requirement is that the students had to have a minimum cumulative high school grade point average, 3.0 for juniors and 2.7 for seniors, and "must have successfully completed Ohio's ninth-grade proficiency examination" (p. 76). The second and alternate requirement entailed a minimum score on a nationally normed proficiency examination such as the ACT or SAT. Andrews (2000) indicated that in Massachusetts "eligible students are those who have a grade point average of 3.0 or above and have a demonstrated ability to benefit from college-level work" (p. 33). Gehring (2001b) wrote that Arizona state law requires participating students to score at least 22 out of 36 on the ACT or 930 out of 1600 on the SAT to become eligible to take college-level courses. McCarthy (1999) reported Oregon recommended limiting student participation to students with high academic credentials.

Catron (2001) stated that in Virginia, the task force responsible for developing the policies and procedures regulating the administrative logistics of the state's DCCE

initiatives felt that the first and foremost student eligibility requirement would be that the student had to be at least a junior and at least sixteen years old. Catron went on to state that the task force was convinced that students younger than sixteen were not mature enough to handle college-level subject matter or the college environment. In North Carolina, students in ninth through twelfth grade are eligible to take dual credit courses and for concurrent enrollment courses students must at least sixteen years old. However, a high school representative that knows the students' academic ability and level of maturity need to make recommendations concerning which students are ready for college-level subject matter and/or the college environment. Finken (2003) quoted Linda Calvert, DCCE initiative director at Clark College in Vancouver, Washington as saying "Maturity can be an issue. Not every 16-year-old is motivated to excel in an environment where we may not take daily attendance and where no one is going to monitor whether they have completed their calculus homework" (p. 7).

Where the courses of the DCCE initiative will be taught is the fourth major challenge that will need to be negotiated between the secondary and postsecondary academic leadership. The two location options are whether the DCCE courses will be taught on either the high school campus or somewhere other than the high school campus, which is often the college campus. A majority of the benefits derived from teaching DCCE courses at the high school mirror the benefits of teaching DCCE courses on the college campus, which have been previously described. However, there is one benefit that is unique to conducting the DCCE courses on the high school campus that is the student's improved geographical access to the course (Catron, 2001). Most DCCE

initiatives do not provide transportation to the college campus; therefore, students who do not have their own means of transportation or who are geographically challenged will be unfairly excluded from taking advantage of the benefits of DCCE courses. Offering the DCCE courses on the high school campuses would address this potential barrier to the DCCE opportunities. For example, Chatman and Smith (1998) reported that Snow College in Ephraim, Utah purposely offered DCCE courses on the high school campus so that transportation to the college campus would not be a barrier preventing some students from taking advantage of the DCCE initiative. Yet, there are major concerns about DCCE courses being taught at the high school but as previously seen with the benefits, most of these concerns are also common to DCCE courses being taught on the college campus. Burns and Lewis (2000) conducted a survey to determine if the location of the DCCE course had any effect on the educational experience of the participating students. They found that the students who took DCCE courses on the college campus felt that the courses were more valuable and that the classes made them feel more responsible and independent, and "... they approached the course more seriously than their regular high school courses..." (p. 6). They also found that the students who took the DCCE courses in the high school setting had a tendency to regard the courses as just another high school course and not as a special educational opportunity. Gehring (2001a) reported that high schools typically lack the college-caliber lab facilities, research facilities, and tutoring centers, and thus can't provide classes that are on a par with what students receive in college" (p. 18). Andrews (2000) pointed out that due to these arguments, Massachusetts only allows DCCE courses to be taught on a college's main campus and the state goes so

far as to consider any course taught at satellite college campuses or in distance-learning courses as ineligible as DCCE courses.

Another major challenge facing DCCE initiatives relates to the funding of the associated activities. Funding issues relating to DCCE initiatives can be divided into two categories: micro-funding issues and macro-funding issues. Micro-funding issues of DCCE initiatives involve those financial elements that occur at the partnership level between the secondary and the postsecondary institutions. These micro-funding issues were part of the previous discussion pertaining to the administrative logistics of managing DCCE initiatives. Chapman (2001) and Jordan (2001) raised a series of issues which were focused on determining the exact costs and expenses of the DCCE initiatives and which of the initiatives' stakeholders - student, parents, secondary institution or the postsecondary institution - would be fiscally responsible for these various financial elements. As stated earlier the various financial elements that need to be negotiated and assigned include student fees, tuition, textbooks, course supply fees, technology fees, and the costs associated with academic student support services. Chapman (2001) also raised the micro-funding question concerning the student insurance issues; the first insurance issue he asked was "Will the students be covered under the community college or high school insurance in the event of an injury?" (p. 17). The second insurance question that needs to be addressed relates to courses like those in the health science programs where the students must participate in clinical settings that often require the students to carry their own malpractice insurance. It needs to be determined who will be responsible for

paying this insurance fee - the students and their parents, the public school system or the college offering the DCCE course.

Although these micro-funding issues are critically important, it is more often the macro-funding issues that determine if DCCE initiatives will be effective and sustainable. These funding issues deal with the DCCE initiatives in a much wider scope and are based more on with the concerns and questions of educational and legislative policymakers at the state level. Boswell (2001) indicated that there are four major funding questions policymakers ask - "Is statewide funding required in order to ensure equity across the state? What financial incentives should be provided to encourage participation among secondary schools and colleges and universities? Or does providing per diem support to both colleges and universities represent *double-dipping* at the expense of the taxpayers? Should financial assistance or incentives be provided to students to pay for AP or IB tests, or to reduce or eliminate the tuition burden for high school students successfully completing college-level courses?" (p. 9).

The issue or perception of *double-dipping*, giving a college and a high school funding for the same students, is a major macro-funding issue for administrators responsible for DCCE initiatives. Puyear, Thor, and Mills (2001) reported, "On October 28, 1999, that the newspaper Arizona Republic ran a front-page article entitled 'Colleges May Be Double Dipping'" (p. 39). They also said that the newspaper article claimed that the state taxpayers were providing funds to two educational institutions for a single student taking a DCCE course. They stated that the article also claimed that the postsecondary faculty was disputing the level of academic rigor of the DCCE courses in

comparison to the regular college courses. Reports like this impede the efforts of the administrators of DCCE initiatives, who are already dealing with major funding cuts due to the recent national economic downturn.

For example, Evelyn (2003) wrote, “Just as they were preparing for sizable mid-year cuts in state appropriations, community college leaders in California were blindsided this month by a second dose of bad news. Governor Gray Davis proposed doubling tuition and slashing the colleges’ funds again in 2003-04 to help offset what is expected to be a \$35 billion state-budget deficit” (p. A22). Evelyn stated that the California community college presidents were claiming that this revelation would be the toughest financial challenge they had ever faced and many of the presidents were already planning to suspend DCCE initiatives as a way to offset this fiscal news.

One very important challenge that secondary and postsecondary administrators must identify and coordinate to ensure student success relates to the academic student support services and responsibilities which define the sixth and final major challenges facing DCCE initiatives. Robertson et al. (2001) identified five tenets of development of successful DCCE collaborations, and one of the five tenets was the establishment of adequate academic student services for the participating high school students. They went on to indicate that the student support services should include “academic advising, pre-college counseling, financial aid planning, study skills workshops, and assessment testing” (p. 3). Fincher-Ford (1997) agreed that defining the student support services functions needs to be one of the DCCE factors that is accomplished during the initial planning process for the DCCE activities. Andrews (2000) stated that the support

services available to the DCCE students should be equivalent to the services the college provides its regular student population.

Jordan (2001) outlined the educational factors that counseling service personnel of Ohio's Postsecondary Enrollment Options (PSEO) program are expected to cover with DCCE students prior to their participation in the PSEO program. The educational factors include: program eligibility, process for granting credits, financial arrangements, transportation criteria, consequences of failing, graduation requirements, other college services available to students, and academic and social responsibilities of students and their parents. Bailey and Karp (2005) indicated that DCCE administrators need to do more than just get students into the DCCE courses; they also need to address the high school-to-college transitional needs of the students, including social support, counseling and non-academic skills training. Jordan (2001) also described several support services activities that were designed to meet the specific needs of the DCCE participating students, such as assertiveness training to help the students communicate with their instructors and time management workshops to assist the students learn how to manage the academic and attendance requirements of both the high school and college.

Fincher-Ford (1997) pointed out that when students are required to take assessment/placement tests prior to participating in DCCE courses; they should be given guidance on how to prepare for the tests and how to interpret the scores they earn. Fincher-Ford also indicated that prospective DCCE students should be provided an orientation and information session that should be attended by the students' parents if possible.

To address these various logistical challenges many DCCE initiatives have established an organizational and operational structure based on formal partnerships that have been developed between the secondary and postsecondary institutions utilizing appropriate liaisons and/or representatives from each institution. What has been found is that well-defined partnerships with good working relationships will significantly reduce the impact of each of the six administrative logistic challenges previously mentioned and will produce unintended benefits as well. Catron (2001) was referencing one of those additional benefits when he referred to the Virginia Community College System in the statement, “Donald Finley, secretary of education and task force member, pointed out that dual enrollment [DCCE] programs were expected to be particularly beneficial to rural school systems that often did not have the resources to offer a wide range of advanced courses, especially for their gifted students” (p. 52).

Another example of how partnerships can work together to customize the logistics of the DCCE initiatives to meet the needs of both the secondary and postsecondary institutions is illustrated by the partnership between Santa Monica College and the Los Angeles area high schools. In referring to this partnership Hugo (2001) indicated that the two members of the partnership agreed to offer the DCCE courses after school, so they would not interfere with the students’ high school schedule and would engage the students in “learning activities beyond the regular class schedule” (p. 67)

### ***Middle and Early Colleges***

Middle and early college high schools are two college preparatory programs which rely heavily on DCCE activities as their primary instructional elements. There are



four factors in literature that help define these two innovative college preparatory programs: program purpose/mission, unique program features, concern/criticism, and best practices for student success. These two educational programs are very similar and the only difference between the two programs is the educational credentials that the students are awarded upon high school graduation. Hoffman (2003) defined middle colleges as high schools located on or near a college where the students graduate from high school with some college credit. Kisker (2006) defined early colleges as “small, autonomous institutions that combine high school and the first 2 years of college into a coherent educational program” and “enable students to earn a high school diploma and complete 2 years of college credit (or an associate’s degree)” (p. 68). Jordan, Cavalluzzo, and Corallo (2006) provided a good description of the difference between the Middle College and Early College initiatives. They stated “The fundamental difference between middle college and early college programs is the latter make dual enrollment an explicit objective and link completion of the associate’s degree directly to the high school programs. Conversely, although middle colleges provide opportunities for dual enrollment, such opportunities are not always mandated and universal” (p. 731).

The first Middle College was opened in 1973 in Long Island City, N.Y., on the campus of LaGuardia Community College (Cunningham & Wagonlander, 2000; Lords, 2000; Conley, 2002). “The design for the Middle College concept evolved from the work of Janet Lieberman, professor of psychology at LaGuardia, and a team of interested educators” (Cunningham & Wagonlander, 2000, p. 41). Lieberman (1998) stated the following about the middle college concept she developed in response to the increasing

high school student dropout rate: “The president of LaGuardia assigned me, his special assistant, to develop an institutional response. I spent two years analyzing and researching the problem and then securing funding for an innovative model that would meet the educational challenge. The prevailing idea was a collaboration between high school and college, to be called Middle College” (p. 14).

Kass (1998) indicated “Other programs followed at Los Angeles Southwest College and Contra Costa College in San Pablo, California” (p. 10). Gehring (2001b) reported that 10 middle colleges had opened by 1991 and that a national organization dedicated to the middle college concept had been established called the Middle College High School Consortium. By 1999, twenty-nine middle colleges were in full operation throughout the United States and twenty-one of them were housed on the campuses of community colleges (Smith & Wright, 1999).

Hoffman (2004) reported that the early college concept was being seriously considered by various educational consortiums right around the turn of the century and Kisker (2005) confirmed this by reporting that the first four early college high schools were opened in 2002. Since that time the early college initiative has been strongly endorsed and financially supported by some very large and affluent philanthropic organizations which include: The Bill & Melinda Gates Foundation, the Carnegie Corporation of New York, the Ford Foundation, and the W. K. Kellogg Foundation (Born, 2006; Jordan et al., 2006; Kisker, 2005). Hoffman (2004) also indicated that these philanthropic institutions had provided well over sixty million dollars in support of the early college high school initiative which had a goal of establishing approximately 140

early college high schools with a five to seven year time period. Kisker (2006) later reported that the amount of financial support these philanthropic institutions had provided was more than \$120 million. Jordan et al. (2006) pointed out that the Bill & Melinda Gates Foundation alone had provided, as of spring 2005, more than \$95 million to support the early college initiative.

“As of the 2003-2004 school year, 24 schools that meet the criteria of the early college high school model are up and running” (Hoffman, 2004, p. 215). Kisker (2006) demonstrated just how popular this educational initiative was becoming by reporting that to date 67 early college high schools were up and running in 24 states. Hoffman and Vargas (2007) further reported that the early college initiative had grown to over 150 schools since 2002.

The middle college concept was conceived with the primary purpose/mission of reducing high school dropout rates by “getting students with college potential on to a college campus and into a postsecondary program before they dropped out of high school” (Conley, 2002, p. 61). Lieberman (1998) quoted the Vice Chancellor of the City University of New York as directing LaGuardia “to do something about keeping adolescents in high school and attracting them to college” (p. 13). Gehring (2001a) indicated that the goals of the middle college concept were “reducing the dropout rate in urban high schools, better preparing students for college, and attracting more students to higher education” (p. 37).

Another major purpose of the middle college is to make better use of a student’s last two years of high school. Lords (2000) cited Leon Botstein, President of Bard

College for applauding middle college programs when “he argues that the final two years of high school are so ‘destructive’ that they should be eliminated altogether” (p. A45). Yachnin (2000) indicated that the U. S. Department of Education echoed this sentiment when it appointed a commission to recommend how “to encourage high-school seniors to do more than count the days until graduation” (p. A35). Yachnin went on to say that after the commission met in September 2000, the commission planned to consider the middle college concept a viable option for the often-wasted senior year. Colgan (2002) reported that Alan Harms, Superintendent of the Wisner-Pilger school district and Nebraska’s 2000-01 Principal of the Year, indicated his approval and support of the middle college concept when he said, “It really was not uncommon to find real lackadaisical attitudes during senior year before. If they realize they have a larger purpose than just putting in their time and picking whatever few credits they have left that year, then that can make a big difference” (p. 19).

The early college concept not only incorporated the missions associated with the middle college concept but included in its mission the goal of guaranteeing the participating students an associate’s degree or the first two years of a four-year degree upon high school graduation (Hoffman, 2004). Hoffman went on to indicate that another major purpose/mission of the early college concept was to inspire the participating students to successfully matriculate into a four-year institution and complete a baccalaureate degree.

Both the middle and early college high schools were designed to address the educational needs of various often-overlooked student populations, one of which is often

referred to as “underserved” students or learners. Conley (2005) said that underserved high school students “are not necessarily the highest academic performers in traditional high school settings, but they prove quite capable in the early college high school structure because they are motivated and focused in their pursuit of a college education” (p. 61). The literature also refers to another student population that is best served by the middle and early college high schools and they are called “at-risk” students (Lieberman, 1994; Smith & Wright, 1999; Cunningham & Wagonlander, 2000; Peebles-Wilkins, 2003). Borsuk and Vest (2002) described “at-risk” high school students as those students who have the potential to do well in school, but for whatever reason do not live up to their fullest potential. Smith and Wright (1999) identified yet another group of students who benefit greatly from the middle and early college experience and they are those students who are “disenfranchised with traditional public education” (p. 11) and find themselves “out of step with the standard high school experience” (p. 11). Smith and Wright go on to indicate that these students just don’t seem to fit in with other students at a traditional high school which causes them to feel disconnected from the other students and high school as a whole.

Much of the literature indicates that high school students who are best served by the middle and early college initiatives are “bright, yet underachieving students” (Kass, 1998, p. 10) and “. . . prone to dropping out but are well-adjusted socially and able to work independently. Their grades and standardized-test scores may be at odds, too” (Lawton, 1996, p. 2). Gehring (2001b) summed up the goal of middle and early college high schools in addressing the needs of these specific student populations when he

learned through numerous student interviews that the middle and early college initiatives “reconnect the most alienated students with school” (p. 40).

The fundamental elements of the middle and early college initiatives depend on DCCE activities; therefore, the benefits of the DCCE activities are also associated with the middle and early college initiatives. These shared benefits can be grouped into two broad categories: student performance factors and student enticement elements. The first category of shared benefits that focus on student performance factors includes: the students’ heightened self-esteem, increased social maturity and their taking responsibility and control of their own education experiences (Borsuk & Vest, 2002; Conley, 2002; Lieberman, 1998; Schleicher, 2003; Smith & Wright, 1999; Yachnin, 2000); the students’ sharpened awareness of the rigors and demands of college-level coursework (Hoffman, 2003; Lords, 2000); the students’ improved class or course performance, which is reflected in rising grade point averages (Borsuk & Vest, 2002; Cunningham & Wagonlander, 2000; Hoffman, 2003); better student attendance records which directly support decreased dropout rates and increased graduation rates (Borsuk & Vest, 2002; Conley, 2002; Cunningham & Wagonlander, 2000; Hoffman, 2003; Lawton, 1996; Lords, 2000; Schmerler, 2002; Smith & Wright, 1999); and an increased percentage of graduating high school students matriculating into a postsecondary institution (Conley, 2002; Cunningham & Wagonlander, 2000; Lawton, 1996; Lieberman, 1998; Lords, 2000; Schmerler, 2002; Smith & Wright, 1999).

The second category of shared benefits between middle and early colleges and the DCCE initiatives involves those elements that entice students to participate in the middle

and early college experience, which include: earning advance college credit that will accelerate the students' time to college degree completion and in the case of early colleges the participating students will have completed an associate's degree by the time they graduate from high school (Colgan, 2002; Conley, 2002; Hoffman, 2003; Lawton, 1996; Lieberman, 1998; Smith & Wright, 1999; Yachnin, 2000); smaller class size, which correlates to lower student-to-teacher ratios (Kass, 1998; Nathan & Myatt, 1998); college tuition savings (Colgan, 2002; Hoffman, 2003; Lawton, 1996; Lords, 2000); and an increased job placement rate and accelerated time to their desired career (Cunningham & Wagonlander, 2000; Hoffman, 2003).

Besides the DCCE benefits the middle and early college concepts possess several unique and distinguishing characteristics and features. These characteristics and features include: small school atmospheres, lower student to teacher/counselor ratios, diverse student support services, physical location, and student selection processes. The first unique feature to be discussed is the middle and early college initiatives' deliberate small school design. Jordan et al. (2006) indicated that the small school design was important because it allowed the students to get individualized attention from the faculty and staff and it fostered a communal and collegial learning environment. Jordan et al. also documented that the participating students often reported that the middle and early colleges had a "family-like atmosphere" (p. 739). Alvarado and Peebles-Wilkins (2003) indicated that the pilot middle and early colleges were designed to limit the size of these innovative high schools to 150 to 400 students. As an example, Washtenaw Technical Middle College which is located on the campus of Washtenaw Community College in

Ann Arbor, Michigan has a total student body of approximately 300 students (Schleicher, 2003). Fenway Middle College High School in Boston, Massachusetts, is another example of this unique middle and early college feature these high schools believed if they were to maintain an environment of academic excellence, they needed to keep their optimal size to 250-300 students (Nathan & Myatt, 1998).

The second unique feature of middle and early colleges is a byproduct of the small school environment which is a lower student to teacher/counselor ratio. Born (2006) reported that lower student to teacher/counselor ratios were critical in developing and fostering close relationships between the students and the high school personnel. Born also indicated that these close relationships generated college environments that “encourage student responsibility and commitment to academic success” (p. 50). Jordan et al. (2006) posited that lower student to counselor ratios meant decreased caseloads which translated into more nurturing learning environments due to providing the counselors the ability to provide the students more individualized attention. Jordan et al. indicated that the impact of individualized attention went further than mere academics by assisting the students with non-academic concerns such as social and emotional issues the students would inevitably encounter while in high school.

The third unique characteristic or feature of middle and early colleges relates to the diverse student support services that are integral elements of these initiatives. The list of student support services that middle and early colleges utilize to ensure student success include: in-school support activities, intervention personnel, and learning communities. The two most commonly used in-school support activities are called “focus group” and



“seminar.” Jordan et al. (2006) referred to focus groups, also referred to as “house” (Born, 2006), as programs that are scheduled in a class period during the students’ regular school day and the specific focus of these sessions is to provide the students emotional and psychosocial support along with tutoring and study skills instruction. Seminar is similar to focus groups, Born (2006) described seminar as an “informal structure, switching from whole group to individual conferencing depending on the time in the semester and what college assignments are due” (p. 52). Born also indicated that these sessions were used to provide the students time to work on class assignments. Teachers play an important role in the focus group or seminar sessions because they serve as the students’ mentor and help the students’ with both academic and/or personal problems and concerns (Borsuk & Vest, 2002). The intervention personnel that assist in making the students’ transition to college are called college liaisons. Born (2006) described college liaisons as personnel who assist the middle and early college students with logistical matters such as program planning, course registration, placement testing, and other factors necessary to participate in college coursework. Cunningham and Wagonlander (2000) stated that the college liaison has to be someone who has the trust and respect of the college’s administration and faculty and the public school’s board of education because of the impact the liaisons will have on the students’ future academic plans. A special instructional methodology that is employed in middle and early colleges that serves as a major student support service is the utilization of learning communities. Lieberman (1998) credited learning communities for the success middle colleges enjoyed because these communities capitalized on and deepened student learning through

challenging group projects. Nathan and Wyatt (1998) proclaimed “instead of thinking about students and teachers as ‘widgets’, we must focus on building small collaborative learning communities in schools and neighborhoods” (p. 284).

The physical location of the middle and early college high schools is the fourth unique feature of these college transition programs. Jordan et al. (2006) alluded to the phrase “power of the site” as a powerful description of the tangible and intangible advantages of locating middle and early colleges on the community college campus. They reported that students felt the caring and demanding setting of the college campus played a significant role in their academic and personal success. Jordan et al. also stated the significance of being located on the college campus translated into a broader selection of courses, increased access to more advanced educational technology and laboratory facilities, and contributed to higher levels of student maturity.

The fifth unique feature of middle and early college high schools is the student selection processes that these high schools employ to determine which students will be afforded the opportunity to participate. There are numerous approaches and strategies being used to assist in the student selection process. These strategies include systematic routines which include teacher and/or counselor recommendations (Alvarado & Peebles-Wilkins, 2003; Cunningham & Wagonlander, 2000). Borsuk and Vest (2002) documented that the middle college associated with the San Bernardino Valley Community College selected student participants by inviting high school sophomores that have low GPAs and high standardized test scores to apply for the program, attend informational sessions with their parents and be interviewed by the school faculty and

staff. Lawton (1996) stated that when the faculty and staff screened the applications and teacher/counselor recommendations, the faculty and staff looked for students that were not living up to their potential and were susceptible to dropping out of school. Some middle and early college high schools required students and their parents to sign agreements during the selection process which required them to make commitments to the initiatives (Jacobson, 2005). Jacobson specified that for the students it meant committing to attend classes and to strive for academic excellence and the parents were promising to be active in the students' academic endeavors by participating in school functions and overseeing the students' homework assignments. These schools felt that if the students agreed to these conditions in the beginning and effective student support services were administered, the students would rise to the challenge.

The major concerns and criticisms of the middle and early college high schools encompass the concerns and criticisms associated in general with DCCE initiatives and activities, however, these innovative high schools have one distinctive criticism and that is the lack of traditional high school student experiences. Because middle and early college high schools are deliberately designed for small student populations, all of the extracurricular activities and students' experiences that are associated with a traditional high school are difficult to duplicate in the middle and early college settings (Conley, 2005). Jacobsen (2005) pointed out that middle and early college high schools do not offer varsity sports, however, many public school districts are allowing interested students to participate in varsity sports at their home high schools while attending the middle or early college if they so desire. Jacobsen then cited Indiana University's dean of

the School of Education, Gerardo M. Gonzalez's questioning of a program that denied students from experiencing the traditional four-year high school experience. Gonzalez felt that the high school experience went deeper than mere academics and was a time the students needed to develop socially. Conley (2005) explained that although middle and early college high school lack the social and cultural factors that traditional high school possess, the students most suited for the middle and early college initiative are often the students who are less likely to participate in these activities in the first place.

From the beginning the philanthropic organizations recognized the lessons that could be learned from the innovative instructional philosophies and methodologies that are at the heart and soul of the middle and early college high schools. Conley (2005) stated "these schools can also teach regular high schools important lessons about how to articulate the curriculum so that the high school and college experiences become more continuous and the transition from high school to college is less abrupt" (p. 62). Overtime traditional high schools will be able to glean the best practices that are developed by the middle and early college initiatives and adapt these practices to better serve their particular student bodies. One of the practices revealed by the middle and early college high schools is the use of small group counseling sessions, like seminar and house (Alvarado & Peebles-Wilkins, 2003; Jordan et al., 2006). Schleicher (2003) stated that it is these small group sessions where students are assisted in defining their educational goals and needs which are used to design the students' academic plans. Another best practice developed through the middle and early college high schools involves training the teachers of these high schools to serve as planning counselors with the knowledge and

capacity to guide and nurture the students (Alvarado & Peebles-Wilkins, 2003; Nathan & Myatt, 1998). Born (2006) referred to the use of teachers in this role as “distributive counseling” (p. 53) because it was the responsibility of every faculty and staff member in the middle and early college high school to be trained and able to assist, mentor, and counsel the students. Nathan and Myatt (1998) posited “there is no substitute for an experienced, caring, and diverse faculty” (p. 283). The ability to make clear connections between what the students are learning in school and their postsecondary opportunities whether that means attending college or moving directly into the work force is another best practice of middle and early colleges (Cunningham & Wagonlander, 2000; Jordan et al., 2006). Born (2006) documented that students spoke positively of the training they acquired in the middle and early college high schools that eased their transition into the college environment. The final best practice of middle and early colleges is the reliance on strong and supportive senior leaders that strive to build effective and collaborative partnerships between the public schools and the community colleges (Conley, 2002; Nathan & Myatt, 1998). The key leaders that will define the quality and sustainability of what is created by the middle and early college initiatives starts with the community college president and the superintendent of the public schools.

Although there is scarce in-depth empirical research data concerning the ability of educational institutions to sustain middle and early college high schools beyond the funding streams that are currently being supplied by philanthropic organizations like the Bill & Melinda Gates Foundation, the literature has reported the positive impact of these innovative high schools. It has been reported to have a positive impact on graduation

rates, college matriculation rates, increased school attendance, and higher grade point averages (Cunningham & Wagonlander, 2000). For example, both Lawton (1996) and Lieberman (1998) reported that DeAnza Community College's middle college, located in Cupertino, California, graduate 87% of their students and 90% of the graduates immediately enrolled in a curriculum program at DeAnza Community College. Lieberman (1998) reported that middle colleges throughout the country had an 87% retention rate, 75% senior graduation rate, and a 78% college matriculation rate. Lords (2000) stated that LaGuardia Middle College reported a 94% graduation rate and a 90% college matriculation rate. These types of results cannot be ignored and the sooner the philosophies of middle and early colleges can be implemented in traditional high school settings the sooner true high school reform on a large scale will become a reality.

### **Related Studies**

A review of the literature revealed that there are a very limited number of formal studies that have been conducted to analyze the educational impact and effectiveness of DCCE initiatives. A majority of the benefits and statements espousing the positive educational impact and effectiveness of DCCE initiatives that were found in the literature review are based on empirical data from both supporters and opponents of the DCCE initiatives. There are also a handful of local, state and national reports that have been published; however, a vast majority of these reports were written using very subjective criteria. The formal studies focused on two major aspects and several minor aspects of DCCE initiatives. The two most commonly studied aspects of the DCCE initiatives are student performance and student perceptions. The other studies looked at common

characteristics of the initiatives such as the location of the programs, enrollment trends, and comparative relationships between the DCCE initiatives and other credit-based programs. Other credit-based programs include articulated credit agreements, Advanced Placement programs, and International Baccalaureate programs.

The studies that analyzed the student performance elements of DCCE initiatives compared grade-point-averages (GPA), course follow-up grades, time-to-degree, and degree completion persistence.

Hebert (2001) looked to see if there was a significant difference in the grades of students who took DCCE mathematics courses taught by high school teachers to those of students who took their DCCE mathematics courses with regular college faculty.

Windham (1997) compared the grades of students who took DCCE English courses to non-DCCE students after each group had completed comparable advanced writing

courses at universities within Florida's State University System. Chatman and Smith

(1998) looked to see if there was a significant difference in the grades of DCCE students taking foreign language courses to regular college students who took the same college

course. Marszalek, Zhu, Loeb, Bragg, and Brooks-Laraviere (n. d.) also looked for a

significant difference in grades of DCCE and non-DCCE students who took comparable Information Technology/Computer Information Science courses at 25 Northwest sites in

the United States. The studies conducted by Windham (1997) and Chatman and Smith

(1998) found no significant differences in the grades of the two groups of students within

experimental groups of the studies. Hebert's (2001) study concluded that students taking

DCCE courses taught by high school instructors had significantly higher grades in

follow-up mathematics courses than those students who took the same DCCE courses with regular college faculty. Marszalek et al. (n. d.) found that the grades of the DCCE participating students were higher than those students who were non-DCCE participants.

Three studies included comparisons of student GPAs. Along with the grades of students who took DCCE English courses to non-DCCE students after each group had completed comparable advanced writing courses, Windham (1997) also looked at the students' GPAs. Marszalek et al. (n. d.) also included the comparison of student GPAs in their study of DCCE and non-DCCE students of Information Technology/Computer Information Science courses. Spurling and Gabriner (2002) performed a comparison study of the GPAs of DCCE students who matriculated to the City College of San Francisco (CCSF) to non-DCCE participating high school students who went on to enroll at CCSF. All three of the studies found that students who participated in the DCCE courses had higher GPAs than the non-DCCE participants of the studies.

The remaining two elements of the student performance aspect of DCCE initiatives that were studied are time-to-degree and degree persistence. Both the Marszalek et al. (n. d.) and the Delicath (1999) studies looked to see if participating in DCCE courses made a significant difference in the completion rates of postsecondary degrees and if the time it took to complete the degrees was significantly decreased. Both of the studies found that students participating in DCCE initiatives had a higher degree-persistence rate than students who did not participate in DCCE courses. However, when it came to the time-to-degree element, both studies concluded that participating in DCCE initiatives did not significantly influence the students' time-to-degree, which is in direct



contradiction to empirical information that is espoused (Andrews, 2001; Boswell, 2001; Catron, 2001; Girardi & Stein, 2001).

The second major aspect most commonly studied about the DCCE initiatives is student perceptions. The studies that focused on student's perceptions concentrated on the students' overall thoughts about their DCCE experience, their perceptions about the location of the DCCE courses and whether or not they felt the experience adequately prepared them for a postsecondary institution.

Marshall and Andrews (2002) surveyed students who participated in DCCE courses in 1998 and 1999 and graduated from Marquette High School in 1999. Huntley and Schuh's (2002) study queried nine students who had participated in DCCE courses at three Midwestern high schools during the 1998-99 academic school year and had matriculated into postsecondary institutions. Kiger and Johnson's (1997) study surveyed not only forty-seven students about their perceptions of their DCCE experience but also included the perceptions of fifty-two parents. Johnson County Community College (JCCC) in Overland Park, Kansas conducted two formal studies of their DCCE initiatives called College NOW, in 2002 and 2005. Each of these five studies wanted to know what the students' overall perceptions were of their DCCE experience. The 2002 and 2005 JCCC studies indicated that 80% and 86%, respectively, of the participating students felt the experience was very positive, and these findings are supported by the Marshall and Andrews (2002) and Kiger and Johnson (1997) studies. The Huntley and Schuh (2002) study also indicated that the students felt the DCCE experience was a positive

experience; however, the students went on to say that they felt the community college courses were not as rigorous as their university courses.

One study wanted to know about the students' perceptions relating to the location of the DCCE courses. Burns and Lewis (2000) surveyed two groups of students who were taking DCCE courses, the first group took DCCE course on the high school campus and the other group took their DCCE courses on the community college campus. Burns and Lewis found that the students who took their DCCE courses on the high school campus felt like they had been short-changed in their experience and were not afforded all of the benefits that are derived from participating in DCCE initiatives on a community college campus.

The three studies that asked whether or not the students felt their DCCE experience adequately prepared them for a postsecondary environment were the two studies conducted by JCCC in 2002 and 2005 and the study by Huntley and Schuh (2002). All three of the studies concluded that the DCCE participating students felt that the DCCE experience had a positive influence on their postsecondary studies. However, as previously stated, the students in the Huntley and Schuh study still felt that the community college courses were less rigorous than the university courses, even though they felt the experience was a positive influence.

Only two other studies pertaining to DCCE initiatives were found during the literature review and these two studies looked at two entirely different aspects of the DCCE initiatives. Kleiner and Lewis (2005) surveyed approximately 1,600 Title IV degree-granting postsecondary institutions to ascertain the level of participation in the

DCCE initiatives, general characteristics of DCCE programs and the number of programs geared specifically to address the needs of at-risk students. Watts, Setzer, and Lewis (2005) sampled 1,499 regular public schools out of approximately 16,483 schools in the United States in an effort to compare the prevalence of the three most common credit-based programs: DCCE, AP, and IB.

Kleiner and Lewis (2005) reported that 57% of the 1,600 high schools had students participating in DCCE courses. The general characteristics that the report studied included location of DCCE courses, minimum faculty credentials, student enrollment requirements, and who was responsible for the tuition associated with the DCCE initiatives. Their report stated that 80% offered courses on the college campus and 55% indicated that they had DCCE courses on the high school campus. Of the 55% that had DCCE courses offered on the high school campus, 32% of the courses were taught by high school faculty. Forty-two percent of the high schools reported having minimum faculty credentials and 80% of these high schools reported using the college faculty credentialing requirements. Eighty-five percent of the high schools reported having minimum student enrollment requirements and of this group of high schools 45% used standardized test scores, 66% looked at the students' GPA and 31% required a recommendation and/or parental permission. The study found that in 64% of the DCCE initiatives tuition was required. In 31% of DCCE initiatives the college paid the students tuition, 37% of the initiatives had the local education administration paying the tuition and in 26% of the reported high schools the state covered the students' tuition expenses.

In Watts et al.'s (2005) comparison study of the three most common credit-based programs, DCCE, AP, and IB, they reported that 50% of the 1,499 high schools reporting having two of three of these credit-based programs, 36% indicated having at least one and 13% stated that they didn't offer any of these three credit-based programs. The study also looked at the types of courses that were being offered through the DCCE programs and where the courses were being offered. The study reported that 64% of the DCCE courses were academic and 36% were career and technical education related. Watts et al. also reported that the high school student respondents indicated that 74% of them took their DCCE courses on the high school campus, 36% took classes at a postsecondary institution and 4% took DCCE course via distance learning.

Due to the very limited number of formal studies that have been conducted pertaining to the DCCE initiatives it is fair to say that this aspect of the country's educational systems will require an increased interest and dedication in order to assess and improve DCCE initiatives.

### **CHAPTER III**

### **METHODOLOGY**

The purpose of this study was to determine how well North Carolina's Dual Credit-Concurrent Enrollment (DCCE) initiatives are addressing three areas of high school students' knowledge of college: (a) their basic college knowledge and their advisors, (b) their college enrollment plans/hopes, and (c) their actual college planning practices. The information from this study should translate into benefits for future student participants of North Carolina's DCCE initiatives. These benefits should also translate into reduced college costs, advanced college standing and a better overall understanding of the DCCE initiatives for an increased number of high school students.

The guiding question of the study centered around what were the major influences on high school students' decisions regarding DCCE courses. The research questions formulated to answer the guiding question included: (a) What were the influences on the academic goals of the students?; (b) What understandings did the participating students have of the DCCE possibilities?; (c) What understanding of the DCCE possibilities were held by the students' advisors, including friends, parents, middle and high school counselors, and community college liaisons?; and (d) What were the important events and factors in the DCCE planning process for the students?

### **College Selection**

The colleges that participated in this study were selected based on two criteria: the colleges' annualized Full-Time Equivalent (FTE) for the 2005-2006 reporting period and the colleges' geographical location within North Carolina.

The North Carolina Community College System's (NCCCS) Annualized Curriculum and Continuing Education Full-Time Equivalent (ANNTBL26) report (see Appendix B) was used to divide the 58 community colleges into five categories. The columns labeled Colleges and Total from the ANNTBL26 report were transferred to a spreadsheet, sorted, and analyzed to generate five categories that represent a reasonable distribution of community colleges within each of the five categories as indicated in Table 1.

**Table 1**

***Community Colleges Per Category***

<b>Category</b>	<b>FTE Range</b>	<b>Total Community Colleges Per Category</b>
1	0-1499	9
2	1500-2499	20
3	2500-3999	14
4	4000-5999	9
5	6000-UP	6

Two community colleges were selected from each of the five categories utilizing the second criteria, the community colleges' geographic location within North Carolina.

North Carolina was divided into three regions; east, central, and west and an effort was made to insure that each region was adequately represented. Appendix C shows a map of the counties of North Carolina to reference how the state was divided into three regions. Western counties are defined as those that are west of but not including Stokes, Forsyth, Davie, Davidson, Stanly, and Richmond counties and these counties are served by nineteen community colleges. The eastern counties are those that are east of but not including Warren, Franklin, Wake, Harnett, Cumberland, Bladen, and Columbus counties and these counties are served by twenty community colleges. The remaining nineteen community colleges serve the other North Carolina counties which are designated as centrally located for the sake of this study. Table 2 shows the community colleges that were selected to participate in the study, the total FTE earned per community college during the 2005-2006 academic school year, the geographic location of the community colleges within North Carolina, and total number of secondary institutions in the community colleges' service area. For this research study, secondary institutions included traditional public high schools (grade 9-12), "secondary" public high schools (grades 6-12), private/proprietary high schools, middle colleges, and early colleges.

The community colleges selected for this study from category 1 include Roanoke-Chowan Community College and McDowell Technical Community College. Roanoke-Chowan Community College is located in eastern North Carolina and works with five secondary institutions from Northampton, Hertford, and Bertie counties. McDowell Technical Community College has been designated as a western county for this study and serves the two secondary institutions of McDowell County. Although the president at

McDowell Technical Community College provided the researcher permission to utilize the college in the research study and numerous efforts were made, the researcher was unable to secure the student contact information needed to randomly select and administer the individual student questionnaire. Therefore, only one community college from category 1 was utilized in this re search study.

**Table 2**

*Community Colleges' Characteristics*

<b>Category</b>	<b>2005 -2006 FTE</b>	<b>Geographic Location</b>	<b>Number of Secondary Institutions in Service Area</b>	<b>Selected Community College</b>
1	962 1364	East West	5 3	Roanoke-Chowan CC McDowell Technical CC
2	1715 2205	East West	6 8	Sampson CC Mitchell CC
3	3235 3449	West East	5 13	Western Piedmont CC Wayne CC
4	4574 5474	Central East	12 25	Durham Technical CC Pitt CC
5	6475 8563	Central Central	34 45	Forsyth Technical CC Guilford Technical CC

In category 2, Sampson Community College and Mitchell Community College were selected for the study. Sampson Community College is an eastern designated county and serves six secondary institutions within Sampson County. Mitchell Community College is the second community college selected from category 2 and is a western designated county that works with eight secondary institutions within Iredell County.



The third category includes Western Piedmont Community College and Wayne Community College. Western Piedmont Community College is geographically positioned in the western part of the state and works with five secondary institutions in Burke County. Wayne Community College is academically partnered with thirteen secondary institutions of the centrally designated Moore and Hoke counties.

Category 4 consists of Durham Technical Community College and Pitt Community College. Durham Technical Community College is a centrally located community college and serves twelve secondary institutions within Durham and Orange counties. Pitt Community College is located in the eastern part of the state and works with the twenty-five secondary institutions of Pitt County.

The fifth and final category of community colleges includes Forsyth Technical Community College and Guilford Technical Community College. Forsyth Technical Community College located in the centrally designated sector of North Carolina works with thirty-four secondary institutions in Forsyth and Stokes counties. The largest community college included in the study is Guilford Technical Community College, which is also centrally located and serves forty-five secondary institutions in Guilford County.

Once the community colleges were selected using the two criteria previously outlined, the presidents at each of the selected community colleges received a personal phone call asking if they would allow the students from their college to participate in the research study. It should be noted that the list of participating community colleges went through several iterations due to the fact that several community colleges had policies

and procedures that disallowed them from providing the information the research study needed to solicit student participation. FERPA regulations require each postsecondary institution to notify their students, via their college catalog, about the personal information the college will provide outside agencies when requested. Several community colleges had made agreements with their student government organizations that they would not release the students' home addresses or phone numbers; therefore, the research study was unable to utilize these institutions.

An information packet was sent to each of the community college presidents who agreed to participate in the research study. The information packets contained five documents: an explanatory letter, a community college information document, an example letter of support, a copy of the student consent form, and a copy of the individual student questionnaire. The explanatory letter (see Appendix D) outlined the goal of the research study, the student selection criteria, and how the students were to be randomly selected. The letter also asked the presidents to provide a letter of support and an example letter was provided that they could use as a guide (see Appendix E). The researcher also asked them to include on the community college information document (see Appendix F) a contact person for the student selection process and to indicate how many secondary schools their community college served. They were also asked to return a signed letter of consent in addition to the completed community college information document. For their review, the presidents were also provided a copy of the documents that were sent to each of the students selected to participate in the research study.

### **Student Selection**

Once the community college information documents were returned by the individual presidents the researcher got in touch with the identified contact personnel from each of the community colleges. Each of the community college contact personnel was asked to complete a research confidentiality document, and return the document to the researcher (see Appendix G). The community college contact personnel were provided the following student selection criteria: students who are 18 years or older, students who graduated from high school in either 2005 or 2006, students who participated in dual credit/concurrent enrollment initiatives while in high school, and students who were enrolled in a curriculum course at the community college during the fall 2006 semester. The community college contact personnel were also sent an email (see Appendix H) with the information document as an attachment (see Appendix I), which outlined the Datatel query statements that would generate a list of student names and the students' directory information for the students who meet the previously outlined selection criteria. Listed below are the Datatel query statements that were provided the community college contact personnel:

```
SELECT INSTITUTIONS.ATTEND WITH INSTA.END.DATES LIKE '...05'
'...06'
```

```
SELECT INSTITUTIONS.ATTEND WITH INSTA.INST.TYPE = 'HS'
```

```
SELECT INSTITUTIONS.ATTEND WITH INSTA.GRAD.TYPE = 'Y'
```

```
SELECT INSTITUTIONS.ATTEND SAVING UNIQUE INSTA.PERSON.ID
```

```
SELECT STUDENTS WITH STU.TERMS = '2006FA'
```

```
SELECT STUDENTS WITH STU.AGE >= '18'
```

```
SELECT STUDENTS WITH STU.ACAD.PROGRAMS = 'T90980' 'T90970'
```

```
LIST PERSON ID.SUP PERSON.NAME BEST.ADDRESS PERSONAL.PHONE  
NUMBER LPTR
```

As previously indicated, the student population selection in this research study was based on four criteria: (a) were at least 18 years old as of April 1, 2007, (b) graduated from high school in either 2005 or 2006, (c) participated in DCCE initiatives while in high school, and (d) were enrolled at one of the selected community colleges during the Fall 2006 semester. The first student selection criterion requiring the students to be 18 years or older was chosen to simplify the study by eliminating the issue of working with minors and requiring the minors' parental consent to participate in the study. The second criterion of only selecting students who graduated from high school in either 2005 or 2006 was chosen due to the currency of the DCCE experiences for the students. For the smaller community colleges this criteria was expanded to include 2004 high school graduates to ensure that they could produce a large enough pool of students to participate in the study. This criterion being the most current data possible was important because the students were asked to respond to the research questions of the study by reflecting back on their DCCE experiences and providing their perceptions of the impact and effectiveness of their experiences but it was felt that the inclusion of 2004 high school graduates did not have a negative impact on the research results. The third student selection criterion gets to the heart of the study and makes sure that only those students who had participated in DCCE initiatives while in high school were included in the research study. The fourth and final student selection criterion was designed to increase

the likelihood that there would be students available to participate in the study and solicit input from students who actually matriculated into a postsecondary institution.

Although the presidents of ten community colleges agreed to have their institutions participate in the research study, the primary research was ultimately only able to gain access to student information lists from nine of the ten community colleges. Several of the smaller community colleges were unable to produce student information lists with more than seventy-five names even after expanding the queries to include 2004 high school graduates. Therefore, all of the identified students from these smaller community colleges were included in the research study. Table 3 shows the number of names that were identified by the query statements for each of the participating community colleges.

Once the community college contact personnel employed the given Datatel query statements, they emailed the generated student lists to the primary researcher, who then compiled the student information, in alphabetical order, into spreadsheets per participating community college. Once the student information was alphabetized, the names were then assigned a number in ascending order. The researcher then employed what Fowler (2002) called a simple random sampling approach in selecting the participants for the research study. Fowler describes the simple random sampling technique as one in which the population of participants has been defined and numbered and then a random number generator is utilized to determine which of the numbered participants will be selected.

**Table 3*****Number of Student Names Identified Per Community College***

<b>Community College</b>	<b># Names Identified</b>
Roanoke-Chowan CC	18
McDowell Technical CC	no list provided
Sampson CC	59
Mitchell CC	83
Western Piedmont CC	126
Wayne CC	125
Durham Technical CC	94
Pitt CC	129
Forsyth Technical CC	220
Guilford Technical CC	75

This guarantees that each member of the defined list of participants has an equal chance of being selected to participate which will minimize selection bias. There are a variety of types of random numbers generators in varying degrees of sophistication which range from tables of random numbers to computer software packages. This research study employed an internet-based random number generator called the research randomizer program (<http://www.randomizer.org/>) to determine the students who would be randomly selected to participate in the research study. The research randomizer generated a random set of numbers utilizing the responses provided for the following series of questions:

1. How many sets of numbers do you want to generate? The study's response to this question was "1."

2. How many numbers per set? The study's response to this question was "75."

3. Number range (e.g. 1-50)? The study's response to this question varied depending on the number of students that were provided by each of the participating community colleges.

4. Do you wish each number in a set to remain unique? The study's response to this question was "yes."

5. Do you wish to sort the numbers that are generated? The study's response to this question was "Yes, least to greatest."

6. How do you wish to view your random numbers? The study's response to this question was "Place markers off."

The students who were selected to participate in the research study were those who had the assigned numbers that were generated by the research randomizer. Examples of the number sets generated by the research randomizer are seen in Appendix J and represent the number sets utilized to determine the students who were asked to complete the individual student questionnaire from Mitchell Community College and Western Piedmont Community College. The research randomizer was used twice on the student information list provided by Mitchell Community College, once to identify twelve students that were solicited to participate in the focus group interview, i.e. combined student interview, and the second time to identify the 75 students who were asked to complete the individual student questionnaire. The research randomizer was only used once for the other participating community colleges and only for the community colleges

that provided more than seventy-five student names after administering the Datatel query statements.

### **Institutional Review Board**

The original proposal for the research study indicated that only five community colleges would be included in the study and focus group interview sessions and individual student questionnaires would be conducted and administered at each of the five community colleges, however, the Institutional Review Board (IRB) approval process took much longer than originally planned. Therefore, the primary researcher was granted permission to modify the study by only conducting the focus group interview at one community college and increasing to ten the number of community colleges that the individual student questionnaire would be administered.

The extended amount of time it took to gain IRB approval had a major impact on the research timeline which was somewhat ameliorated through the decision to conduct only one focus group interview. The original IRB application was submitted in June 2006. On September 19, 2006, the researcher received an email from a representative of the School of Education indicating that they had just received the application and asked if there was a desire for them to review the application. After numerous email exchanges, the researcher was able to revise the IRB application so that it conformed to the recommendations of the School of Education representative, and the IRB application was then resubmitted on December 4, 2006. On January 2, 2007, the researcher received an email from the School of Education representative asking for clarification on several elements of the application and revisions to several of the documents accompanying the



application. On January 7, 2007 the researcher responded to the School of Education representative's questions for clarification and submitted revised versions of the accompanying documents of the IRB application. On January 21, 2007 the researcher received an email from an IRB representative stating that they had numerous concerns and questions about the application and requested that the researcher work through their concerns and questions via email versus submitting a revised IRB application. For the next two months the researcher worked through the concerns and questions that the IRB representative had about the application and on March 22, 2007 the researcher received an email from the IRB representative indicating that they had signed off on the application; but that the researcher would need to submit a modification application prior to sending out the individual student questionnaire.

On July 9, 2007 the researcher submitted a modified application to the IRB representative and was immediately told the researcher needed to submit it to the School of Education and they would review it and send it to the IRB office. The researcher submitted the modification application to the School of Education on July 11, 2007 and on August 14, 2007 the researcher was notified that the application would be sent to the IRB office the very next day. On August 16, 2007 the researcher was notified that the application was returned to the School of Educational to be reviewed and signed by the departmental reviewer. On September 3, 2007 the researcher was notified that the application had been reviewed and signed by the departmental reviewer and returned to the IRB office. On September 6, 2007 the researcher received an email from a representative of the IRB office indicating that the modification application had been

approved and the researcher was granted permission to start collecting student data with the submitted instrument. The data collection began on September 10, 2008 and continued until the second week in January 2008, and the resulting data form the foundation of this research study.

### **Data Sources**

The study was a three-phase, mixed methods study (Creswell, 2003). The first phase involved a student database search; the second phase involved a focus group interview that ended up being a combined student interview due to low student participation, which represented the first data collection methodology used in the study, and the third phase entailed the second data collection methodology of the research study which was the administration of an individual student questionnaire.

Jaeger (1997) stated “the purpose of survey research is to describe specific characteristics of a large group of persons, objects, or institutions” (p. 449). The decision to employ survey research methodologies to study the guiding question and research questions of this research study was made because the study adhered to the two major elements described in Jaeger’s purpose statement for survey research. One element of Jaeger’s definition addressed in this study is the inclusion of a large group of people and multiple institutions. The large group of people that this research studied was the students who successfully completed DCCE courses and who attended one of the nine participating community colleges. The other element of Jaeger’s definition involves analyzing the specific characteristics of the group being studied. This research study contained Jaeger’s second element in that the study specifically examined three very

specific characteristics of the students' knowledge of college: the knowledge-base of the students and their advisors, the college enrollment goals for the students, and the students' college planning practices.

The two methodologies employed in this research study, a focus group interview and individual student questionnaires, were selected because they rely on feedback and input from the students being studied, thereby, giving the research a unique and authentic insight into the issues being queried by the research question. The use of these two methodologies lent validity to the data analysis that was needed to respond to the guiding question and research questions in a cost-effective, relatively short period of time and allowed the study to cross-check accuracy and consistency of the responses.

The first survey research method utilized in the study was a focus group interview which was conducted on the campus of Mitchell Community College located in Statesville, North Carolina. Twelve student names were randomly selected from the list provided by Mitchell Community College's identified contact person. Although the literature did not reveal a definitive number of participants required to conduct an effective focus group session there is a range of participants that can be derived from the literature; Vogt (1999) indicated 12 participants, Salant and Dillman (1994) and Edmunds (1999) indicated eight to ten participants, Krueger and Casey (2000) indicated five to ten participants, Bader and Rossi (2002) indicated ten to 12 participants, and Creswell (2003) indicated six to eight participants. This study chose twelve in hopes of guaranteeing there would be enough participants to make the focus group interview effective.

Once twelve randomly selected student names were identified, each of the selected students was sent an invitational letter (see Appendix K), along with the Participant's Consent form (see Appendix L). Two weeks after mailing the invitation letter to the randomly selected students the primary researcher called each of the 12 students. During the telephone conversations the researcher followed the focus group screening questionnaire script (see Appendix M) to ascertain the students' interest in participating in the focus group interview. The telephone calls revealed that of the 12 randomly selected students, three students agreed to participate in the focus group interviews, two of the phone numbers had been disconnected, one student had moved away from North Carolina, three students declined participation in the focus group interviews but agreed to complete an individual student questionnaire, one student declined to participate in either the focus group interviews or complete the individual student questionnaire and the researcher was unable to make contact with the remaining two randomly selected students.

Because only three of the originally randomly selected students agreed to participate in the focus group interview the researcher randomly selected nine more potential focus group participants. The researcher removed the original twelve randomly selected student names from the Mitchell Community College list and re-administered the research randomizer. During the second administration of the research randomizer the researcher had the randomizer randomly sort all the numbers and list the numbers in their randomly selected order. Once the list was generated the researcher started with the first name and number on the list and made personal telephone calls to the students on the list.

After all of the telephone calls were completed, seven students agreed to participate in the focus group interviews and the seven students were informed that two drawings would be held at the end of the interview session and the two drawn names would be given \$25 gift certificates. Edmunds (1999) would describe this type of focus group session as a mini focus group. The mini focus group interview was scheduled and conducted on Thursday, June 21, 2007 on the campus of Mitchell Community College. On the day of the focus group interview only two students showed up for the focus group interview and the decision was made to move ahead with the interviews. Edmunds (1999) described two other types of focus groups that are smaller than a mini focus group and they were dyads and triads and these focus groups involved two and three participants respectively. Because only two participants showed up for the focus group interview a dyad focus group session was conducted. Edmunds indicated three advantages and three disadvantages to dyad focus groups. The first advantage of the small focus group interview, such as a dyad, is that it allows the moderator of the focus group interview to gain “greater detail with more in-depth probing on topics of discussion” (p. 20). The second advantage of dyad focus groups is that it allows more opportunities for the participants to test new products and procedures of products in certain types of focus group settings. The third advantage of dyad focus groups is that these formats are often less expensive to administer. Of the three advantages identified by Edmunds, the only one that played a role in the focus group interview of this study would be the first advantage in that the researcher was able to ask the participants to expound upon their responses. The first disadvantage that Edmunds relates with dyad focus group session is

that the associated study may be required to conduct more sessions so that enough information can be obtained to conduct an analysis. Although it would have been better to have been able to conduct more focus group sessions, time constraints played a major role in the decision to move ahead with only one focus group interview for the current research. The second disadvantage of the dyad focus group format involves the limited opinions and points of view that are represented by the group and for this study this was compounded by the fact that the two participants were similar in multiple ways. The two participants of the dyad focus group were Caucasian females and both non-public school students in that one student had been home schooled and the other had attended a private school. The third disadvantage of dyad focus groups relates to the fact that when there are only two participants, each of the participants will be expected to speak out more and they may feel uneasy and uncomfortable with this level of attention. This was not a problem for the focus group interview that was conducted for this study. Both of the participants demonstrated a great deal of self-confidence and showed no signs of feeling uneasy or discomfort during the interview session. Because only two students participated in this focus group interview this session resulted in a combined student interview versus a true focus group and will be referred to as a combined student interview throughout the rest of this research study.

The combined student interview was conducted using a Focus Group Protocol script (see Appendix N), which outlined how the combined student interview session was to be conducted along with the questions for the participants. The study incorporated the focus group questioning philosophy of Krueger and Casey (2000) which separated the

questions into five categories: opening questions, introductory questions, transition questions, key questions, and ending questions. For the opening question category the study had one question that was designed to have the participants introduce themselves and their future plans. The intent of this question was to allow the participants an opportunity to get to know each other and feel more comfortable answering questions in the presence of others. The opening question of the combined student interview was: Tell us your first name and briefly describe your future plans.

The introductory question category of the combined student interview also involved one question that was designed to help the students begin reflecting on their DCCE experience. The question was: Reflecting back, how did you learn of the dual credit-concurrent enrollment initiatives?

The third questioning category, the transition questions, consisted of three questions and these questions were designed to have the participants reflect back on when they first began making postsecondary plans and who or what were the most influential elements. Listed below are the three transition questions used during the combined student interview:

- What grade were you in and what or who influenced you to seriously start to develop and plan for your postsecondary goals?
- Name two things that were the most influential elements in helping you determine your postsecondary goals and indicate why you chose these two things?

- Name two reasons why you selected the dual credit-concurrent enrollment courses you chose and indicate why you identified these two reasons?

The heart of the combined student interview involved the fourth category of questions, the five key questions. During this portion of the combined student interview the participants were asked to reflect back and provide a more in-depth critique of their level of understanding and future role of their DCCE experience in terms of their postsecondary goals. They were also asked to critique the level of influence and understanding of various groups which included: student advisors, friends, parents, middle and high school counselors and community college liaisons. The five key questions asked during the combined student interview are listed below:

- When you first enrolled in dual credit-concurrent enrollment courses, describe your level of understanding about how the dual credit-concurrent enrollment courses were going to help you with your postsecondary goals?
- Did you know where you were going to college and which program of study you were going to enroll in when you enrolled in the dual credit-concurrent enrollment courses?
- In your perspective, what level of understanding did the following groups have of the dual credit-concurrent enrollment initiative?
  - Student Advisors
  - Friends
  - Parents
  - Middle and High School Counselors
  - Community College Liaisons



- In your perspective, how well did the following groups make the connections between your postsecondary goals and the overall dual credit-concurrent enrollment initiative?
  - Student Advisors
  - Friends
  - Parents
  - Middle and High School Counselors
  - Community College Liaisons
  
- What element of the dual credit-concurrent enrollment planning process was the most valuable to you?

The final category of questions, consisted of two ending questions, which asked the participants to reflect back DCCE experience and describe what they would have done differently, knowing what they know now. They were also asked to indicate what the various groups listed above could have done differently to better prepare the participants for their postsecondary experience. Listed below are the two ending questions:

- Knowing what you know today, what would you have done differently concerning your participation in the dual credit-concurrent enrollment initiative?
  
- In retrospect, how could any of the following groups have done things differently to help you make better use of your dual credit-concurrent enrollment experience?
  - Student Advisors
  - Friends
  - Parents
  - Middle and High School Counselors

- Community College Liaisons

The responses of the participants were recorded using three different mediums during the course of the combined student interview. Each of the participants was given a clip board, ink pen and a small pad of paper when they arrived. The first twelve pages of each pad of paper was numbered one through twelve according to the twelve questions that would be asked during the interview. As each question was asked, the participants were asked to jot down their first thoughts prior to the discussions and this was done in hopes of helping the participants begin to develop their own responses to the questions. Two digital voice recorders were also used to record the participants' responses throughout the combined student interview. The third and final medium used to record the participants' responses during the combined student interview involved the notes that the primary researcher took throughout the session.

Because there were only two participants, there was no need to have two drawings and both students were given a \$25 gift certificate and thanked for their participation.

The third phase of the research and the second methodology utilized in the study entailed the administration of an individual student questionnaire. The individual student questionnaire captured a majority of the data that was used in the research study which allowed the researcher to gather data from a large pool of target students in the most cost-effective manner.

The individual student questionnaire was mailed to a total of 602 students from the nine participating community colleges. Although the intent of the study was to select 75 students from each of the nine participating community college to send the individual

student questionnaire, two of the smaller community colleges did not have 75 students that met the defining criteria of the study and twenty-three surveys were returned due to incorrect mailing addresses. Salant and Dillman (1994) stated that two strengths of mail surveys are that they can be completed in privacy and not feel the pressure associated with responding to questions in a group or face-to-face settings and the responses are less susceptible to the biases associated with the respondent wanting to give the answer that they feel the interviewer wants to hear. Salant and Dillman listed multiple weaknesses of mail surveys and the first is the introduction of what they call non-coverage error which means the list that the participants are selected from is most likely not the complete list of possible participants. This weakness was somewhat mitigated in that this research study did narrowly define the population of student participants; however, this step was taken to help identify a group of students who could easily reflect back on their participation in the DCCE initiatives. The second weakness that they identified involves the non-response error which can be caused by a variety of reasons. Fowler (2002) defined three categories of people who do not respond to a mail survey which are contributing factors of non-response error: those who did not receive the survey for whatever reason and thus not given a chance to complete the survey, those who received the survey but refused to complete the survey, and those who received the survey but were unable to complete the survey for reasons such as being ill or unable to read to the survey due to language barriers or their reading or writing skills were not adequate to complete the survey. Salant and Dillman (1994) provided a fourth category of people and it includes those people who are just not interested enough in the purpose of the survey.

Another weakness that Salant and Dillman gave of mail surveys is that the researcher has little to no control over the questionnaire once it is mailed. The researcher cannot be absolutely certain that the person that the survey was sent to was the actual person that completed and returned the survey. This is a problem in that the information gained has no guarantee of accurately reflecting what the selected participant would have included in the completed survey. The researcher also doesn't have any control in making sure the respondent answers all of the questions on the questionnaire versus leaving some of the items blank.

Like the combined student interview phase of the study, the student participants were selected by placing the names of the students provided by each of the participating community colleges in alphabetical order and then numbering them in ascending order. Then the internet-based research randomizer was utilized to select the students that would participate in the research study. Because the group of students being analyzed in this research study represents a homogenous group of people who had to meet specific selection criteria, the study incorporated a simple random sampling technique by using an internet-based research randomizer and so was able to guarantee with a high degree of confidence that selection bias has been truly minimized if not eliminated.

Each randomly selected student was mailed an individual student questionnaire packet which contained: an invitational cover letter (see Appendix O), a student consent form (see Appendix P), an individual student questionnaire (see Appendix A), and a self-addressed stamped envelope. The individual student questionnaire packets were mailed to 602 participants during early September through early October of 2007, and during the

latter part of November 2007 the first reminder postcard (see Appendix Q) was mailed to the 602 selected students thanking those who had completed and returned the questionnaire. The reminder postcard also asked those that did not complete and return the questionnaire to please do so if they were willing to voluntarily participate in the study and that if anyone had any questions or needed a new survey to please contact the primary researcher. After the initial mailing, approximately 63 completed questionnaires were returned prior to the first reminder postcard. Several selected participants did contact the primary researcher requesting new questionnaires, and after the first reminder postcard was mailed six more completed questionnaires were returned. During the second week of December 2007 a second and final reminder postcard (see Appendix Q), was mailed out to all of the selected participants which once again thanked those who had already completed and returned the questionnaire and reminded the others that if they wanted to participate in the study, to please return the completed questionnaire or contact the researcher with any questions or requests. The mailing of the second reminder postcard yielded two more completed questionnaires for a combined total of 71 completed questionnaires out of the 602 questionnaires that were initially mailed which represents a return rate of 11.79% (see Table 4).

Fowler (2002) outlined a sequence of events that a study utilizing a mail survey can follow to increase the response rate and the first step is to send the non-respondents a reminder card. Since identifying numbers could not be used on the initially mailed questionnaires, the researcher had to send the reminder card to all of the 602 selected participants. The second event outlined by Fowler includes the mailing of a letter to the

non-respondents asking them for their help and input. The primary researcher chose to mail a second reminder postcard in lieu of a formal letter due to the cost associated with mailing a letter to all 602 participants. The third event included in Fowlers sequence of events to increase the response rate for the mail survey involves contacting the non-respondents by telephone. The major factor hindering the researcher from employing this strategy is the fact that the researcher could not be provided the telephone numbers for the students identified by the nine community colleges.

**Table 4**

*Questionnaire Return Rates*

<b>Participating Community Colleges</b>		<b># Mailed</b>	<b># Returned</b>	<b>% Returned</b>
Roanoke-Chowan CC		18	3	16.67%
McDowell TCC		0	0	
Sampson CC		59	5	8.47%
Mitchell CC		75	11	14.67%
Western Piedmont CC		75	4	5.33%
Wayne CC		75	14	18.67%
Durham TCC		75	6	8.00%
Pitt CC		75	5	6.67%
Forsyth TCC		75	13	17.33%
Guilford TCC		75	10	13.33%
		602	71	11.79%
Returned Due to Bad Addresses	23			
Adjusted Return Rate		579		12.26%

Because the research study chose to guarantee the participants that their responses would be completely anonymous, the questionnaires did not have an identifying number on them as Fowler suggested. Therefore, the researcher only knows the names of the selected participants that did not receive the questionnaire because the questionnaires

were returned to the researcher due to wrong mailing addresses. As indicated in Table 4, 23 questionnaires were returned to the researcher due to wrong mailing addresses which means the researcher knows of 23 participants who fall into the first category of non-responsive participants. There could be others that fall into category one that the researcher is unaware of and there is no way the researcher can determine how many of the non-responses fall into the other two categories of non-responders.

The individual student questionnaire consisted of two different sets of questions; the first set consisted of four demographic questions and the second set consisted of eleven questions that were developed based on the guiding and research questions which are the foundation of this research study. The four demographic questions asked the students to indicate their gender, ethnicity, type of high school attended and the community college they attended. The nominal response options for each of the four demographic questions are listed below:

- *Gender*: Female, Male
- *Ethnicity*: African American, American Indian, Asian, Caucasian, Hispanic, Other
- *High School*: Home Schooled, Private School, Public School
- *Community College*: Durham Technical Community college, Forsyth Technical Community College, Guildford Technical Community College, Mitchell Community College, Pitt Community College, Roanoke-Chowan Community College, Sampson Community College, Wayne Community College, Western Piedmont Community College.

Four of the remaining eleven questions were developed when the results of the combined student interview were analyzed and salient points emerged which were utilized to formulate the question options for these four questions. Listed below are the four questions and accompanying each question are the response options that were derived from the salient points that emerged during the combined student interview:

- Using the list provided below, how did you learn of the dual credit-concurrent enrollment program? If more than one answer applies, please rank them according to the most influential
  - Parents
  - Friends
  - High School Teachers
  - High School Counselors
  - College Representative
  - College Promotional Material
- Using the list provided below please indicate which two things were the most influential factors in helping you determine your college goals or write in your most influential factors. Please indicate why you chose these two things.
  - A parent's past college difficulties.
  - A parent's past hardships in life.
  - A brother/sister's lack of college experience.
  - A brother/sister's past college difficulties.
  - Proximity of college to home.



- Professional Goals.
- Ability to take college courses in high school.
- Because the tuition was waived.
- Using the list provided below please indicate the two most important reasons why you selected the dual credit-concurrent enrollment courses you chose or write in your influential reasons in the space(s) marked “other.” Please indicate why you identified these two reasons.
  - Courses met associate degree requirements.
  - Courses met bachelor degree requirements.
  - Courses met personal interests.
  - Courses matched up with high school courses.
  - Take advantage of the tuition waived opportunity.
  - Wanted something beyond the high school experience.
  - Because my friends signed up for the courses.
- Using the list provided below and knowing what you know today, please indicate what you would have done differently concerning your participation in the dual credit-concurrent enrollment initiative or write in your response if it is not listed below. Please indicate why you do these things differently.
  - I would have taken more college courses.
  - I would have started taking college courses earlier in high school.
  - I would have better planned the college courses I took with my ultimate college goals.

The remaining questions on the questionnaire were pre-determined prior to the combined student interview and were designed to gain further insight into the study's guiding and research questions (see Appendix A for the complete questionnaire). Question 5 of the questionnaire was a two part question that required the participants to provide yes or no responses to both parts of the question that was designed to have the students reflect back on their pre college planning process. The purpose of the eighth question was to find out during which grade level of school the students started to seriously develop their plans for college. The remaining five questions used 5-point Likert scales to capture the responses of the participants. Questions 6 and 12 used a 5-point Likert scale consisting of very high level, high, low, very low, and no to measure the participants' perceptions of their personal level of understanding and that of various educational groups that they dealt with before and during their experiences in DCCE initiatives. Question 13 used a similar 5-point Likert scale consisting of very high, high, low, very low, and none to measure the participants' perception of the level of connection the various groups made between the students' plan for college and the DCCE initiative. Questions 7 and 9 used a 5-point Likert scale consisting of most, very, influential, hardly, and not to measure the participants' perceptions of the level of influence various groups had on their DCCE knowledge base and their college goals and plans.

### **Data Analysis**

This study was a three-phase, mixed methods research study. Descriptive statistics were used to describe the salient points and recurring answers that emerged from the literature review, combined student interview and individual student questionnaires

relating to the study's guiding and research questions. Krueger and Casey (2000) contended that although the findings of focus group interviews, i.e. combined student interview, are not intended to be used to make generalized statements or posits, the findings can be transferable. Krueger and Casey described the concept of transferability as one in which the results of a focus group interview can be transferred to another situation or population if the researcher determines that the "conditions, situations, and procedures" (p. 204) of the focus group interview involves a high degree of fit with the other situation or population being studied.

The analysis of the data was handled in two phases; the first phase involved the results of the combined student interview and the second phase entailed analyzing the results of the individual student questionnaires. During the first phase of the data analysis, the researcher reviewed and analyzed the voice recordings and the participants' and researcher's notes of the combined student interview and identified and documented any recurring answers in the participants' perceptions, experiences, and feelings (Fowler, 2002) relating to the combined student interview questions. Because there were only two participants in the combined student interview and the two participants were very similar demographically, the results of the combined student interview are biased and that is why the results were analyzed along with factors revealed during the literature review. The researcher was sensitive to any recurring answers that emerged relating to the participants' perceptions, experiences, and feelings in terms of their advisors' and their personal level of understanding and influences pertaining to the participants' knowledge-base, college enrollment goals, and college planning practices. Once recurring answers

were detected that correlated with the patterns revealed during the literature review, the selection options for four questions on the individual student questionnaire were generated capturing the essence of the recurring answers identified in the combined student interview and literature review. Questions 10, 11, 14 and 15 of the individual student questionnaire were the questions that incorporated the salient points and recurring answers that emerged from the combined student interview and the literature review process.

The second phase of the study's data analysis involved what Jaeger (1997) referred to as data reduction of the responses to the individual student questionnaire. Jaeger described data reduction as the process of converting survey data into an analyzable format which for this research study involved generating multiple data spreadsheets. As indicated multiple spreadsheets were generated and one overall spreadsheet (see Appendix R) was developed that captured every response from each of the individual student questionnaires that were completed and returned. The questionnaires that were completed and returned were not arranged in any specific order and each questionnaire was assigned a number in ascending order. The rows of the spreadsheets were assigned the numbers corresponding to the individual questionnaires in ascending order and the spreadsheet's columns were assigned to each possible response that could be provided on the individual student questionnaire for all the questions except those questions that were formulated using the combined student interview responses and literature review which includes questions 10, 11, 14, and 15.

The results of the demographic questions were compiled and recorded in Appendix S. The responses to all of the non-demographic questions were compiled in separate spreadsheets and then the results of all of the responses were compiled and formatted into tables. Descriptive statistics were utilized for data acquired through the individual student questionnaires in relationship to the study's guiding and research questions.

### **External Validity**

Vogt (1999) describes external validity as the degree to which the results of a study are generalizable to a similar population beyond the research study. Due to the limited size and demographics of the completed surveys that were returned, there is no degree of confidence that the results of this survey can be generalized to a larger population. Therefore, the findings of this research study do not necessarily reflect the perceptions and understanding of the overall population of students that have participated in DCCE initiatives. Although the findings of this research study cannot be generalized to the larger population, the findings should be transferable to other studies of students who have participated in DCCE activities.

### **Internal Validity**

Because this research study was a qualitative descriptive study, internal validity relates to the degree of confidence in the accuracy and quality of the study. Creswell (2003) outlined a number of strategies of check the accuracy of the findings of qualitative research studies. One of the strategies Creswell identified is the use of triangulation which is the use of multiple data sources that result in the same if not similar results and

findings. This research study utilized this strategy by employing three different data sources; literature review, a combined student interview and an individual student questionnaire and each of these sources produced results that were similar. Therefore, the primary researcher feels confident that this research study has a high degree of internal validity.

## **CHAPTER IV**

### **RESULTS**

#### **Introduction**

The purpose of this study was to examine the primary influences on the postsecondary decision-making processes of students enrolled in dual-credit and concurrent enrollment (DCCE) initiatives. The study focused on three areas of interest: the students' basic college knowledge and that of their advisors, the students' college enrollment plans/hopes, and the students' college planning practices. The study also examined the level of impact of these influences in terms of the three major areas: the students' basic knowledge of college, college aspirations, and college planning practices. The guiding question of this research study was "What were the major influences on students' decisions regarding enrolling in DCCE courses?" The following research questions directed this study.

1. What were the influences on the academic goals of the students?
2. What understandings did the participating students have of the DCCE possibilities?
3. What understandings of the DCCE possibilities were held by the students' advisors, including friends, parents, middle and high school counselors, and community college liaisons?

4. What were the important events and factors in the DCCE planning process for the students?

The first phase of the research involved selecting ten community colleges that evenly represented North Carolina community colleges in two categories: geographic location within North Carolina and the community colleges' annualized Full-Time Equivalent (FTE) for the 2005-2006 reporting period. Of the ten community colleges that were contacted and whose presidents gave permission for the community college to participate in the research study, only nine actually provided the required information needed to conduct the study utilizing the students at their institution. All ten of the community college presidents identified a data collection resource person to assist the researcher in identifying the students at their community college that met the study's student selection criteria. All ten of the community college contact personnel were contacted and asked to generate a list of student names that the researcher could use to randomly select the study's participants.

This chapter presents the findings from the study according to the two data collection methodologies that were employed. The findings of the combined student interview are presented first. The notable influences and factors that emerged from the combined student interview which were used to formulate the individual student questionnaire are described in detail. The findings are analyzed in terms of each of the study's four research questions.

The second data collection methodology employed was the individual student questionnaire, and, as with the combined student interview, the findings from the



questionnaire are analyzed in terms of the study's four research questions. This section will describe the salient points and any recurring answers that emerged from both the Likert scale questions and the narrative response questions of the individual student questionnaire.

The final section of this chapter is a summary of the common responses that emerged from both the combined student interview and the individual student questionnaires.

### **Combined Student Interview Analysis**

The intended focus group interview was to be conducted on the campus of Mitchell Community College in Statesville, North Carolina, during the summer semester of 2007. The resulting audio-taped focus group interview involved only two of the twelve randomly selected students based on four criteria who attended the actual session, which means the session really became a combined student interview because of having only two participants. The selection criteria specified students who: (a) were at least 18 years old as of April 1, 2007, (b) graduated from high school in either 2005 or 2006, (c) participated in DCCE initiatives while in high school, and (d) enrolled at one of the selected community colleges during the Fall 2006 semester. Both of the students were Caucasian females and for the purpose of reporting the findings of the combined student interview the names of the students have been changed to protect their identity. The first student, who will be referred to as Karen, attended a local private school and the second student, who will be referred to as Melissa, had been home schooled. Both of the students indicated that they were working toward the completion of the Associate of Arts degree

at Mitchell Community College and both students had plans to matriculate to four-year universities in North Carolina; Karen indicated Winston Salem State University and Melissa specified The University of North Carolina at Charlotte.

***Research Question #1: Influences of Students' Academic Goals***

The lines of inquiry for this research question involved the following four questions during the combined student interview and the number in the parentheses indicates the actual question sequence in the interview:

- Reflecting back, how did you learn of the DCCE initiatives? (#2)
- What grade were you in and what or who influenced you to seriously start to develop and plan for your postsecondary goals? (#3)
- Name two things that were the most influential elements in helping you determine your postsecondary goals and indicate why you chose these two things? (#4)
- Did you know where you were going to college and which program of study you were going to enroll in when you enrolled in the DCCE courses? (#7)

Five influences emerged from analysis of the combined student interview transcripts and notes relating to the first research question. The primary influence on the students' academic goals was the students' families and, more specifically, their parents' guidance and aspirations for the students. Both participants indicated that because their mothers had recently completed their associate degrees at local community colleges, they were influential and driving forces behind the establishment of their academic goals. Although neither participant knew for sure where their mothers learned about the DCCE

initiatives, they both suspected their mothers were made aware of the DCCE opportunities because of their mothers' experiences with and exposure to the community college educational programs their mothers attended. Besides the guidance and support the parents provided, the other familial influences that the participants indicated were the trials and tribulations that they witnessed several of their family members go through which a good postsecondary education could have helped with and how participating specifically in DCCE opportunities could have greatly benefited their siblings. This is illustrated by the participants' comments:

- “Well, I think my major reason is my mom, she basically did everything the hard way and ever since I was little I’ve known I was going to college”  
(Melissa)
- “With my family my dad’s disabled and my mom’s going to work full-time and she did all the on-line courses at CPCC and I saw how hard she was working and she had me kind of young so she didn’t get the chance to go to college. That’s why it has always been very important to me to go to college and find a way to do it for free” (Melissa)
- “My family has a lot to do with my decision because I am really close to all my family and I have two older brothers and neither one of them went to college and one of them tried to start coming but it just didn’t work out”  
(Karen).

The influence of the parents and family was by far the primary influence for the students; however, there were four other influences that emerged during the combined

student interview. The four other influences are ranked and presented according to their level of influence starting with the most influential: transferability, followed by financial issues, early college graduation, and job security. The most significant of these secondary influences was the transferability of the courses offered through the DCCE initiative.

Both students indicated that they had developed aspirations to attend a four-year institution, specifically Appalachian State University (ASU), when they were as young as thirteen years old. However, they didn't seriously begin planning for college until their sophomore year in high school, and in both cases they only knew where they wanted to go to college; neither of the students knew what they specifically wanted to study or what they wanted to do once they graduated from college. Because they were both undecided in terms of their college majors, they both chose DCCE courses that were transferable to a four-year institution, thereby allowing them more time to determine what they want to study before they entered the four-year institution. These comments reflected this mindset:

- "I mean, Mitchell is a really good college and the classes and courses that you take here will pretty much transfer to anywhere and that had a lot to do with my decision in doing the dual enrollment" (Karen)
- "Seeing that I really didn't know what I wanted to do but again the courses transfer anywhere in North Carolina which is where I was going to go I figured to get basic classes out of the way, it's free, and I can graduate early, I mean that is pretty much what it was" (Melissa).

The second most significant secondary influence revolved around the financial benefits of the DCCE initiative due to the fact that the tuition was waived for all the courses that were DCCE eligible. One participant indicated that the inability to afford college tuition was the primary reason that her brother was unable to remain in college. Both participants indicated that they had a real firm understanding of the financial benefits they reaped because the tuition was waived for all the courses they took. The participants' stated:

- "I mean free college classes, starting early and then I can transfer to UNCC or UNCG or Appalachian, I mean that just sounds like a really good deal"  
(Melissa)
- "I don't want to spend a lot of money I don't have going to UNCC when I can get the same thing here and I did it for free for awhile and now I am paying five to six hundred dollars per semester and I can stay at home rent free"  
(Melissa)
- "Like I said before the money had a lot to do with me coming here because I could go for free and go ahead and get a year's worth of work done and pay nothing for it" (Karen)
- "Seeing that I really didn't know what I wanted to do but again the courses transfer anywhere in North Carolina which is where I was going to go I figured to get basic classes out of the way, it's free, and I can graduate early, I mean that is pretty much what it was. Money had a lot to do with it" (Melissa)

- “Because at the time my mom was going to Mitchell so therefore she wasn’t able to work as often as she could and we’re having to pay for her college and it is kind of hard when you have four kids and the mom is going to college and they’re having to pay for her college plus to support a family” (Karen).

The third secondary influence that emerged from the combined student interview pertaining to the students’ academic goals and their participation in DCCE activities centered on the prospect of graduating from college early. Both the participants indicated that they understood going into the DCCE experience that they were affording themselves the opportunity for early college graduation and that is why they both took courses that they knew would transfer to a four-year institution. One of the participants made the following comment that highlights their awareness of the benefits derived from participating in DCCE opportunities:

- “Because we didn’t know about it for my older brother and he is 22 and he is just getting started in college and he is going to apply for this fall. He’s 22, I’m 19 and I almost have my associate degree. They wish they could have done that for him but they didn’t know about it at the time” (Melissa).

The final secondary influence that emerged from the combined student interview was the belief that securing a good job requires obtaining a postsecondary degree and that is why they worked hard in high school and decided to enroll in DCCE courses. For example, Karen stated:

- “Pretty much anywhere you go now you need a college education to get a good job anywhere, so that is pretty much why I did it.”

***Research Question #2: DCCE Level of Understanding of Participating Students***

The lines of inquiry for this research question involved two questions:

- When you first enrolled in DCCE courses, describe your level of understanding about how the DCCE courses were going to help you with your postsecondary goals? (#6)
- Knowing what you know today, what would you have done differently concerning your participation in the DCCE initiative? (#11)

The combined student interview participants indicated that they had a good understanding of the benefits of the DCCE initiative and they also stated that their parents and the personnel at the community college did a great job of preparing and advising the students throughout the DCCE experience. One thing that both students stated as they reflected on their experiences is that they wish they had taken more DCCE courses when they had the opportunity. They realized now that they could be further along in their associate degree endeavors if they had taken more DCCE courses prior to graduating from high school. Both students stated that they deliberately only took 2-3 DCCE courses per semester because they were uncertain how these DCCE courses would impact their already hectic weekly schedules. The comments that reflected these concerns include:

- “At the time, I would think I can only take 2 to 3 classes per semester, but now I know I can handle it so I wish I would have done that. I know that I can handle it but my senior year I was going to high school, I was going to Mitchell, and I was working two jobs all at the same time” (Karen)

- “Yeah, I should have thought to do that because at the time I as working seventy hours a week and going to school full-time” (Melissa).

These statements and various other comments indicated that the students gained confidence in their postsecondary experience and abilities over time and truly felt that they could have handled taking more than 2-3 DCCE courses per semester.

***Research Question #3: DCCE Level of Understanding of Participating Students’***

***Academic Advisors***

The lines of inquiry for this research question involved three questions, and the list of academic advisors that is referred to in these questions includes student advisors, friends, parents, middle school and high school counselors, and community college liaisons. The three questions were:

- In your perspective, what level of understanding did the following groups have of the DCCE initiative? (#8)
- In your perspective, how well did the following groups make the connections between your postsecondary goals and the overall DCCE initiative? (#9)
- In retrospect, how could any of the following groups have done things differently to help you make a better use of your DCCE experience? (#12)

The common issues concerning each of the five academic advisors that the participating students were asked to assess in terms of level of DCCE understanding will be discussed individually. The participants were instructed to score the academic advisors’ level of understanding of DCCE and the level of connection the academic advisors made between the DCCE initiative and the students’ academic goals using 5 as



the highest level of understanding or connectivity and 1 being the lowest score for these two questions. The first academic advisor to be discussed is the student advisors group defined as any school personnel not in an official counselor role; examples included teachers, assistant principals and principals. Because Melissa was home schooled, she stated that the only student advisors that she had were those from the community college and she implied that the community college advisors had a solid understanding of the DCCE initiative. Although Karen considered the teachers in her private school as the student advisors, she gave no indication that they had any understanding of the DCCE opportunities or that they provided her assistance in the development of her postsecondary goals.

The participants' parents, on the other hand were awarded very high scores by both the participants. Each student gave her parents scores of five and credited her parents for being both knowledgeable about the benefits of the DCCE experience and for assisting the student in making the connection between the student's long-term postsecondary goals and the available of the DCCE opportunities. Comments included:

- "I gave my parents a five because they were the ones that gave me the knowledge about it, I mean I wouldn't have had any clue what dual enrollment was if hadn't been for my parents" (Karen)
- "My parents, they just knew it would be a good program and would benefit me well in the long run and they kind of pushed me into doing it and now my younger brother is in it" (Melissa).

The students' responses to what their parents could have done differently for them and their DCCE experience revealed conflicting thoughts of appreciation for what the students were allowed to do, a desire to have their parents push them harder, and misgivings about not heeding the advice of their parents. Karen's response conveyed mixed feelings; on one hand, she wished her parents would have pushed her to take more DCCE courses, and on the other hand, she completely understood the reservations her parents had with her taking on too many responsibilities while in high school. Karen stated:

- "They would only let me take two at a time because they were so worried about me working two jobs plus going to high school and you know but I mean I understand why they did that because they didn't want me to get in over my head and then freak out and not know what to do and whatever.. But to allow me to take more classes would be pretty much the only thing they needed to, that they could have changed to help the situation."

Melissa, on the other hand, indicated that her mother actually urged her to take more courses and gave Melissa reasons why she should; however, Melissa admitted that she didn't listen to her mother at the time and now she regretted not having heeded her mother's advice and guidance.

Both students gave their friends mid-to-low scores in both their friends' understanding of the DCCE opportunities and their understanding of how those opportunities were connected to their postsecondary goals and aspirations. The participants agreed that those friends who were also taking advantage of the DCCE

initiatives were very supportive, while those who were not taking DCCE courses often wondered why anyone would do more than they had to do while in high school. The participants did state that their friends really didn't know about the program and when the participants talked to their friends about the DCCE program their friends became either interested or supportive. The students were in agreement concerning their friends' level of understanding of the DCCE initiative and gave their friends a score of three. The participants however did differ in the scores they gave their friends when it came to the level of connectivity the friends made between the DCCE opportunities and the participants' college goals. Melissa gave her friends a score of two and Karen gave her friends a three. Comments relating to the participants' friends include:

- “For friends I gave them a three, I found them very, very supportive, whenever I would tell them about it and you know some of them were kind of like the whole, why would you, you know you are in high school enjoy high school don't jump off and go to college, you know blah-blah-blah-blah....but for the most part they were supportive” (Karen)
- “Depends on the friends, some are in high school and said I don't understand, why would you do that and then some of them are in the Huskins program. Once I explained it to them they kind of understood, but some of my friends are just kind of ignorant I'd have to say because they didn't understand why you'd start college early but some of them knew how good the program was already, not many people knew about that” (Melissa).

They both made it clear that their friends really didn't have an impact or significant influence when it came to what courses the participants were going to take or whether or not the participants were going to take part in the DCCE offerings in the first place. Because their friends had little to no impact on the participants' DCCE decision making process, there wasn't anything their friends could have done differently. However, Melissa did imply that it probably would have made her DCCE experience more enjoyable if she had had some friends who went through the program with her.

No data could be gathered concerning middle school and high school counselors because Melissa was home schooled and the private school that Karen attended did not have counselors.

For the final group of academic advisors, the community college liaisons, both participants gave the community college liaisons scores of five. The participants gave the community college liaisons high praise and stated that the liaisons had a firm understanding of the DCCE operational procedures and were also very helpful in assisting the participants in connecting the DCCE courses with the participants' postsecondary goals and aspirations. The participants asserted that the liaisons coached them through the DCCE course selection process and were very respectful and helpful during the process. Melissa captured this best when she stated:

- "Mitchell counselors, I mean advisors, they knew how dual enrollment worked and they knew how it could benefit me and they kind of pushed me to get classes that would help my degree and I found that very helpful. At first I was kind of, I should the classes I want to take but then I just started to realize

that you need so many classes for your associate degree then I started taking classes that they suggested and that is what got me really focused on my degree.”

When asked what the liaisons could have done differently in terms of the participants’ DCCE experience, the main remark was that the liaisons could have allowed and advised them to take more than 2-3 DCCE courses per semester. However, it did appear from their statements that this was a policy of the college and not a personal stance of the liaisons.

***Research Question #4: Significant Events and Factors of Students’ DCCE Planning Process***

The lines of inquiry for this final research question involved three of the combined student interview questions:

- What grade were you in and what or who influenced you to seriously start to develop and plan for your postsecondary goals? (#3)
- Name two reasons why you selected the DCCE courses you chose and indicate why you identified these two reasons? (#5)
- What element of the DCCE planning process was the most valuable to you? (#10)

An analysis of the responses relating to the fourth research question revealed several of the same responses that have been highlighted and discussed in the three research questions previously outlined. The factors that were found to have the most significance for the combined student interview participants included course

transferability, accelerated college graduation aspirations and the prospect of tuition-waived college classes. As stated earlier, both participants posited that since prior to taking the DCCE courses they really had not determined what they wanted to study at the four-year institution, they made sure they took college transferable courses. Melissa also indicated that in the beginning the major factor in the courses she chose to take was the fulfillment of her personal interests.

One interesting finding that did surface in the combined student interview was that the planning process for both the participants was dynamic in that their plans and college aspirations evolved over time and became more solidified the more they participated in DCCE activities. The longer the participants were in the DCCE initiative, the more the third factor came into play, which was their aspiration to complete the Associate of Arts degree at the community college prior to transferring to a four-year institution. For both students getting the Associate of Arts degree was not their originally intended purpose; when they first started taking DCCE courses, their major reasons included college transferability, waived tuition, and the prospect of an early graduation from a four-year institution. However, as time passed, they came to realize that they had accumulated a significant number of college courses that were applicable to the Associate of Arts degree, and their community college liaisons advised them to be patient and complete the associate's degree at the community college and then transfer to a four-year institution. Melissa's comments about her visit with her UNCC advisor illustrate how this point was driven home for her:

- “I went to UNCC and talked to a counselor actually not two weeks ago and that is one of the things he said to me because I was thinking about transferring this fall but he said you are so close to getting your associate degree. Because I was going to transfer but he said why don’t you get your associate degree because you’re so close, you will still have that piece of paper and a college graduate no matter what.”

Although the combined student interview only had two participants who were demographically very similar and did not include any public school students, the findings of the combined student interview were helpful and were consistent with the information gleaned in the literature review.

### **Individual Student Questionnaire Analysis**

The combined student interview responses were used in developing the selection options for four of the questions on the Individual Student Questionnaire; therefore, at the conclusion of the combined student interview, the 15-item Individual Student Questionnaire was finalized and mailed to 602 students randomly selected from the lists of students identified by the nine participating community colleges. The students all met the four criteria that the students (1) were at least 18 years old as of April 1, 2007, (2) graduated from high school in either 2005 or 2006, (3) participated in DCCE initiatives while in high school, and (4) were enrolled at one of the selected community colleges during the Fall 2006 semester.

The return rate for the questionnaire was 11.79% or 71 of the 602 students responded, 47 females (66.2%) and 24 males (33.8%). The majority of the respondents

were Caucasian (91.55%;  $n=65$ ), followed by African-Americans (2.82%;  $n=2$ ), American Indians (1.41%;  $n=1$ ), Hispanic (1.41%;  $n=1$ ) and two (2.82%) of the respondents identified themselves as “Other.” The majority of the respondents attended secondary school at a public school (73.24%;  $n=52$ ), followed by home schooled (15.49%;  $n=11$ ) and private school (11.27%;  $n=8$ ). Although the intent of the research study was to survey seventy-five students from each of the participating community colleges, the smaller community colleges were unable to generate large enough lists of students who met the four student selection criteria. Therefore, the two smaller community colleges, Roanoke-Chowan Community College and Sampson Community College, were only able to generate student lists of 18 students and 52 students, respectively. For these two smaller community colleges the questionnaire was sent to all of the students identified and for the remaining seven community colleges a research randomizer was employed to randomly select seventy-five students per community college who would be asked to complete the questionnaire. The community college with the highest number of respondents was Wayne Community College (19.72%;  $n=14$ ), followed by Forsyth Technical Community College (18.31%;  $n=13$ ), Mitchell Community College (15.49%,  $n=11$ ), Guilford Technical Community College (14.08%;  $n=10$ ), Durham Technical community College (8.45%;  $n=6$ ), Sampson Community College (7.04%;  $n=5$ ), Pitt Community College (7.04%;  $n=5$ ), Western Piedmont Community College (5.63%  $n=4$ ), and Roanoke-Chowan Community College (4.23%;  $n=3$ ).



The first data analysis technique that was used to analyze and report the questionnaire data and make the data from five-option Likert scale questions more manageable and readable was to collapse the data from five categories into three categories of responses. Those questions that utilized “most influential,” “very influential,” “influential,” “hardly influential,” and “not influential” were compressed into “most/very influential,” “influential,” and “hardly/not influential.” The questions that employed “very high level of understanding,” “high level of understanding,” “low level of understanding,” “very low level of understanding,” “no understanding” were collapsed into “very high/high understanding,” “low understanding,” and “very low/no understanding.” The remaining question involving the five-option Likert scale that utilized “very high connections,” “high connections,” “low connections,” “very low connections,” and “no connections” was collapsed into “very high/high connections,” “low connections,” and “very low/no connections.”

A second data analysis and reporting technique that was used on the five-option Likert scale questions involved assigning each of the five-options of the Likert scale a numeric value and then calculating the mean and standard deviation for each of the items that were queried in the questions (see Table 5). It should be noted that every respondent did not include a response for every item of every question; therefore, the response rate for each item of each question was documented accordingly and appropriately.

**Table 5*****Five-Option Likert Scales and Numeric Values***

Numeric Value	5	4	3	2	1
	Very High Level of Understanding	High Level of Understanding	Low Level of Understanding	Very Low Level of Understanding	No Understanding
	Most Influential	Very Influential	Influential	Hardly Influential	Not Influential
	Very High Connections	High Connections	Low Connections	Very low Connections	No Connections

***Research Question #1: Influences of Students' Academic Goals***

The lines of inquiry for this research question on the individual student questionnaire involved the following four questions and the number in the parentheses indicates the number of the question on the individual student questionnaire.

- Using the list provided below, how did you learn of the dual credit-concurrent enrollment program? If more than one answer applies, please rank them according to the most influential. (See Appendix A, Question #7.)
- What or who influenced you to plan for your college goals? (See Appendix A, Question #9.)
- Using the list provided below, please indicate which two things were the most influential factors in helping you determine your college goals or write in your most influential factors. Please indicate why you chose these two things. (See Appendix A, Question #10.)

Two of the questions provided lists of groups/resources and asked the respondents to rate the groups/resources' level of influence on the students' academic goal development and on students' awareness of the DCCE program and its opportunities. The third question provided students a list of factors that were derived from the combined student interview responses and asked the students to indicate which factors were influential in their college goal development and explain why they selected those factors.

Not every respondent provided a rating for every group/resource for each of the questions. For example, question #9 was designed to determine which group/resource the students considered the most influential in helping them develop the students' academic goals. The group/resource that received the most responses (95.77%;  $n = 68$ ) was parents and 86.76% ( $n=59$ ) of the 68 respondents rated the influence of their parents on their academic goal development as "most/very influential" with only one female student, who attended a public high school, rated her parents as "hardly/not influential." Of the 47 female questionnaire respondents, 97.80% ( $n=46$ ) rated their parents on this question and 83% ( $n=38$ ) of these 46 females rated their parents' level of influence on their academic goal development as "most/very influential." Of the 22 males that gave their parents a rating for question #9, 95.45% ( $n=21$ ) indicated that their parents were "most/very influential" in assisting them plan their academic goals. All of the private and home schooled students responded and unanimously rated their parents "most/very influential" and this rating was also given to parents by 81.63% ( $n=40$ ) of the 49 public school respondents.

The respondents also credited their parents for being the most significant group/resource for making them aware of the DCCE initiative. When the students were asked in question #7 to rate the level of influence each of the group/resource had on the students' awareness of the DCCE program, the parents were rated by 85.29% ( $n=61$ ) of all surveyed students, which once again represents the highest number of student responses amongst all of the listed group/resources. Of those 61 students, 68.85% ( $n=42$ ) of the students rated their parents' influence on their awareness of the DCCE program as "most/very influential." Of the total male survey respondents, 91.67% ( $n=22$ ) rated their parents' influence on their awareness of the DCCE program and 72.73% ( $n=16$ ) of those 22 males rated their parents "most/very influential." Of the total female survey respondents, 82.98% ( $n=39$ ) of the 47 females rated their parents level of influence on their awareness of the DCCE initiative and 26 of those 39 females (66.67%) awarded their parents a rating of "most/very influential." The breakdown of the secondary school categories reveals that although the level of influence of the parents on the students' DCCE awareness in all three categories was high, the private and home schooled respondents rated their parents higher than did public school respondents. Private school parents received a rating of "most/very influential" by 85.71% ( $n=6$ ) of the 7 private school students that responded to this question of the questionnaire. The next highest rating for parents came from the home schooled respondents and 81.82% ( $n=9$ ) of the 11 home schooled students that responded to this survey question, rated their parents "most/very influential," while the parents of the public school students were rated

“most/very influential” by only 62.79% ( $n=27$ ) of the 43 respondents that attended public school.

The next group/resource that the students indicated was significantly influential in their academic goal planning process was their student advisors and an example of student advisors was defined as high school teachers. Fifty (70.42%) of the overall 71 questionnaire respondents provided a rating for student advisors and 52% ( $n=26$ ) of the 50 respondents rated their student advisors as “most/very influential.” Of the overall female questionnaire respondents, 65.96% ( $n=31$ ) rated their student advisors and 54.84% ( $n=17$ ) of 31 females rated their student advisors level of influence on the development of their future academic goals as “most/very influential.” Of the 19 males that gave their student advisors a rating, 47.37% ( $n=9$ ) indicated that their student advisors were “most/very influential” in helping them develop plans to reach their academic goals. The largest group of secondary students that provided input concerning the level of influence the student advisors had in supporting the students in the planning process for reaching their academic goals was the public school respondents with 76.92% ( $n=40$ ) of the 52 public school respondents rating their student advisors. Of the 40 public school respondents, 47.50% ( $n=19$ ) of them rated the students advisors as “most/very influential” in assisting the students with their academic goal planning process. Of the private school respondents, 75% ( $n=6$ ) rated their student advisors and 66.67% ( $n=4$ ) of these private school respondents indicated that their student advisors were “most/very influential” in the helping them with their academic goal development. Only 36.36% ( $n=4$ ) of the home schooled respondents provided a rating for their student advisors and

of those that responded 75% ( $n=3$ ) rated their student advisors as being “most/very influential” in the formation of their academic goals and aspirations.

Because the questionnaire indicated high school teachers as an example of student advisors at the secondary school, it is likely that the respondents associated student advisors with only high school teachers. Therefore, it seems fitting to report the findings of the research study relating to the high school teachers and their level of influence on the students’ awareness of the DCCE program at this time. Although the respondents rated their parents significantly higher when it came to having a influence on the students’ awareness of the DCCE program, 74.65 % ( $n=53$ ) of the respondents did give high school teachers a rating with 47.17% ( $n=25$ ) of the 53 respondents indicating that their high school teachers were “most/very influential” in raising their awareness of the DCCE initiative. Of the total male survey respondents, 79.17% ( $n=19$ ) rated their high school teachers’ influence on their awareness of the DCCE program with 47.37% ( $n=9$ ) of those 19 males rating their high school teachers “most/very influential.” Of the total female survey respondents, 72.34% ( $n=34$ ) of the 47 females rated their high school teachers’ level of influence on their awareness of the DCCE initiative with 47.06% ( $n=16$ ) of those 34 females giving their high school teachers a rating of “most/very influential.” An analysis of the secondary school demographic categories indicates that all of the private school respondents gave a rating to their high school teachers’ level of influence on the students’ awareness of the DCCE program; however, only 50% ( $n=4$ ) of the respondents gave the high school teachers a rating of “most/very influential,” while 37.50% ( $n=3$ ) rated their high school teachers level of influence as “hardly/not

influential.” The six home schooled students that rated their high school teachers’ level of influence on the students’ awareness of the DCCE endeavor were evenly split between rating their high school teachers as either being “most/very influential” or “hardly/not influential.” The students from the public schools that responded to this question relating to the high school teachers’ level of influence on the students’ awareness of the DCCE program represent 75% ( $n=39$ ) of the total public school respondents. Of the 39 public school respondents, 46.15% ( $n=18$ ) rated their high school teachers as being “most/very influential” in their awareness of the DCCE opportunities.

Friends and high school counselors received from the students who responded a reasonably high percentage of ratings of “most/very influential” on students’ awareness of DCCE opportunities; 47.37% ( $n=27$  of 57) and 50% ( $n=30$  of 60), respectively. For the students’ friends and high school counselors the females who responded gave each group/resource “most/very influential” ratings at 53.85% ( $n=21$  of 39) and 52.63% ( $n=20$  of the 38) respectively. Of the 7 home schooled students that responded, 57.14% ( $n=4$ ) gave their friends a rating of “most/very influential” in the students’ awareness of the DCCE initiative and 26 of the 46 public school respondents (52.63% ) rated their high school counselors as “most/very influential.”

Friends and high school counselors received very mixed ratings from the respondents when it came to the level of influence they had on the respondents’ academic goal development. Both were rated by a total of 52 respondents; however, the demographics of the respondents varied. Friends received rating from 32 females and 20 males, and 37 public school students, 7 private schooled and 8 were home schooled. The

high school counselors were rated by 35 females and 17 males, and 40 public school students, all eight private school students, and 4 of the home schooled students. Overall 42.31% ( $n=22$ ) of the 52 respondents rated the high school counselors level of influence on their academic goals as “hardly/not influential” and 34.62% ( $n=18$ ) rated the high school counselors as “most/very influential.” One notable finding is the variance in the responses by gender in that 45.71% ( $n=16$ ) of the 35 females who responded rate the high school counselors as “most/very influential” while 64.71% ( $n=11$ ) of the 17 males responding rate the high school counselors as “hardly/not influential.” The ratings for the friends were very similar to those for the high school counselors in that 36.54% ( $n=19$ ) of the respondents rated their friends’ level of influence on their academic goals as “hardly/not influential,” while 32.69% ( $n=17$ ) rated their friends as “most/very influential” and 30.77% ( $n=16$ ) respondents rated them just “influential.” The most notable variance in the ratings of the friends is that 57.14% ( $n=4$ ) of the 7 private school respondents and 50% ( $n=4$ ) of the home schooled respondents rated their friends as “most/very influential” while 40.54% ( $n=15$ ) of the 37 public school students rated their friends as “hardly/not influential.”

The listed group/resource that received remarkably high percentages of “hardly/not influential” was associated with the community colleges and included the community college representatives and community college material. Both of these community college group/resources received high percentages of “hardly/not influential” in terms of the influence they have on the students’ academic goals development and DCCE program awareness. The first group/resource to be discussed will be the



community college material because it received the highest percentage of “hardly/not influential” ratings. Of the 44 respondents that provided a rating for the community college material, 47.73% ( $n=21$ ) of the respondents rated the community college material “hardly/not influential” in terms of the materials level of influence on the students’ academic goals. The 44 respondents consisted of 28 females and 16 males, who represented 33 public school students, 6 private school students and 5 home schooled students. Of the responding males, 50% ( $n=8$ ) rated the community college material as “hardly/not influential” in assisting students to develop their academic goals and aspirations, and 13 of the 28 females (46.43%) gave the community college material the same rating. This material received a much lower rating in terms of being influential in helping the student become aware of the DCCE opportunities. A total of 46 students rated the community college material in terms of influence on their awareness of the DCCE initiative, 28 females and 18 males. Of these 46 students, 67.39% ( $n=31$ ) rated the community college material as ‘hardly/not influential.’ Of the males, 77.78% ( $n=14$ ) rated the community college material as “hardly/not influential” and 60.71% ( $n=17$ ) of the females gave the community college material the same rating. All of the private school students (100%,  $n=8$ ) rated the community college material as “hardly/not influential” as did 80% ( $n=4$ ) of the home schooled students.

Forty-six respondents rated the community college representatives’ influence upon their academic goal development and 49 of the respondents rated the community college representatives’ level of influence on the respondents’ awareness of the DCCE program. The community college representatives received a notably lower rating in the

area of DCCE awareness influence, 65.31% ( $n=32$ ) of the 49 respondents rated the representatives “hardly/not influential.” A higher percentage of the male respondents, 76.47% ( $n=13$ ) of the 17 male respondents rated the community college representative as “hardly/not influential,” whereas 59.38% ( $n=19$ ) of the 32 females rated the community college representatives’ DCCE awareness influence as ‘hardly/not influential.’ All of the private school respondents ( $n=7$ ) rated the community college representatives’ DCCE influence “hardly/not influential” rating, as did 66.67% ( $n=4$ ) of the 6 homes schooled respondents and 58.33% ( $n=21$ ) of the 36 public school respondents.

The community college representatives received slightly better ratings in terms of their influence on the respondents’ academic goal development, however; 45.65% ( $n=21$ ) of the 46 respondents gave the representatives a rating of “hardly/not influential.” Of the female respondents, 53.57% ( $n=15$  of 28) rated the community college representative as ‘hardly/not influential,’ as did one-third ( $n=6$  of 18) of the male respondents. The private school respondents were the most critical of the community college representatives’ influence in planning their academic goals, 85.71% ( $n=6$  of 7) gave the representatives a rating of “hardly/not influential.” The home school respondents had the next highest “hardly/not influential” rating of community college representatives at 40% ( $n=2$  of 5) followed by 38.24% ( $n=13$  of 34) of the public school respondents.

Table 6 indicates the numbering schema that was applied to the Likert scales that were used in the two questions that determined the level of influence the defined groups/resources had on the respondents’ academic goal development and DCCE awareness.

**Table 6*****Numbering Schema for Questions 7 and 9—Individual Student Questionnaire***

Numerical Value	5	4	3	2	1
Level of Influence	Most Influential	Very Influential	Influential	Hardly Influential	Not Influential

The numerical values were set up so a rating of five is the highest level of influence that any group/resource can receive and a rating of one is the lowest level of influence that the a group/resource can be assigned.

Table 7 indicates the results of employing the second data analysis method to assess how influential the respondents considered the indicated list of group/resources in the students' academic goal development process.

**Table 7*****Level of Influence on Academic Goal Development: Overall Respondents***

	Student Advisors	Friends	Parents	H.S. Counselors	H.S. Plan of Study	C.C. Rep.	C.C. Material	C.C. Plan of Study
<i>M</i>	3.500	2.981	4.485	2.846	2.829	2.630	2.523	3.000
<i>SD</i>	1.216	1.163	0.763	1.392	1.465	1.199	1.191	1.229
<i>n</i>	50	52	68	52	42	46	44	46

Table 7 shows the mean, standard deviation, and number of respondents on the level of influence the defined group/resources had over the students' academic goal development. Consistent with what was previously reported, the students' parents received the highest mean ( $M=4.485$ ,  $SD=0.763$ ) of all the group/resources listed with question #9, followed

by their student advisors ( $M=3.500$ ,  $SD=1.216$ ), their community college plan of study ( $M=3.000$ ,  $SD=0.837$ ), and their friends ( $M=2.981$ ,  $SD=1.163$ ).

The mean rating of the parents is very notable in that the calculated mean is only a half a point off from the highest possible level of influence, and this rating was received from input of all but three of the total number of survey respondents. The other important finding is that the standard deviation of 0.763 indicates a high level of agreement among the respondents that the parents are significantly influential in the planning process of the students' academic goals and aspirations. Table 7 shows that the student advisors were considered the next group/resource very influential in the students' academic goal development process with a mean rating of 3.5 and a standard deviation of 1.216. These findings concur with those previously discussed using the first method of data analysis.

An analysis of the statistics (see Table 8) of the male respondents indicates the group/resource that was rated as the most influential in assisting the students' in the development of their academic goals was parents ( $M=4.636$ ;  $SD=0.581$ ), followed by students' advisors ( $M=3.211$ ;  $SD=1.273$ ), and then their friends ( $M=3.000$ ;  $SD=1.214$ ).

**Table 8**

***Level of Influence on Academic Goal Development: Male Respondents***

	Student Advisors	Friends	Parents	H.S. Counselors	H.S. Plan of Study	C.C. Rep.	C.C. Material	C.C. Plan of Study
<i>M</i>	3.211	3.000	4.636	2.176	2.733	2.778	2.500	2.882
<i>SD</i>	1.273	1.214	0.581	1.185	1.668	1.060	1.033	1.111
<i>n</i>	19	20	22	17	16	18	16	17

The table also indicates that the males felt the high school counselors ( $M=2.176$ ;  $SD=1.185$ ) and the community college material ( $M=2.500$ ;  $SD=1.033$ ) had the least amount of influence on their academic goals development.

Table 9 points out that the female respondents also considered their parents to be the most influential in their academic goal planning process ( $M=4.413$ ;  $SD=0.832$ ), followed by their student advisors ( $M=3.677$ ;  $SD=1.166$ ). The female respondents' third most influential group/resource was different than that of the male respondents in that the females rated the high school counselors as the third most influential ( $M=3.171$ ;  $SD=1.382$ ). Community college representatives and material were the two group/resources rated by the female respondents as being the least influential on their academic goal development and both had the same mean ratings ( $M=2.536$ ;  $SD=1.290$ ), and these ratings are consistent with what was previously documented.

**Table 9**

***Level of Influence on Academic Goal Development: Female Respondents***

	Student Advisors	Friends	Parents	H. S. Counselors	H. S. Plan of Study	C. C. Rep.	C. C. Material	C. C. Plan of Study
<i>M</i>	3.677	2.969	4.413	3.171	2.885	2.536	2.536	3.069
<i>SD</i>	1.166	1.150	0.832	1.382	1.366	1.290	1.290	1.307
<i>n</i>	31	32	46	35	26	28	28	29

Due to the low number of respondents in the private schools and home school demographic categories, only the public school results will be discussed. Table 10 lists

the results provided by the public school respondents. In terms of the groups/resources that were most influential to the students' academic goal development process, the first two groups/resources are consistent, parent ( $M=4.347$ ;  $SD=0.830$ ) and student advisors ( $M=3.450$ ;  $SD=1.154$ ). Once again it is the third group/resource that is different than the other demographic groups, and that is the community college plan of study which was rated the third most influential group/resource ( $M=3.114$ ;  $SD=1.231$ ). Once again the community college material ( $M=2.515$ ;  $SD=1.149$ ) and community college representatives ( $M=2.676$ ;  $SD=1.199$ ) were given ratings that indicated that they were the least influential in the students' academic goal development process.

**Table 10**

***Level of Influence on Academic Goal Development: Public School Respondents***

	Student Advisors	Friends	Parents	H.S. Counselors	H.S. Plan of Study	C.C. Rep.	C.C. Material	C.C. Plan of Study
<i>M</i>	3.450	2.865	4.347	3.075	3.065	2.676	2.515	3.114
<i>SD</i>	1.154	1.182	0.830	1.403	1.459	1.199	1.149	1.231
<i>n</i>	40	37	49	40	31	34	33	35

Table 11 shows the mean, standard deviation and number of respondents that identified the level of influence the defined groups/resources had over the students' awareness of the DCCE program. Again the parents were rated the most influential in helping the students become aware of the DCCE program ( $M=3.820$ ;  $SD=1.360$ ). The next two groups/resources that were rated the most influential by all the respondents were the high school teachers ( $M=3.283$ ;  $SD=1.459$ ) followed closely by the high school

counselors ( $M=3.233$ ;  $SD=1.466$ ). Once again the two groups/resources that were rated the least influential helping the students become aware of the DCCE opportunities were the community college material ( $M=2.000$ ;  $SD=1.398$ ) and the community college representatives ( $M=2.163$ ;  $SD=1.419$ ).

**Table 11**

*Level of Influence on Students' Awareness of the DCCE Initiative: Overall Respondents*

	Parents	Friends	High School Teachers	High School Counselors	Community College Representative	Community College Material
<i>M</i>	3.820	3.105	3.283	3.233	2.163	2.000
<i>SD</i>	1.360	1.435	1.459	1.466	1.419	1.398
<i>n</i>	61	57	53	60	49	46

Table 12 illustrates that the ratings the male respondents gave the different groups/resources match the previously reported percentile ranking order for both the most and least influential factors in the male respondents' awareness of the DCCE initiative.

**Table 12**

*Level of Influence on Students' Awareness of the DCCE Initiative: Male Respondents*

	Parents	Friends	High School Teachers	High School Counselors	Community College Representative	Community College Material
<i>M</i>	4.000	2.778	3.316	2.955	1.706	1.611
<i>SD</i>	1.309	1.396	1.529	1.527	1.105	1.243
<i>n</i>	22	18	19	22	17	18

The only differences are that the male respondents rated the parents higher than the overall rating ( $M=4.000$ ;  $SD=1.309$ ) and rated the both the community college groups/resources lower than the overall ratings: community college material ( $M=1.611$ ;  $SD=1.243$ ) and community college representatives ( $M=1.706$ ;  $SD=1.105$ ).

Table 13 displays ratings the females gave the groups/resources on their level of influence on the students' DCCE Program awareness. Once again the parents were rated higher than any other group/resource ( $M=3.718$ ;  $SD=1.395$ ). Although the next two significantly influential groups/resources are the same as the overall respondents and the males respondents, the order of the two is different in that the high school counselors ( $M=3.395$ ;  $SD=1.424$ ) were considered more influential than the high school teachers ( $M=3.265$ ;  $SD=1.442$ ). The groups/resources and the order of the groups/resources were the same as that of the overall respondents and that of the males which ranks least influential the community college material ( $M=2.250$ ;  $SD=1.456$ ) and the community college representatives ( $M=2.406$ ;  $SD=1.521$ ).

**Table 13**

***Level of Influence on Students' Awareness of the DCCE Initiative: Female Respondents***

	<b>Parents</b>	<b>Friends</b>	<b>High School Teachers</b>	<b>High School Counselors</b>	<b>Community College Representative</b>	<b>Community College Material</b>
<i>M</i>	3.718	3.256	3.265	3.395	2.406	2.250
<i>SD</i>	1.395	1.446	1.442	1.424	1.521	1.456
<i>n</i>	39	39	34	38	32	28



Table 14 shows that although the parents ( $M=3.581$ ;  $SD=1.401$ ) once again were rated the most influential group/resource on the students' DCCE initiative awareness, the high school counselors ( $M=3.543$ ;  $SD=1.277$ ) had only a slightly lower rating, and both of these groups were once again followed by the high school teachers ( $M=3.359$ ;  $SD=1.328$ ). Consistent with the other demographic groups, the public school respondents felt that the community college material ( $M=2.294$ ;  $SD=1.488$ ) and the community college representatives ( $M=2.361$ ;  $SD=1.417$ ) were the least influential of their DCCE awareness.

**Table 14**

*Level of Influence on Students' Awareness of the DCCE Initiative: Public School Respondents*

	<b>Parents</b>	<b>Friends</b>	<b>High School Teachers</b>	<b>High School Counselors</b>	<b>Community College Representative</b>	<b>Community College Material</b>
<i>M</i>	3.581	3.048	3.359	3.543	2.361	2.294
<i>SD</i>	1.401	1.464	1.328	1.277	1.417	1.488
<i>n</i>	43	42	39	46	36	34

The final line of inquiry on the individual student questionnaire concerning the influences on students' academic goals asked the students to identify two options that were the most influential factors in helping them determine their academic goals. The students were provided eight options, which are listed below:

- A parent's past college difficulties
- A parent's past hardships in life

- A sibling's lack of college experience
- A sibling's past college difficulties
- Proximity of college to home
- Professional goals
- Ability to take college courses in high school
- Because the tuition was waived

The two options that were selected most often were “professional goals” and “ability to take college courses in high school,” respectively. Of all the respondents, 49.30% ( $n=35$ ) selected “professional goals”; this includes 58.33% ( $n=14$ ) of the male respondents and 44.68% ( $n=21$ ) of the female respondents. In the secondary school demographic group a higher percentage of private school respondents (62.50%,  $n=5$ ) chose “professional goals” followed by the 50% of the public school respondents ( $n=26$ ) and 36.36% ( $n=4$ ) of the home schooled respondents. The students included the following comments when they selected “professional goals”:

- “I knew that if I start early and stayed determined, I could sooner achieve my career” (female, Caucasian, public school, Mitchell Community College)
- “I want to be a nurse, that means I have to go to college that's the only reason” (female, Caucasian, public school, Roanoke-Chowan Community College)
- “looking ahead to what I wanted to do, I knew I had to go to college and get a prestigious degree” (male, Caucasian, private school, Durham Technical Community College)

- “In order to become a nurse, you must have a degree in nursing” (female, Caucasian, home schooled, Wayne Community College)
- “The more education you have, the more job freedom you have” (female, Caucasian, public school, Mitchell Community College)
- “I wanted to be able to attain a well paying job” (male, Caucasian, public school, Guilford Technical Community College)
- “I wanted to pursue a career in the medical field and has recently changed to law (criminal justice) so education is essential to my career goals” (female, African-American, public school, Forsyth Technical Community College)

The second most selected option was “ability to take college courses in high school” which was chosen by 47.89% ( $n=34$ ) of the total respondents, including 51.06% ( $n=24$ ) of the responding females and 41.67% ( $n=10$ ) of the responding males. For the secondary school demographic group, 81.82% ( $n=9$ ) of the home schooled respondents, 44.23% ( $n=23$ ) of the public school respondents and only 25% ( $n=2$ ) of the private school responded selected “ability to take college courses in high school.” Some of the student comments that were listed with this option include:

- “Taking courses in high school helped me explore what areas I was interested in and helped me get realistic college goals” (male, Caucasian, private school, Durham Technical Community College)
- “Gave me a head start on prerequisite courses plus allowed me to get out of high school classes that would have been a waste of time” (female, Caucasian, public school, Sampson Community College)

- “This gave me the freedom to get intro courses out of the way and take it slower in my major at UNC-Chapel Hill” (female, Caucasian, home schooled, Durham Technical Community College)
- “I took these to get ahead and they were free” (female, Caucasian, public school, Wayne Community College)
- “This put me at an advantage in that I had one year of college finished when I completed high school” (male, Caucasian, home schooled, Western Piedmont Community College)
- “This meant early graduation with an associate degree” (female, Caucasian, public school, Guilford Technical Community College)
- “I knew whatever I took it would benefit me. ‘Jump Start’ is a great program” (female, Caucasian, private school, Wayne Community College)

Although the other options were selected, the “professional goals” and “ability to take college courses in high school” were the only two that were selected by a large number of respondents.

***Research Question #2: DCCE Level of Understanding of Participating Students***

The lines of inquiry for this research question involved three survey questions:

- Did you know where you were going to college and which program of study you were going to enroll in when you first enrolled in dual credit-concurrent enrollment courses? (#5)

- When you first enrolled in dual credit-concurrent enrollment courses, describe your level of understanding about how the dual credit-concurrent enrollment courses were going to help you with your college goals? (#6)
- Using the list provided below and knowing what you know today, please indicate what you would have done differently concerning your participation in the dual credit-concurrent enrollment initiative or write in your response if it is not listed below. Please indicate why you do these things differently. (See Appendix A, Question #14.)

The first question to be analyzed and documented is question #6 of the individual student questionnaire. This survey question asked the students to reflect on their DCCE experience and rate their personal level of understanding of how the DCCE courses were going to help them achieve their college goals. Of all the students that responded to the research survey, only one student chose not to respond to this particular survey question and the student was a Caucasian male public school student who attended Wayne Community College. Although none of the respondents rated their pre-DCCE level of understanding of how the DCCE courses related to their college goals as “very low level of understanding” or “no understanding,” to remain consistent with the preceding analysis, the data was still reported using the collapsed categories “very high/high understanding,” “low understanding,” and “very low/no understanding.”

Of the 70 respondents, 61 (87.14%) rated their pre-DCCE level of understanding of how the DCCE courses would apply to their college goals as “very high/high understanding,” and the remaining 12.86% of the respondents ( $n=9$ ) rated their

understanding as “low understanding.” A higher percentage of the 47 female respondents (93.62%,  $n=44$ ) rated their pre-DCCE level of understanding as “very high/high understanding” than did the 73.91% ( $n=17$ ) of the 23 male respondents to this survey question. In terms of the secondary school groups, 45 (88.24%) of the 51 public school students gave themselves the highest rating of “very high/high understanding,” followed by 7 (87.50%) of the 8 private school students and 9 (81.82%) of the 11 home schooled students. As previously noted, no respondents to this survey question believed that their pre-DCCE level of understanding of how the DCCE courses would help achieve their college goals was “very low/no understanding.”

Table 15 indicates the numbering schema that was applied to the Likert scale in the second data analysis method employed to analyze question #6 of the individual student questionnaire.

**Table 15**

*Numbering Schema for Questions 6—Individual Student Questionnaire*

<b>Numeric Value</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Level of Influence	Very High Level of Understanding	High Level of Understanding	Low Level of Understanding	Very High Level of Understanding	No Understanding

The numeric values were set up so a rating of 5 represents the highest level of understanding and a rating of 1 represents the lowest level of understanding the students could rate their personal pre-DCCE level of understanding of how the DCCE courses could help them reach their college goals.

Table 16 indicates the results of employing the second data analysis method to assess the students' perceptions of their own level of understanding of how the DCCE courses facilitated accomplishing their college goals. Table 16 shows the mean, standard deviation and number of respondents for each of the five Likert scale levels of understanding for the overall respondents to this question along with those of the gender groups.

**Table 16**

*Level of Understanding of How DCCE Course Help College Goals: Overall, Female and Male Respondents*

	<b>Overall</b>	<b>Females</b>	<b>Males</b>
<i>M</i>	4.20	4.34	3.91
<i>SD</i>	0.651	0.600	0.668
<i>n</i>	70	47	23

An analysis of the mean scores indicates that the female respondents rated their level of understanding of how the DCCE courses would help them reach their college goals slightly higher than the male respondents, which is consistent with what was previously reported.

An analysis of the mean and standard deviation scores of the secondary school groups listed in Table 17 reveals a different rank order of the three groups. It was previously reported that a higher percentage of public school respondents rated their pre-DCCE level of understanding as “very high/high understanding” than did the private and home schooled respondents; however, an analysis of the mean and standard deviation

scores in Table 17 shows that a higher percentage of private school students ( $M=4.63$ ;  $SD=0.744$ ) feel they had a higher pre-DCCE level of understanding of how the DCCE course would help them reach their college goals than did the public and home schooled respondents.

**Table 17**

***Level of Understanding of How DCCE Course Help College Goals: Secondary School Respondents***

	<b>Public School</b>	<b>Private School</b>	<b>Home Schooled</b>
<i>M</i>	4.18	4.63	4.14
<i>SD</i>	0.751	0.744	0.601
<i>n</i>	51	8	11

The perceived level of understanding for the home schooled respondents ( $M=4.14$ ;  $SD=0.601$ ) was once again the lowest of the three secondary school groups; however, the perceived pre-DCCE level of understanding of the public school respondents was only slightly higher ( $M=4.18$ ;  $SD=0.751$ ). The public and private school respondent groups swapped positions because the public school respondents had a higher percentage of respondents who rated their pre-DCCE level of understanding as “very high/high understanding,” a higher percentage of the 8 private school respondents (75.00%,  $n=6$ ) rated themselves as “very high level of understanding” as compared to the 51 public school respondents (25.49%,  $n=13$ ).

The second data analysis method that was used to review and analyze the students’ perceptions of their DCCE level of understanding involved asking them if they



knew prior to participating in their DCCE courses where they were going to college and which field of study they wanted to pursue. All 71 respondents answered the first portion of question #5 which asked them if they knew where they were going to college before they started participating in any of the DCCE courses. Only 67 respondents answered the second portion of question #5 which asked the students if they knew which program of study they were going to enroll in at college before they took any DCCE courses.

Only 57.75% of the 71 respondents ( $n=41$ ) who answered to the first part of question #5 indicated that they knew where they were going to college before they started taking DCCE courses. There was minimal difference in the percentages of females and males that stated they knew where they were going to college. Of the 24 male respondents, 58.33% ( $n=14$ ) indicated that they did know where they were going to college and 27 (57.45%) of the 47 female respondents indicated they knew where they were going to college before they started taking DCCE courses.

There was a notable difference in the percentages of some of the secondary school groups who indicated that they knew where they were going to college before they started taking DCCE courses. Of the 52 public school respondents, 65.38% ( $n=34$ ) indicated that they knew where they were going to college prior to enrolling into any DCCE courses, followed by 54.55% ( $n=6$ ) of the 8 home schooled respondents. The responses of the private school respondents were notably different from those of the public and home schooled respondents. Only 1 (12.50%) of the 8 private school respondents indicated that she knew where she was going to college before she started taking DCCE courses.

The second portion of question #5 delved deeper into the students' academic goals by inquiring if the students' knew which program of study they wanted to pursue prior to taking any DCCE courses. Of the 67 who responded to this portion of question #5, 35 (52.25%) respondents indicated that before they started taking DCCE courses they did know which program of study they wanted to pursue in college. A higher percentage of the 23 male respondents (65.22%,  $n=15$ ) reported that they knew which program of study they wanted to study compared to the 44 female respondents (45.45%,  $n=20$ ).

Although some of the groups involve small participant numbers, there was once again a dramatic difference in the results of the various secondary student groups. The group with a notably higher percentage of respondents reporting that before they took DCCE courses they knew which program of study they wanted to pursue was the 48 public school respondents; 60.42% ( $n=29$ ) of them responded "yes" to this portion of question #5. Of the 11 home schooled respondents, only 36.36% ( $n=4$ ) of them stated that they knew the program of study they wanted to pursue and only 2 (25.00%) of the 8 private school students responded similarly.

Overall the data indicates that the public school respondents had a better feel for where they were going to college and which program of study they intended to pursue and that the private school students were the least knowledgeable of where they wanted to go and what they wanted to study.

The final line of inquiry on the individual questionnaire developed to ascertain the students' perceived level of understanding of the DCCE program and its opportunities asked the students to reflect on their DCCE experience and indicate what they would

have done differently concerning their participation. Of the 71 survey respondents, 67 (94.37%) provided an answer to this survey question; 46 of the respondents were females and 21 were males. Of the secondary school groups, 51 public school respondents answered this survey question followed by 10 home schooled students and 6 private school students.

The survey question provided the students three choices that had been gleaned from the combined student interview and the students were also given the opportunity to provide their own factor if the three choices that were provided did not apply. The three choices that were provided included:

1. I would have taken more college classes.
2. I would have started taking college classes earlier in high school.
3. I would have better planned the college courses I took with my ultimate college goals.

The first of the three choices was selected by the most respondents. Approximately half (53.73%,  $n=36$ ) of the 67 respondents to this survey question indicated that, knowing what they know today, one of the things they would have done differently concerning their DCCE experience is they would have taken more college classes. This ratio of respondents is approximately the same for the female and male respondents to this survey question in that of the 21 males respondents, 57.14% ( $n=12$ ) selected this choice as did 52.17% ( $n=24$ ) of the 46 female respondents. The secondary school group that had the highest percentage of respondents who selected this choice was 4 (66.67%) of the 6 private school respondents. Once again it must be emphasized is that

the low numbers associated with the private school group means that these findings can only be used to illustrate a potential area of interest and cannot be generalized to a larger population.

The respondents were also asked to indicate why they selected the “I would have taken more college courses” choice and the comments include:

- “I would have been that much closer to having all of my requirements for my program of study out of the way” (female, Caucasian, public school, Roanoke-Chowan Community College)
- “I could have finished more credits and graduated earlier” (female, Caucasian, public school, Forsyth Technical Community College)
- “I would have meant less time in college” (male, Caucasian, public school, Guilford Technical Community College)
- “could have been farther along by the time I graduated high school and might have been ready for a 4-year university” (female, Caucasian, public school, Wayne Community College)
- “because of being able to graduate early and not pay tuition” (female, Caucasian, home schooled, Pitt Community College)

The second highest choice selected in this survey question was “I would have started taking college courses earlier in high school.” Of the 67 respondents, 49.25% ( $n=33$ ) indicated they would have started taking college earlier in their high school career. Half ( $n=23$ ) of the 46 female respondents selected this choice as did 10 (47.62%) of the 21 male respondents. Of the secondary school groups, 28 of the public school

respondents selected this choice as did 3 home school and 2 private school students. The comments the respondents made with their choices include:

- “I would have taken the courses in my junior year of high school instead of just my senior year” (male, Caucasian, public school, Wayne Community College)
- “I would have tried to take college course a semester earlier” (female, Caucasian, public school, Roanoke-Chowan Community College)
- “I would have started the dual credit enrollment in the 11<sup>th</sup> grade, but I didn’t know about it until the 12<sup>th</sup> grade” (female, Caucasian, public school, Wayne Community College)
- “I could have entered the nursing program sooner” (female, Caucasian, public school, Pitt Community College)
- “I should have taken them while I had more spare time in high school, now I live on my own & a job & barely have any time for anything” (female, Caucasian, public school, Wayne Community College)

The third choice of this survey question was only selected by 27 (40.30%) of the 67 respondents, 18 (39.13%) of the 46 female and 9 (42.86%) of the 21 male respondents. Of the secondary school group respondents, 18 were from the public school, 6 were home schooled and 3 were private school students. The 27 respondents provided the following comments for why they made this choice:

- “I would have taken more academic courses, such as Math or English instead of electives” (female, Caucasian, public school, Wayne Community College)

- “not all of my classes were able to transfer” (male, Caucasian, home schooled, Western Piedmont Community College)
- “I would have taken general ed. Classes instead of what I took” (female, Caucasian, public school, Guilford Technical Community College)
- “I would have taken classes that went towards my degree instead of what I thought was fun” (female, Caucasian, public school, Pitt Community College)
- “I would take more class that would help to my degree” (male, Caucasian, public school, Forsyth Technical Community College)
- “If I had known what I wanted a degree in I could have taken just those classes instead of taking classes that would not count towards my degree” (female, Caucasian, home schooled, Wayne Community College)

Of the 67 respondents to this survey question, 11 (16.42%) selected the “Other” choice and provided a comment with their selection. The gender and secondary school break down of these 11 respondents included; 9 females, 2 males, 8 public school, 2 private school, and 1 home schooled student. Of the 11 respondents to this survey question, 3 respondents took the opportunity to state that they were satisfied with their DCCE experience and felt they took full advantage of the opportunity, as illustrated in the following comment.

- “I wouldn’t do anything different, I took all I could” (female, Caucasian, public school, Wayne Community College)

The comments of the students who, knowing what they know today, felt they would have done something differently include:

- “I would have worked harder, I didn’t realize (at the time) the effect that my dual-enrollment classes would have on my college GPA” (female, Caucasian, private school, Mitchell Community College)
- “I would have researched it more in depth instead of looking at it as a chance to get off campus” (male, Caucasian, public school, Western Piedmont Community College)
- “More electives, I would have tried out a few more possible majors to a get a feel for it and save time later (when I was paying)” (female, Caucasian, public school, Guilford Technical Community College)

***Research Question #3: DCCE Level of Understanding of Participating Students’***

***Academic Advisors***

The lines of inquiry for this research question involved three questions, and the list of academic advisors referred to in these questions included student advisors, friends, parents, middle and high school (MS/HS) counselors, and community college (CC) personnel. The three questions were:

- In your opinion, what level of understanding did the following groups have about the dual credit-concurrent enrollment initiative? (#12)
- In your opinion, how well did the following groups make the connections between your college goals and the overall dual credit-concurrent enrollment initiative? (#13)

- In retrospect, please indicate how each of the following groups could have done things differently to help you make better use of your dual credit-concurrent enrollment experience? (#15)

These three questions had the students reflect on and rate their academic advisors' level of understanding of the DCCE program, how well the academic advisors made the connection between DCCE opportunities and the students' academic goals and what the academic advisors could have done differently to help the students make better use of their DCCE experience. The five academic advisors who were identified in these three questions included: student advisors (ex. high school teachers), friends, parents, MS/HS counselors, and CC personnel.

The first two questions asked the students to rate these five academic advisors using a 5-point Likert scale consisting of: very high, high, low, very low, and none. Once again for the purpose of analysis and reporting these were collapsed into three levels: "very high/high understanding," "low understanding," and "very low/none understanding." The third line of inquiry for this research question had the students indicate what each of the five academic advisors could have done differently to help the student make better use of their DCCE experience.

The first aspect of the student reflections that will be analyzed is the students' perception of their various academic advisors' level of understanding of the DCCE program and its opportunities. All ( $n=71$ ) of the respondents provided a rating for their friends, parents, and community college personnel, followed by a 95.77% ( $n=68$ ) response rate for community college personnel and an 88.73% ( $n=63$ ) response rate for



student advisors and MS/HS counselors. The home schooled demographic group had the highest response rate for this line of inquiry for this research question, 100% ( $n=11$ ) of the home schooled respondents provided a rating for each of the five academic advisors.

The overall respondents' perceptions of the level of understanding of the DCCE initiative of the five academic advisors were very polarized in that the respondents felt the academic advisors either had a very high to high level or a very low to no level of understanding of the DCCE program.

The responses indicated that the students felt that three of the five academic advisors; CC personnel, parents, and student advisors, had a firm understanding of the DCCE initiative. The CC personnel received the highest rating from the respondents of all of the subsets of gender and secondary school demographic categories. Of the 68 respondents that rated the CC personnel, 83.28% ( $n=57$ ) indicated that the CC personnel's level of understanding was "very high/high understanding," followed by that of the student advisors at 73.02% ( $n=46$ ) and the parents at 66.20% ( $n=47$ ). The percentage of females and of males who felt that the CC personnel's level of understanding of the DCCE initiative was "very high/high understanding" were similar at 84.44% ( $n=38$ ) and 82.61% ( $n=19$ ) respectively. All six of the private school respondents rating the CC personnel felt the CC personnel had a "very high/high understanding" level of understanding of the DCCE program. Also 82.35% ( $n=42$ ) of the 51 public school respondents and 81.82% ( $n=9$ ) of the 11 home schooled respondents rated the CC personnel as having a "very high/high understanding" level of understanding of the DCCE program.

Parents and student advisors received the “very high/high understanding” rating from a larger percentage of females than from the male respondents. Of the 41 female respondents, 75.61% ( $n=31$ ) rated their student advisors’ level of DCCE understanding of the DCCE program as ‘very high/high understanding’ compared to 68.18% ( $n=15$ ) of the male respondents.

Two other major variances in percentages for these two academic advisor groups is seen in the secondary school respondents. The first to be noted is that only 45.45% ( $n=5$ ) of the 11 home schooled respondents signified that they felt their parents had a “very high/high understanding” of the DCCE initiative which is markedly lower than the public school respondents at 67.31% ( $n=35$ ). The other major variance is in the private school respondents (87.50%,  $n=7$ ) which was the highest percentage of the secondary school respondents who felt their parents had a “very high/high understanding” level of DCCE understanding which is not only higher than the home schooled ratings but also significantly higher than the public school respondents at 67.31% ( $n=35$ ).

The findings in Table 18 indicate that there was a relatively even polarized distribution of the respondents, per demographic categories, who believed that their friends either had a very high to high level of understanding or very low to no level of understanding of the DCCE program.

Although the overall respondents’ perceptions of the middle and high school counselors’ level of understanding of the DCCE initiative were relatively evenly split between “very high/high understanding” and “very low/none understanding”: 53.97%

( $n=34$ ) and 46.03% ( $n=29$ ), respectively, there were notable differences when the data was disaggregated by demographic categories.

**Table 18**

*Perceptions of Friends' Level of Understanding of DCCE Initiative*

	<b>Very High/High</b>	<b>Low</b>	<b>Very Low/None</b>
<i>Overall</i>	45.07% ( $n=32$ )	0%	54.93% ( $n=39$ )
<i>Females</i>	42.55% ( $n=20$ )	0%	57.45% ( $n=27$ )
<i>Males</i>	50.00% ( $n=12$ )	0%	50.00% ( $n=12$ )
<i>Public</i>	44.23% ( $n=23$ )	0%	55.77% ( $n=29$ )
<i>Private</i>	50.00% ( $n=4$ )	0%	50.00% ( $n=4$ )
<i>Home</i>	45.45% ( $n=5$ )	0%	54.55% ( $n=6$ )

There was a difference between the female and male respondents' perceptions, 60.98% ( $n=25$ ) of the 41 female respondents felt their parents' level of DCCE understanding was 'very high/high understanding' whereas only 40.91% ( $n=9$ ) of the 22 male respondents rated their parents level of understanding as "very high/high understanding." What stands out is that a majority of the 22 male respondents (59.09%,  $n=13$ ) felt the middle and high school counselors' level of DCCE understanding was "very low/none understanding" while a majority of the 41 female respondents (60.98%,  $n=25$ ) indicated the opposite.

A similar difference was discovered when the secondary school category data was analyzed. The data indicated that a majority of the 5 private school respondents (80.00%,  $n=4$ ) and of the 11 home schooled respondents (72.73%,  $n=8$ ) rated their middle and high school counselors' understanding of the DCCE program as "very high/high

understanding” while over half of the 47 public school respondents (53.19%,  $n=25$ ) rated their middle and high school counselors level of DCCE understanding as “very low/none understanding.”

An analysis of the data relating to the respondents’ perceptions of how well the academic advisors make the connection between the students’ academic goals and the DCCE initiative revealed very similar patterns to the students’ perceptions of the academic advisors’ level of DCCE understanding. The response rate of the overall respondents for each of the academic advisors was remarkably high as seen in Table 19.

**Table 19**

***Responses Per Academic Advisors and Percentage of Overall Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>Responses</i>	65	68	71	64	67
<i>% of Overall Respondents</i>	91.55%	95.77%	100.00%	90.14%	94.37%

Once again the academic advisors that were rated “very high/high understanding” by the highest percentage of respondents were parents, CC personnel, and student advisors; however, the order of ranking has changed. For this line of inquiry the parents received the “very high/high understanding” rating from the highest percentage of respondents, followed by CC personnel and then student advisors. The students’ parents received a “very high/high understanding” rating from 78.87% ( $n=56$ ) of the 71

respondents, the CC personnel received the rating from 69.01% ( $n=49$ ) of the 67 and the student advisors from 60.56% ( $n=43$ ) of the 65 respondents.

Of the 47 female respondents, 80.85% ( $n=38$ ) rated their parents' ability to make the connection between the students' academic goals and the DCCE courses they took as "very high/high understanding" and a slightly lower percentage (75.00%,  $n=18$ ) of the 24 male respondents gave their parents the same rating. The 11 home schooled respondents all rated their parents and indicated that they felt their parents demonstrated a very high degree of connectivity between the DCCE opportunities and the students' academic goals. The parents of the 8 private school respondents received the next highest rating from the respondents at 87.50% ( $n=7$ ). The public school parents received the lowest number of "very high/high understanding" rating from the 52 respondents (73.08%,  $n=38$ ); however, this still demonstrates a rather high level of student confidence in their parents' ability to make the connection between the DCCE initiative and the students' academic goals.

Although the percentages of the CC personnel were slightly different than the ratings the respondents gave the parents, the rank order in which the various demographic categories rated the CC personnel was the same. Of the 44 female respondents, 34 (77.27%) rated the CC personnel's ability to draw a connection between the DCCE opportunities and the students' academic goals as "very high/high understanding" while only 62.50% ( $n=15$ ) of the 23 male respondents indicated the same level of confidence in the CC personnel ability to make the connection. Like the percentage rating for the parents, the ten home schooled respondents had the highest percentage of students that

marked the CC personnel's ability to connect DCCE to academic goals as "very high/high understanding" (90.00%,  $n=9$ ), followed by the eight private school students at 87.50% ( $n=7$ ) and then 67.35% ( $n=33$ ) of the 49 public school respondents.

As seen before, the third academic advisor who received a "very high/high understanding" rating from a large percentage of the 65 respondents was the student advisors (60.56%,  $n=43$ ). The perceptions of the gender groups are in the same order as for their ratings of the parents and the CC personnel in that a higher percentage of the 43 female respondents gave the student advisors a "very high/high understanding" rating than did the 22 male respondents. Of the female respondents, 30 (63.83%) gave the student advisors a rating of "very high/high understanding" on their abilities to connect the DCCE courses with the student academic goals whereas only 54.17% ( $n=13$ ) of the male respondents rated them so. There was, however, a marked change in the order of the ratings the home schooled students gave the parents, the CC personnel and the student advisors. Whereas the home schooled students had the highest percent of respondents that felt that their parents and CC personnel had a "very high/high understanding" DCCE to academic goals connectivity, only 33.33% ( $n=2$ ) of the 6 home schooled respondents rated their student advisors as "very high/high understanding" which could be an artifact of the home schooled students not having student advisors. The category with the highest percentage of respondents rating student advisors as "very high/high understanding" were the 8 private school respondents at 75.00% ( $n=6$ ), followed by 68.63% ( $n=35$ ) of the 51 public school respondents.

Although the confidence levels in the friends and middle and high school counselors were not in the “very high/high understanding” range, neither did they, for the most part, receive very high ratings in the “very low/none understanding” range in terms of their perceived abilities to make the connection between the DCCE activities and the students’ academic goals. The only demographic group that had a large percentage of respondents that rated any of the academic advisors in the “very low/none understanding” level was the home schooled respondents, and again it needs to be reiterated that all of the home schooled respondent numbers are too small to be generalizable.

The middle and high school counselors received the highest percentage of marks for having very low to no ability to make the connection between DCCE offerings and student academic goals. Four (80.00%) of the 5 respondents rated the middle and high school counselors “very low/none understanding” and 55.56% ( $n=5$ ) of the 9 respondents rated their friends connectivity abilities as “very low/none understanding.” As stated earlier the other academic advisors did not received a large percentage of marks in the “very low/none understanding” category and the parents and CC personnel received consistently lower marks in the “very low/none understanding” category.

Similar to the first research question, the second data analysis method involves analyzing the means and standard deviations of the responses that were given concerning the academic advisors’ level of understanding of the DCCE program and their abilities to connect the DCCE initiative to the students’ academic goals. Table 20 shows the numbering schema that was applied to the 5-point Likert scales in which the numerical

values are assigned so that the highest level of understanding and connectivity are equal to five and the lowest level of understanding and connectivity is equal to one.

**Table 20**

*Numbering Schema for Questions 12 and 13—Individual Student Questionnaire*

Numeric Value	5	4	3	2	1
Level of Influence	Very High	High	Low	Very Low	None

Table 21 shows that the academic advisors with the three highest means are: CC personnel ( $M=4.294$ ,  $SD=0.899$ ), parents ( $M=3.817$ ,  $SD=1.032$ ), and student advisors ( $M=3.778$ ,  $SD=1.243$ ).

**Table 21**

*Level of Understanding of DCCE Initiative: Overall Respondents*

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.778	3.169	3.817	3.349	4.294
<i>SD</i>	1.156	1.082	1.032	1.381	0.899
<i>n</i>	63	71	71	63	68

In the previous analysis the order the students' ranked the academic advisors' DCCE program understanding was CC personnel, student advisors, and parents, whereas in this second data analysis the order of parents and students advisors has changed. The rank order based on the academic advisors' means is a more accurate rank order because these the previous ranking was based on scores that were collapsed even though the collapsed



scores do provided a good general analysis of the respondents' input. It also needs to be reiterated that the ratings for the academic advisors' level of understanding of the DCCE opportunities were polarized in that none of the respondents rated any of the academic advisors as having "low" understanding of the DCCE initiative which was the most neutral rating the respondents could assign the academic advisors as indicated in Table 21.

Although it is true that the CC personnel, parents, and student advisors had the three highest means, it needs to be recognized that the other two academic advisors, middle and high school counselors ( $M=3.349$ ,  $SD=1.381$ ) and the respondents' friends ( $M=3.169$ ,  $SD=1.082$ ) had mean scores that were neutral. When related to the previously documented results, it is seen that for the most part the respondents either felt their middle and high school counselors and friends had a very good understanding or they had virtually no understanding whatsoever.

The only academic advisor who received a mean equal to 5.000 from any of the demographic categories was the CC personnel and it was awarded by the eight private school respondents as seen in Table 22. The mean scores indicate that the private school respondents perceived the student advisors ( $M=4.000$ ,  $SD=1.309$ ) and parents ( $M=4.000$ ,  $SD=0.535$ ) as having high levels of understanding of the DCCE program followed closely by their friends ( $M=3.875$ ,  $SD=0.354$ ).

Table 23 illustrates that the home schooled respondents felt that their parents ( $M=4.727$ ,  $SD=0.467$ ) had the highest level of understanding of the DCCE program followed by the CC personnel ( $M=4.500$ ,  $SD=0.707$ ). The mean scores of the remaining

three academic advisors were perceived to have either a neutral or very low understanding of the DCCE initiative.

**Table 22**

*Level of Understanding of DCCE Initiative: Private School Respondents*

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	4.000	3.875	4.000	3.125	5.000
<i>SD</i>	1.309	0.354	0.535	1.126	0.000
<i>n</i>	8	8	8	8	8

**Table 23**

*Level of Understanding of DCCE Initiative: Home Schooled Respondents*

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.200	2.818	4.727	2.000	4.500
<i>SD</i>	2.049	1.328	0.467	1.414	0.707
<i>n</i>	5	11	11	5	10

The highest mean score awarded by the public school respondents went to the CC personnel ( $M=4.140$ ,  $SD=0.948$ ) while the other academic advisors earned very neutral mean scores (see Table 24). An analysis of the mean scores by gender reveals that both females and males felt that the CC personnel had the best understanding of the DCCE program ( $M=4.267$ ,  $SD=0.837$ ;  $M=4.348$ ,  $SD=1.027$ , respectively).

**Table 24**

***Level of Understanding of DCCE Initiative: Public School Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.800	3.135	3.596	3.520	4.140
<i>SD</i>	1.030	1.067	1.071	1.359	0.948
<i>n</i>	50	52	52	50	50

The genders did differ in the rank order of the remaining four academic advisors.

The females felt that their student advisors had a better understanding of the DCCE initiatives than their parents, followed by their middle and high school counselors and lastly their friends. On the other hand, the males indicated that their parents had the next best understanding of the DCCE program followed by their student advisors, their friends and lastly their middle and high school counselors (see Tables 25 and 26).

**Table 25**

***Level of Understanding of DCCE Initiative: Female Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	4.000	3.128	3.830	3.537	4.267
<i>SD</i>	0.975	1.055	0.985	1.380	0.837
<i>n</i>	41	47	47	41	45

**Table 26***Level of Understanding of DCCE Initiative: Male Respondents*

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.364	3.250	3.792	3.000	4.348
<i>SD</i>	1.364	1.152	1.141	1.345	1.027
<i>n</i>	22	24	24	22	23

Next, the second data analysis method will be used to review and analyze the students' perceptions of the academic advisors' abilities to make the connection between the students' academic goals and the DCCE opportunities. As a whole, the mean scores were very neutral overall, and when disaggregated into the two primary demographic categories of gender and secondary schools; in other words, the means were not notably high or low. In terms of their perceived abilities to relate the respondents' academic goals to the DCCE courses the students took the parents and CC personnel earned the top two highest mean scores, respectively, by all demographic categories except the private school students. For the private school respondents, the top two ranked academic advisors switched places and the CC personnel were perceived to have a higher ability to make the connection between the DCCE opportunities and the students' academic goals (see Tables 27 and 28).

**Table 27*****Level of Connection of DCCE Initiative and Academic Goals: Overall Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.646	3.044	4.042	3.141	3.910
<i>SD</i>	1.243	1.099	0.992	1.424	1.111
<i>n</i>	65	68	71	64	67

**Table 28*****Level of Connection of DCCE Initiative and Academic Goals: Private School Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.875	3.750	4.250	2.875	4.375
<i>SD</i>	1.246	0.463	1.035	0.991	0.744
<i>n</i>	8	8	8	8	8

Once again the friends of the respondents and the middle and high school counselors received the lowest means of the five academic advisors. The lowest mean ranking was awarded by the home schooled respondents and it was for the middle and high school counselors ( $M=1.600$ ,  $SD=0.894$ ) and the next lowest mean ranking was for their friends ( $M=2.333$ ,  $SD=1.225$ ) (see Table 29). The only other mean ranking that was less than 3.000 from the secondary school demographic category was made by the private school respondents for their middle and high school counselors ( $M=2.875$ ,  $SD=0.991$ ).

**Table 29*****Level of Connection of DCCE Initiative and Academic Goals: Home Schooled Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	2.667	2.333	4.727	1.600	4.200
<i>SD</i>	1.966	1.225	0.467	0.894	0.919
<i>n</i>	6	9	11	5	10

**Table 30*****Level of Connection of DCCE Initiative and Academic Goals: Public School Respondents***

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.725	3.059	3.865	3.333	3.776
<i>SD</i>	1.115	1.085	1.010	1.438	1.177
<i>n</i>	51	51	52	51	49

The male respondents were more critical than the female respondents of all the academic advisors' abilities to make the connection between their academic goals and the DCCE opportunities, and over 90% of the total male respondents rated every academic advisor (see Tables 31 and 32). Table 32 shows that all of the academic advisors received mean rankings of less than 4.000 and two of the academic advisors were rated less than 3.000. The middle and high school counselors of the male respondents received the

lowest mean scores ( $M=2.864$ ,  $SD=1.457$ ) followed closely by their friends ( $M=2.870$ ,  $SD=1.140$ ).

**Table 31**

*Level of Connection of DCCE Initiative and Academic Goals: Female Respondents*

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.814	3.133	4.128	3.286	4.000
<i>SD</i>	1.075	1.079	0.875	1.402	1.057
<i>n</i>	43	45	47	42	44

**Table 32**

*Level of Connection of DCCE Initiative and Academic Goals: Male Respondents*

	<b>Student Advisor</b>	<b>Friends</b>	<b>Parents</b>	<b>MS/HS Counselors</b>	<b>Community College Personnel</b>
<i>M</i>	3.318	2.870	3.875	2.864	3.739
<i>SD</i>	1.492	1.140	1.191	1.457	1.214
<i>n</i>	22	23	24	22	23

The final line of inquiry for this research question involved asking the respondents to describe what they believed the five academic advisors could have done differently so that the respondents could have made better use of their DCCE experience. The reporting of this data will concentrate on one academic advisor at a time and the first to be discussed will be the student advisors. Forty-nine of the respondents provided input and six common answers emerged from the response analysis, which include:

1. Provide more encouragement and better advising (21 responses)
2. Be better organized and informed (7 responses)
3. Start advising earlier and allow students to start earlier (5 responses)
4. Be more accepting of the DCCE program (3 responses)
5. Provide more DCCE opportunities (1 response)
6. Nothing, they did great (12 responses)

Of the 49 respondents, 21 (42.86%) felt that the student advisors should have been more encouraging and could have done a better job of advising as illustrated by the following comments:

- “They could have told me about it instead of pushing pointless class on me just to take time” (female, Caucasian, public school, Guilford Technical Community College)
- “. . . inform me more about the program” (male, African-American, public school, Durham Technical Community College)
- “More encouragement to take the courses” (female, Caucasian, public school, Wayne Community College)
- “They could have mentioned that the courses – counted for half a high school credit” (male, Caucasian, public school, Western Piedmont Community College)

The next most common answer indicated by 24.49% ( $n=12$ ) of the respondents was that the student advisors did a great job and the respondents didn't think the student



advisors could have done anything differently to help them throughout their DCCE experience. This was illustrated by comments like:

- “They were very helpful” (female, Caucasian, public school, Western Piedmont Community College)
- “They made me realize what I needed” (male, Hispanic, public school, Guilford Technical Community College)
- “They were as helpful as I needed them to be” (male, Caucasian, private school, Durham Technical Community College)
- “They did all they could” (male, Caucasian, private school, Wayne Community College)

Comments that 38 respondents made concerning what their friends could have done differently to help their DCCE experience be better were condensed into six common responses:

1. Could have been better informed (8 responses)
2. They were helpful because they shared the experience (7 responses)
3. Could have been better or more serious students (6 responses)
4. Could have been more encouraging and supportive (5 responses)
5. Could have teamed up – like carpool (1 response)
6. Nothing, they had no impact (11 responses)

Of the 38 respondents, 11 (28.95%) indicated that there was nothing their friends could have done to help the students make better use of their DCCE experience and some

went so far as to praise their friends' assistance, as demonstrated by the following comments:

- “They did all they could do” (female, Caucasian, public school, Forsyth Technical Community College)
- “I don’t think anything because it really doesn’t have anything to do with them” (female, Caucasian, public school, Guilford Technical Community College)
- “Don’t rely on friends for this type of advise” (female, Caucasian, public school, Western Piedmont Community College)
- “Would not have been a factor to me” (male, Asian, public school, Sampson Community College)
- “My friends were the most helpful because they had done this already” (female, Caucasian, public school, Roanoke-Chowan Community College)
- “They helped me choose what to take” (female, Caucasian, public school, Mitchell Community College)

The most critical type of the comment was that their friends could have been better more knowledgeable and informed about the DCCE opportunities and 8 (21.05%) of the 38 respondents made comments of this nature and some included:

- “My friends did not know about it” (male, Caucasian, public school, Wayne Community College)
- “understand dual-enrollment better” (female, Caucasian, public school, Mitchell Community College)

- “Some friends wondered why I pursued extra work” (female, Caucasian, private school, Wayne Community College)

Forty-eight respondents provided comments about what their parents could have done differently to help the students make better use of their DCCE experience and four typical responses emerged:

1. Be more knowledgeable of the DCCE program (14 responses)
2. Provide more encouragement and support (8 responses)
3. Paid more attention to me and be more disciplined-based (4 responses)
4. Nothing, they were encouraging and supportive (22 responses)

Of the 48 respondents, 22 (45.83%) commented that they felt their parents did a great job of providing them encouragement and support and signified that they didn't feel their parents could have done anything differently to make their experience more meaningful. The respondents made comments including:

- “My parents were great, but I think a lot of parents fail to place importance on becoming an educated individual” (male, Caucasian, public school, Guilford Technical Community College)
- “My parents did everything well by encouraging me to do it” (female, Caucasian, public school, Roanoke-Chowan Community College)
- “They did enough! (as much as they knew how to do)” (female, Caucasian, public school, Forsyth Technical Community College)
- “They did their part” (male, Caucasian, public school, Wayne Community College)

The major criticism the respondents had for their parents was that 29.17% ( $n=14$ ) of the 48 respondents felt their parents should have been more knowledgeable of the DCCE program and its opportunities. Comments included:

- “My parents should have started the process earlier” (male, Caucasian, home schooled, Mitchell Community College)
- “needed to be more aware” (female, Caucasian, public school, Pitt Community College)
- “more information about the program” (male, African-American, public school, Roanoke-Chowan Community College)
- “My parents did not know anything about it” (male, Caucasian, public school, Wayne Community College)

The middle and high school counselors received comments from 47 respondents and those comments were grouped into seven common types:

1. Be more knowledgeable of the DCCE program and its’ level of rigor (13 responses)
2. Be more encouraging and optimistic and sharing (9 responses)
3. Provide better communication with both the college and the students (8 responses)
4. Provided DCCE information earlier (7 responses)
5. Be more knowledgeable of the students and their academic goals (2 responses)
6. Be more open to DCCE courses and less concerned with AP numbers (1 response)

7. Nothing, they did great (7 responses)

Two major responses concerning what the middle and high school counselors could have done differently to ensure that the students' DCCE experience had been more meaningful include counselors being more knowledgeable of the rigor required of DCCE experience and that they could have been more encouraging and supportive. Thirteen (27.66%) of the 47 respondents expressed feelings that they believed the middle and high school counselors could have been better informed of the benefits of the DCCE initiative.

Statements included:

- “communicate with the college more and be more knowledgeable about it”  
(female, Caucasian, public school, Roanoke-Chowan Community College)
- “have more knowledge to inform the students” (female, Caucasian, public school, Forsyth Technical Community College)
- “They could have mentioned that the courses counted for half a college credit”  
(male, Caucasian, public school, Western Piedmont Community College)
- “They were not helpful and were unformed” (male, Caucasian, public school, Mitchell Community College)
- “be more knowledgeable about the college courses” (female, Caucasian, public school, Pitt Community College)

The respondents felt the middle and high school counselors could have been more encouraging and supportive and 9 (19.15%) of the 47 respondents expressed these sentiments by making comments including:

- “They could have told me about it instead of pushing pointless classes on me just to take up time” (female, Caucasian, public school, Guilford Technical Community College)
- “been more informative and willing to explain and help with the process” (female, Caucasian, public school, Wayne Community College)
- “didn’t really care what we did” (male, Hispanic, public school, Forsyth Technical Community College)
- “be more optimistic, knowledgeable – principal was no help he did not want it to happen, he was more worried about numbers and AP courses” (female, Caucasian, public school, Guilford Technical Community College)

The final academic advisor to be reported, the CC personnel, received the most number of comments. Fifty-four respondents commented on what the CC personnel could have done differently to help the students make better use of their DCCE experience and seven common responses emerged. These seven are:

1. Provide better advising like assigning a permanent advisors (13 responses)
2. Market the program better (11 responses)
3. Communicate with the students earlier and more effectively (6 responses)
4. Provide more interaction and be more available (3 responses)
5. Offer more courses (2 responses)
6. Work closer and better with the high schools (2 responses)
7. Nothing, they were great (18 responses)

The most common response about the CC personnel was positive in that they felt the CC personnel did a great job and did not feel the CC personnel could have done anything different in helping the their DCCE experience be more meaningful. These positive comments were made by 33.33% ( $n=18$ ) of the 54 respondents, including:

- “They were good” (male, Caucasian, private school, Mitchell Community College)
- “They helped a lot, I wouldn’t change anything” (female, Caucasian, public school, Guilford Technical Community College)
- “They were great, I couldn’t ask for anything better” (female, Caucasian, public school, Pitt Community College)
- “The personnel walked me though every step and were extremely helpful” (male, Caucasian, home schooled, Mitchell Community College)
- “I think they did things just fine, they were always there if I needed them and that really helped out a lot” (female, Caucasian, home schooled, Wayne Community College)

There were, however, two actions that some indicated the CC personnel could have done differently to make their experience more meaningful. The first was indicated by 24.07% ( $n=13$ ) of the 54 respondents that the CC personnel could have conducted the advising and registration processes more effectively and the second recommendation was to provide the students a permanent advisor. The respondents’ comments included:

- “better advising on what classes to take” (female, Caucasian, home schooled, Forsyth Technical Community College)

- “It would have been nice to have not felt like I as in a stockyard during registration every semester” (female, Caucasian, home schooled, Durham Technical Community College)
- “could have found me an advisor that might help me, rather than me having to seek advice from someone different every time” (female, Caucasian, public school, Forsyth Technical Community College)
- “ensure classes are needed in college plan” (female, Caucasian, public school, Mitchell Community College)

Of the 54 respondents, 11 (20.37%) expressed that they felt the CC personnel should have marketed the DCCE program more prominently. The comments included:

- “They need to advertise the program” (female, Caucasian, public school, Roanoke-Chowan Community College)
- “should have visited the high school to inform the students” (female, Caucasian, public school, Forsyth Technical Community College)
- “talk with students at local/surrounding schools and also tell students about dual-enrolling and how it can help them get ahead for college” (female, Caucasian, public school, Durham Technical Community College)
- “need to be more informative” (female, Caucasian, public school, Pitt Community College)



***Research Question #4: Significant Events and Factors of Students' DCCE Planning***

***Process***

The lines of inquiry for this final research question were covered two questions on the individual student questionnaire:

- What grade were you in when you seriously started to develop and plan for your college goals? (#8)
- Using the list provided below, please indicate the two most important reasons why you selected the dual credit-concurrent enrollment courses you chose or write in your influential reasons in the space(s) marked “other.” Please indicate why you identified these two reasons. (See Appendix A, Question #11.)

The first line of inquiry into this research question reveals the important events and factors in the students' DCCE planning process by asking the students to indicate when they seriously started making their plans for college. All 71 of the respondents answered this question on the Individual Student Questionnaire and Table 33 indicates their responses. The responses indicate that 90.14% ( $n=64$ ) of the 71 respondents started planning for college while they were in high school. The largest percentage of the total respondents began their college planning in their junior year in high school (29.58%,  $n=21$ ). Table 33 shows that the sophomore and junior years of high school for the respondents were when the majority (52.11%,  $n=51$ ) of the students began seriously formulating their plans for college.

**Table 33*****Grade Level of Initial College Planning: Overall Respondents***

	<b>7th</b>	<b>8th</b>	<b>9th</b>	<b>10th</b>	<b>11th</b>	<b>12th</b>
Totals	3	4	13	16	21	14

When the data are disaggregated by gender, it becomes clear that the female respondents began their planning for college much earlier than did the male respondents. Of the 47 female respondents, 12 (25.53%) indicated that they began planning for college during their first year in high school and 23.40% ( $n=11$ ) indicated that they started during their second year in high school (see Table 34).

**Table 34*****Grade Level of Initial College Planning: Per Gender***

	<b>7th</b>	<b>8<sup>th</sup></b>	<b>9th</b>	<b>10th</b>	<b>11th</b>	<b>12th</b>
Females	2	4	12	11	9	9
Males	1	0	1	5	12	5

There is a stark difference in the responses provided by the male students. Of the 24 male respondents, 91.67% ( $n=22$ ) signified that they began planning for college during either their sophomore, junior, or senior years in high school, with the highest percentage indicating their junior year of high school (50.00%,  $n=12$ ). There is almost a two year difference between when the female and male respondents' start of planning for college. Another factor that stands out is that only one male respondent stated that he

began planning for college prior to entering high school, while 6 (12.77%) of the 47 female respondents stated they began college planning before entering high school. When the input of the respondents is disaggregated by secondary schools, the data indicate that the highest percentage of public school students began the college planning process in the 10<sup>th</sup> grade, while the highest percentage of home schooled and private school students began planning for college in the 11<sup>th</sup> grade. Thirteen (25%) of the 52 public school respondents identified their sophomore year of high school as the time when they started planning for college and only 9.62% ( $n=5$ ) of the 52 respondents signified that they started planning for college while they were in middle school. Although the highest percentage of public school students indicating that tenth grade was the year they started planning for college, it also needs to be noted that all four years of high school were indicated as initial college planning years by approximately the same number of students.

As stated earlier, a majority of the home schooled and private school students indicated that they started planning for college during their junior year in high school and, although the number of respondents from these categories was low, there are some interestingly notable findings. The responses from the private and home schooled respondents indicate that the emphasis on college planning for the private school students was mainly during their sophomore and junior years of high school and for the home schooled students it was their junior and seniors of high school (see Table 35).

**Table 35*****Grade Level of Initial College Planning: Per Secondary School Category***

	<b>7th</b>	<b>8th</b>	<b>9th</b>	<b>10th</b>	<b>11th</b>	<b>12th</b>
Public School	1	4	11	13	12	11
Home Schooled	1	0	1	1	6	2
Private School	1	0	1	2	3	1

The second line of inquiry for the final research question provided the students a selection of choices that had been identified through the combined student interviews. The students were asked to select the two most important reasons why they chose the DCCE courses that they participated in and briefly describe why they made those selections. The students were also given the option of providing their own reasons if none of the listed choices were appropriate to their circumstances and DCCE experience. The seven choices provided were:

- courses met associate degree requirements
- courses met bachelor degree requirements
- courses met personal interests
- courses matched up with high school courses
- take advantage of the tuition waived opportunity
- wanted something beyond the high school experience
- because my friends signed up for the courses

The reason to take DCCE courses that the highest percentage of respondents selected was financial reasons as they wanted take advantage of the tuition waived

opportunity. Of the 71 respondents, 28 (39.44%) indicated that they were taking advantage of the fact that the DCCE courses were tuition waived. The comments that were made can be grouped into four salient responses. The first involved the students saying they took DCCE courses to help their parents by reducing the financial burden they would have to incur for the respondent to attend a postsecondary institution. The second was more personal with some students indicating they knew they were going to have to pay for college by themselves and were taking the DCCE courses to reduce their own personal outlay of costs for their college experience. The third response revolved around the fact that students knew they weren't going to qualify for financial aid and were looking to reduce their educational expenditures. The fourth and final point involved the desire to experiment with various courses and career options with minimal financial risk. Some of the comments the respondents provided include:

- “Since I am paying for college myself, I wanted to have every opportunity I could to take advantage of college classes” (female, Caucasian, public school, Forsyth Technical Community College)
- “came from a family that would not have a lot of money for college” (female, Caucasian, public school, Guilford Technical Community College)
- “Government looks at parent’s gross income which is high due to them being self employed so I’m not eligible for any student financing” (male, Caucasian, public school, Western Piedmont Community College)
- “save money for other needs (fiscal wisdom)” (male, Caucasian, public school, Guilford Technical Community College)

- “wanted to see what college would be like” (male, Asian, public school, Sampson Community College)

The choice that was selected by the second highest percentage of respondents was that the DCCE courses met the students’ personal interests. Of the 71 respondents, 27 (38.03%) indicated that they chose the DCCE courses because they matched their personal goals and interests. There were three recurring answers that emerged. The first was that the students were curious about various careers and subjects and chose to experiment with these options prior to graduating from high school. The second was that these courses fit into the schedule of their personal lives in terms of high school courses and part-time jobs. The final recurring answer was that the course matched their predetermined career paths. The respondents’ comments included:

- “I like math so I choose accounting” (male, Hispanic, public school, Forsyth Technical Community College)
- “The course matched what I wanted to do with my career” (male, Caucasian, public school, Wayne Community College)
- “I took classes to decide if I wanted to pursue psychology” (female, Caucasian, public school, Mitchell Community College)
- “times and dates were good – I worked part-time at a clothing/retail store” (female, African-American, public school, Forsyth Technical Community College)
- “I explored the possibility of a history major a little where it was free.” (female, Caucasian, public school, Guilford Technical Community College)

The other choice that was selected by many respondents was that “courses met associate degree requirements.” This option was selected by 36.62% ( $n=26$ ) of the 71 respondents. The comments associated with the respondents’ selection of this option fell into three salient groups, and the first being that the student simply wanted to obtain a head start on the collegiate experience. The second was that the respondents knew that they were eventually going to a four-year institution; however, they intended to first get their college transfer associate degree from the community college. They stated that they saw this as an avenue through which they could get to the four-year institution in less time. The final point was that the respondents desired to get their general education courses of their intended associate degree out of way prior to high school graduation so that they could start taking their courses in the major area of study sooner. The following are examples of the respondents’ comments.

- “Taking dual enrollment classes helped me experience college without becoming overwhelmed, but it also put me ahead with college credits and the transfer program” (female, Caucasian, public school, Durham Technical Community College)
- “wanted to take the opportunity to get a a head start on my 1<sup>st</sup> college degree” (female, Caucasian, public school, Wayne Community College)
- “I wanted to be able to get general classes out of the way to focus on my major” (female, Caucasian, public school, Forsyth Technical Community College)

- “I was getting my AA and it allowed me to transfer straight into my major at UNC” (female, Caucasian, home schooled, Durham Technical Community College)
- “Wanted to get an associate then go on to bachelor” (female, Caucasian, public school, Mitchell Community College)

The “courses matched up with high school courses” option was the fourth most selected response. Of the total respondents, 19 (26.76%) selected this option and their comments can be grouped into two lines of thought. The first is that they believed the courses would improve their overall high school grade point average. The second was the respondents were very interested in being able to take one course and have it count for both high school and college credit.

Their comments included:

- “get high school credit and college credit and raise my GPA with one course – looked good on transcript” (female, Caucasian, private school, Sampson Community College)
- “It lightened my high school course load by counting as high school and college classes” (female, Caucasian, home schooled, Forsyth Technical Community College)
- “I would not only receive a credit from college but also at high school: 2 for the price of 1” (female, Caucasian, public school, Wayne Community College)



The choice of the student wanting something beyond their normal high school experience was selected by 23.94% ( $n=17$ ) of the 71 respondents and their comments are grouped into three recurring points. The first point centered around the students' feelings that their high school courses were not catching their attention. The second was that the students' didn't feel challenged by their high school courses and once again found they were disinterested in their high school classes. The final point was that the respondents liked being around a more mature and serious group of students. Listed below are some examples of the respondents' comments.

- “High school was boring and it was a chance to get out faster” (female, Caucasian, public school, Guilford Technical Community College)
- “I was ready for more of a challenge and was tired of high school” (female, Caucasian, public school, Forsyth Technical Community College)
- “didn't like high school, gave me time with more mature people” (female, Caucasian, public school, Wayne Community College)
- “High school is too generic” (male, Caucasian, public school, Guilford Technical Community College)

The “courses met bachelor degree requirements” choice was selected by 22.54% ( $n=16$ ) of the total respondents. These comments provided by the respondents can be grouped into two recurring responses types, the first being that the students can get their general education courses out of the way before entering their four year institution, therefore, allowing them to start taking courses within their major field of study sooner. The other response type was that the respondent viewed the DCCE courses as being

advantageous in the four-year college admissions process. The respondents' comments include:

- “get certain classes out of the way so that I could work on classes right in my major” (female, Caucasian, private school, Sampson Community College)
- “These courses were needed for my basic studies, I just wanted a head start” (female, Caucasian, private school, Mitchell Community College)
- “would count as credit to my undergrad” (female, Caucasian, public school, Guilford Technical Community College)
- “because home-schooled high schoolers have to work extra hard for admission” (female, Caucasian, home schooled, Durham Technical Community College)

The last choice to be selected by respondents was “because my friends signed up for the courses. Only 4 (5.63%) of the 71 respondents indicated that this was an important reason they chose to enroll in the DCCE courses that they took and here are several of the related comments:

- “if they were doing it I wanted to also” (female, Caucasian, public school, Pitt Community College)
- “I had a few friends who used it” (male, Caucasian, public school, Forsyth Technical Community College)
- “so I decided to join them” (male, Caucasian, private school, Mitchell Community College)

### Summary

The research revealed that there are several major influences on the students' decisions regarding enrolling in DCCE courses. The primary influence--which was a recurring response throughout the research study--was the influence of students' parents. The respondents credited their parents for being the most influential factor in both the development of their college planning goals and for the students' awareness of the DCCE initiative. It was also specified that although the parents were aware of the DCCE initiative, if they had been more fully informed of all aspects of the DCCE programs, the students would have done some things differently to take full advantage of the DCCE opportunities. Other personnel that were helpful and influential were the student advisors of the respondents. Non-personnel related influences that were revealed through the research study included tuition-waived college credit, transferability of college courses, early start on college courses, and a quicker pathway to career goals.

The people that really did not play a role in the respondents' college goal development and awareness of the DCCE opportunities included the students' friends, middle and high school counselors, and the CC material. A majority of the respondents indicated that although their friends weren't that influential, it really wasn't anything their friends could have an influence over in the first place. There was, however, a notable disappointment in the level of knowledge, encouragement, and support that the middle and high school counselors provided the respondents about and towards the DCCE program and the respondents indicated that the CC material was not as influential as it should have been.

The research also revealed that a majority of the students felt that their pre-DCCE level of understanding of the how they could apply their DCCE experience to achieve their college goals was very high, with the male respondents reporting a higher level of understanding than the females, and there was only a slight difference in perceived level of understanding between the three secondary school groups. An interesting finding was that only around one half of the respondents reported knowing where they wanted to go to college before they started taking DCCE courses and what they wanted to study once they graduated high school. Although there was no notable difference between the males and females in terms of knowing where they were going to college before they took DCCE courses, a higher number of males reported knowing what they wanted to study once they graduated from high school. Another finding that emerged from both the combined student interview and the individual student questionnaire was that by participating in the DCCE program the students were able to bring focus and resolution to what they wanted to do after they graduated from high school which in turn helped them determine which college they would be attending.

The research further revealed a majority of the respondents didn't start planning for college until sometime in their sophomore or junior year of high school and the data reveals that a majority of the respondents were already taking DCCE courses when they developed their college goals. This may be why a notable number of respondents indicated that they would have taken more or different DCCE courses if they had had their college goals defined prior to taking any DCCE courses, instead of taking courses for personal interests and the opportunity to take tuition-waived college courses.

## CHAPTER V

### INTERPRETATIONS AND CONCLUSIONS

The purpose of this study was to examine the primary influences on a DCCE student's postsecondary decision-making process. The study specifically examined the level of influence of three aspects of the student's postsecondary decisions as related to the dual-credit and concurrent enrollment (DCCE) initiatives: the students' basic college knowledge and that of their advisors, the students' college enrollment plans/hopes, and the students' college planning practices. The guiding question of this research study was "What were the major influences on students' decisions regarding enrolling in DCCE courses?" The following research questions were used to discover the responses to this study's guiding question.

1. What were the influences on the academic goals of the students?
2. What understandings did the participating students have of the DCCE possibilities?
3. What understandings of the DCCE possibilities were held by the students' advisors, including friends, parents, middle and high school counselors, and community college liaisons?
4. What were the important events and factors in the DCCE planning process for the students?

This chapter summarizes the findings of each of study's research questions, provides interpretations and implications of the findings, and concludes with recommendations for further research based on the study's findings.

### **Findings**

This section summarizes the findings of each research question employed in this study to ascertain the response to the study's guiding question of "What were the major influences on students' decisions regarding enrolling in DCCE course?"

#### ***Research Question #1: What were the influences on the academic goals of the students?***

The respondents' answers to this research question can be grouped into several recurring responses, with the primary one being that the parents have, without question, the largest influence on the development of students' academic goals and in making the students aware of the DCCE opportunities. The respondents indicated that their student advisors, specifically teachers, were also influential in both the students' academic goal development and their overall DCCE awareness.

The respondents also indicated that there were several reasons why they chose to participate in the DCCE program as part of working towards fulfilling their academic goals. These reasons included the tuition-waived opportunity and the ability to get a head start on their college education. The findings of the study indicate that the students were very aware of the financial advantages of the tuition-waived opportunity provided by participating in the DCCE initiative. The students also stated that taking the DCCE courses to get a head start in college would help them in three important ways: in the

transferability of the courses, in getting an early start in their college program of study, and the possibility of reaching their professional goals sooner.

The resource that was revealed to be the least influential in assisting the students develop their academic goals turned out to be the promotional material of the community colleges, and this opportunity for improvement will be discussed in greater depth later in this chapter.

***Research Question #2: What understanding did the participating students have of the DCCE possibilities?***

The research findings revealed that overall, the respondents reported that prior to participating in any of the DCCE courses they felt they had a very good understanding of the DCCE initiative and how it could benefit them. The male respondents indicated they had a higher sense of confidence in their DCCE awareness than the females of the study reported having. These expressions of confidence were interesting in light of the fact that they contrast markedly with another finding indicating that prior to taking any DCCE courses, only slightly over half of the respondents even knew where they were going to college or which program of study they were planning to pursue. One salient point exposed in reviewing these findings was that the respondents saw their college planning process as being dynamic in that it evolved and became more solidified the more they participated in the DCCE initiative.

The respondents did, however, express regrets about their DCCE participation when asked to reflect back on their experience. A recurring response of regret was they

wished they had taken more DCCE courses and that they had started taking DCCE courses earlier in their secondary school experience.

***Research Question #3: What understanding of the DCCE possibilities were held by the students' advisors, including friends, parents, middle and high school counselors, and community college liaisons?***

An analysis of the findings revealed that the respondents consistently identified three academic advisors as having high levels of understanding of the DCCE initiative and how it linked to their academic goals. The three academic advisors consistently identified were the parents, the CC personnel, and the student advisors, specifically teachers, but the ranked order of these three varied slightly depending on the demographic group that was doing the ranking. Overall the respondents indicated that their friends were not influential; however, the respondents went on to state that their friends don't really play a critical role in their academic decisions in the first place. The one group that received very polarized ratings was the middle school/high school counselors group where the respondents either felt the counselors had a very high level of understanding or no understanding at all. These findings indicated that the middle and high school counselors should have been more knowledgeable and supportive of the DCCE initiative.

***Research Question #4: What were the important events and factors in the DCCE planning process for the students?***

The findings indicated that the students once again identified the tuition-waived opportunity as the primary factor in the students' decision to participate in the DCCE



program. There were several reasons for tuition waivers being the primary factor including: it reduced their parents' financial burden, it reduced their own personal financial obligations, some students already knew they wouldn't qualify for financial aid, and tuition waived courses afforded students the ability to experiment with courses with no financial outlay. Other important factors in the students' DCCE planning process that have been previously identified include the transferability of DCCE courses and the prospect of possibly being able to shorten the time to college graduation. For 'personal reasons' emerged as salient and had several unique exemplars, including the ability to try various careers and subjects, that the DCCE courses fit the daily schedule of their personal lives, and the DCCE courses matched up with their pre-determined career goals and path.

### **Interpretations**

Six interesting factors can be noted in the findings of this research study including: the positive impact of parental influence, the lack of influence of the CC material, the disappointing influence of middle and high school counselors, the timeline when the students begin to seriously plan for college, the preponderance of Caucasian respondents, and the high number of non-public school respondents.

The findings very clearly established the first emerging factor, that the students' parents are, by far, the most critical factor in the students' decision making process when it comes to college and career planning. The findings consistently point to just how influential the parents are to the students - no matter how well informed (or not) the parents are of all of the nuances and procedural elements of the DCCE initiative.

Although the students indicated that their parents could have been more knowledgeable of the DCCE program, it was clear that the parents did recognize that the DCCE initiative would benefit their students, even if they weren't privy to all of the facts about the DCCE program. This raises a very big question concerning what strategies the secondary schools and community colleges have developed, adopted, and administered to leverage this high level of understanding by increasing the parents' level of understanding of the DCCE program and the program's connectivity to the students' academic goals.

The next factor that emerged from the findings was that the DCCE promotional material actually was not considered influential in helping the respondents develop their academic goals or in raising the students' awareness of the DCCE initiative. An interesting and somewhat ironic aspect is that, in all probability, most marketing strategies used by both the secondary schools and the community colleges rely on costly, attractive print material presumably designed to deliver the maximum influence on students' college planning and decisions. Although heavily investing in print materials is not necessarily a bad approach, the study's findings indicate that the marketing strategies for the secondary schools and community colleges need to better determine the information that parents want and really need in order to be positive advocates of the DCCE program. One approach could be to survey parents to see exactly what they might need to assist them in guiding their students to these innovative high school to college programs.

Another group that needs to have a significant amount of input into the design of marketing material is revealed in the fourth factor that emerged from the research study

findings and that involves the middle and high school counselors group. The research findings revealed that the student respondents did not believe that either the middle or high school counselors had a solid understanding of the DCCE initiative or how to help the students draw the connection between the DCCE courses and their academic goals. One reason the middle and high school counselors received such low ratings could be that they simply do not have the time to devote to learning about new opportunities like the DCCE initiatives. Due to the heightened accountability standards associated with the No Child Left Behind federal mandate, the school counselors have been straddled with the majority of massive new testing responsibilities. This indicates a need for some easily accessible informational materials targeted to this potentially influential but overworked group. There are some community colleges, such as Caldwell Community College and Technical Institute (CCC&TI), in Hudson, North Carolina, that have recognized and are trying to address this added burden on the middle and high school counselors. For instance, CCC&TI has hired a transition advisor for each high school within the college's service area, which includes Caldwell and Watauga counties. The transition advisor's role is to provide the secondary school students information, counseling, and guidance related to the college's DCCE opportunities and the students' academic goals. Having both the secondary and postsecondary partners collaborating on the advising of secondary school students would greatly help in the development of useful marketing tools that, in turn, would help the educational institutions address the next factor that emerged during the analysis of the findings which is related to when the students indicated they start planning for college.

The fourth notable factor that was revealed in the research was that a majority of all respondents indicated that they did not start planning for college until they were in their sophomore or junior year of high school. Considering the guidelines of the DCCE programs in the state of North Carolina, waiting until the tenth or eleventh grade of high school doesn't allow the students to take full advantage of the DCCE opportunities. For example, in North Carolina the dual credit component, called the Huskins program, allows secondary school students to begin taking Huskins classes during the freshman year in high school. However, if the students start taking college courses before they determine where they want to go to college and what they want to study, they need to take extra efforts to make sure they take only very general courses that can count toward any degree. This makes their need for timely and effective dual credit course counseling even more critical. North Carolina's concurrent enrollment program is slightly less impacted by the finding regarding late students' college planning in that students must be 16 years old to participate in this programming and on average students turn 16 years old in the tenth grade; therefore, the findings indicate that the students will become eligible to take the concurrent enrollment courses around the same time that many start developing their college goals.

The next interesting factor that emerged during the analysis of the research findings is that almost all of the participants in the study were Caucasian students (91.78%, n=67 of 73 total study participants) and that the ethnicity with the second highest number of participants was African-Americans, who only represented 2.82% (n=2) of the respondents. Due to FERPA restrictions, the research study was not able to

capture the ethnicity data for all of the students meeting the study's student selection criteria so there is no data to indicate if the general population of students taking the DCCE courses is similarly predominantly Caucasian. Therefore, one question that needs to be asked is what is the ethnic breakdown of the students that are participating in DCCE opportunities? This question should begin to answer why there was a preponderance of Caucasians that were randomly selected to participate in the research study. If asked to speculate from my many years of experience working with DCCE activities, I would say that most of the marketing and promotional strategies employed to raise awareness of the DCCE program rely on students and parents that are educationally savvy, which begs the question are the DCCE promotional and marketing strategies biased towards those students and parents that have previous experience with educational environments at the postsecondary level? Or is the preponderance of Caucasian respondents due to the fact that the Caucasian population has a much higher percentage of parents with college experience which would provide their students an edge when it comes to being aware not only of the DCCE program but also of how to maneuver through the enrollment processes of postsecondary institutions? If future research were to reveal proportional under representation of ethnic minority students in the DCCE initiatives, this would point to a need for the development of more focused marketing materials and strategies.

The final notable factor revealed during the analysis of the research findings was that close to 30% ( $n=21$ ) of the 73 total participants in the study attended non-public schools, including 9 private school students and 12 home schooled students. The high number of non-public school participants, especially of home schooled students, could be

because the parents who are not satisfied with and have chosen to avoid the public school system see the DCCE program as an opportunity to have their students participate in a professional academic environment while avoiding what they consider to be the undesirable traditional public school environment.

From its conception the DCCE program has had as a major element of its mission the need to provide a mechanism that would increase the matriculation rate of secondary school students to an institution of higher learning. This was to be accomplished by providing financial incentives in the form of tuition waived college classes and early exposure to the collegial environment to help raise the students' college level confidence and competence. The findings of this research study seem to indicate that the secondary students with the greatest need of assistance who could benefit the most from the DCCE program may be missing out on this educational opportunity and need to be deliberately, strategically included in the DCCE initiative.

### **Implications**

There are a number of implications that can be derived from the findings of this research study and they will be outlined in terms of the policies and practices the educational institutions that sponsor DCCE initiatives should adopt to fully accomplish the mission of the DCCE program.

#### ***Implications for Policy***

There are three major policy implications that the administrators of DCCE programs need to consider as indicated by the findings of this research study.

The first policy implication is that state educational leaders need to require stronger collaborations and partnerships between PK-12 public schools, community colleges, and universities. A first step in this direction would be to require public schools and community colleges to coordinate curriculum alignment initiatives so that the various curricula the students take throughout their pre-kindergarten to community college experience reflect a truly seamless transition. Programs in place such as the DCCE program provide the students that opportunity for seamless transition only if strategic academic personnel provide the parents and their students the proper resources and guidance. This will only occur on a systemic basis if educational leaders at the state and local levels fully embrace these initiatives through the appropriate allocation and strategic use of funds to support recruitment and outreach, such as the exceptional, albeit unusual, previously cited transition advisors placed in all Caldwell County high schools. In North Carolina there is currently an organization of top academic leaders that could, if they chose to, spearhead this type of initiative. They are called the North Carolina Education Cabinet. The North Carolina Education Cabinet was created in 1992 by the North Carolina General Assembly General Statute (GS) 116C-1. The Education Cabinet consists of the Governor, who serves as the chair, the elected Superintendent of Public of Instruction, the Chair of the State Board of Education, the President of the North Carolina Community College System, the President of the University of North Carolina, and the President of the North Carolina Independent College and Universities. Given the will, the Education Cabinet has the authority and influence to bring a seamless PK-20 education to scale for all students in the state of North Carolina.

As these partnerships and collaborations evolve, there will need to be policies that strengthen and expand the career exploration and college planning process backmapped to the middle schools. The Huskins element of the DCCE initiative in North Carolina is designed to allow students to start participating in college courses beginning in the ninth grade. This early exposure to collegial course work, often times in the vocational area, allows the students to experiment in career possibilities with the potential of earning college credit that they can use once they graduate high school. If the students enter high school with a higher understanding of the field of study that they would prefer to pursue, once they graduate there is absolutely no reason typical high school students shouldn't finish high school with at least one year of college under their belt. With one year of college completed, there would be significant tuition savings for the families of the students; furthermore, it is conceivable that the drop-out rate would decrease while the matriculation rate to postsecondary institutions would increase dramatically. The ultimate goal should be to make sure that every student has a comprehensive college/career goal that incorporates middle school, high school and community college curricula that are aligned and adjusted as the interests of the students vary over time.

Accomplishing the second policy implication regarding career exploration will be made easier if the third policy implication is adhered to and that is to require the middle school and high school counselors to work hand-in-hand with the community college in their local educational area (LEA). The one issue that will get in the way of moving forward with this activity is the fact that the middle school and high school counselors are overwhelmed with the mandated testing responsibilities of the LEAs. State level leaders



will need to recognize the importance of having the middle and high school counselors move back into their primary duties which should be providing the academic resources that the students and their parents need to perform effective college planning.

The final policy implication indicates the need to develop and implement state-wide strategies designed to increase the parental involvement in the students' educational goals by systematically increasing the parents' knowledge and level of confidence in working with educators. The findings clearly indicate that the parents have a large amount of influence over the postsecondary choices the students make, even when the parents don't fully understand all of the nuances of the options available to the students. It is imperative that strategies are developed that strategically address this issue. One way this could be accomplished is by reconsidering attendance zones that would ensure that schools once again become the backbone of communities or at least a critical and influential element of the community in which the students reside. Strategies that encourage the merging of the schools' neighboring communities with that of the educators' and the students' residential communities would help raise the parents' familiarity with the faces and personalities of the educational providers of their students. Creating more meaningful relationships will result in deepening the levels of influence on students' postsecondary planning.

### ***Implications for Practice***

The major emphasis of the implications for practice is the need to increase the awareness of the DCCE initiative and the effective planning of opportunities afforded by

the DCCE program; in other words, there is a great need for a targeted communication plan for all DCCE programs that is part of a well-designed program delivery system.

The first implication for practice is the need to put a greater emphasis and urgency in drawing the parents (and more specifically the mothers) into the academic planning process for the students and arming the families with the resources they need to make informed decisions about their students' future. The research findings indicated that the CC material had little to no influence on the students' academic goals or in helping raise the students' awareness of the DCCE opportunities. Promotional material will always be needed and can be very valuable; however, this study indicates educational institutions need to take a seriously critical look at how they are developing the material and how they determine what information the promotional materials contain. Input from the parents and the students needs to be acquired to ascertain what they would like to see or need in the promotional material to help them be more aware of students' educational options. When a specific parent was mentioned in the research it was often the mother; therefore, strategies that seek and incorporate the students' mother's input should prove to be very valuable.

The second implication for practice is the need to develop and implement strategies that reach out to the population of students that would benefit the most from the DCCE opportunities. These strategies should focus heavily on raising the level of understanding and awareness of the DCCE initiative of first-generation college going students and their parents. At the same time, these strategies should be developed so that all ethnic groups within the LEA's service area are well-informed of the benefits and

administrative procedures of the DCCE program. These strategies should incorporate a host of opportunities for the various groups to interact with the participating educational institutions in a convenient and non-intimidating environment, such as a local boys club or a faith-based community location. This environment should welcome inquisitive parents and instill in the families a sense of confidence in working with the educational institutions within their community. This would translate into a better sense of confidence in dealing with institutions of higher learning outside of their communities.

The final two implications for practice have to do with the actual planning and DCCE course selection of the students who do choose to participate in the DCCE program. The first practice needed is for the education institutions to develop strategies that will cause a majority of the students to start seriously developing their college goals either prior to high school or within their freshman year in high school. The findings indicate that, overall, the respondents did not start seriously developing their academic and college goals until sometime in their sophomore or even junior year of high school. Since the Huskins dual credit program in North Carolina allows freshman to participate in these DCCE courses, if the students haven't begun developing their academic or college goals, the students could potentially miss out on one or two full years of DCCE opportunities. These one or two years of DCCE participation could have dramatic ramifications in helping the students realize savings in both finances and time due to shortened time to college degree completion. If students don't have their college goals developed prior to taking DCCE courses, it could cause the students to earn college credits that they will never use once they matriculate to an institution of higher learning

and this represents lost opportunities in both time and money. Therefore, ensuring earlier college planning should be a priority goal.

The final practice implication is related to and facilitated by the previously discussed early start in college planning for the students and this practice implication involves providing the students more effective DCCE course advising. It is imperative that the students will have developed their college goals prior to participating in the DCCE opportunities in order for the students to optimize the financial benefits associated with the DCCE program by taking the right courses. If the students have developed their college goals prior to participating in the DCCE initiative, then it is the educational institution's responsibility to provide the students effective and timely course advising so that the DCCE courses the students take correlate directly with and earn credit toward the students' college goals. Without this use of effective and timely advising for the students, this research study indicated it is highly likely that students will take at least some courses unrelated with their ultimate college goals. Considering the fact that many of the Huskins agreements in North Carolina stipulate that the LEA will cover the cost of the textbooks in the Huskins classes, any course that a student takes that cannot be used when they matriculate to a college has the potential of costing the students in unrealized lost financial benefits. In those instances that the LEA pays the cost of the textbooks and since the DCCE courses are tuition-waived, the unrealized financial benefit of just one three credit hour course including textbook fees could be in the range of \$200 to \$250 per course. Some LEAs also cover the cost of student fees for the DCCE participants and that cost could easily add an extra \$10 to \$100 to the unrealized financial benefits - all

depending on the DCCE courses that the student chooses to take. The findings indicated that a major motivation for the students to take DCCE course was for the financial benefits; however, if the students take DCCE courses that do not coincide with their ultimate college goals, the lost financial benefits could add up very quickly.

### **Recommendations for Further Research**

High school reform is an initiative that has been in the spot light of late and the DCCE program is in the midst of the dialog surrounding high school reform; therefore, it is imperative that this initiative undergo a much higher level of scrutiny and study. Although the findings of this research study may not be generalized to a larger population, the questions asked in the study and other related questions need to be explored in more detail and on a larger scale.

The first area requiring further research is to determine with more certainty exactly who is taking advantage of the DCCE opportunities. Are a majority of the current participants those students who would have matriculated into an institution of higher learning even without their DCCE course credits or is the DCCE program being taken advantage of by the students that truly need this experience for financial reasons and to gain the needed confidence to remain in school and matriculate to college? Also of interest is what kinds of DCCE courses of study are often taken. Are the students taking DCCE courses in the college transfer area or are they taking courses in technical programs of study? Which area is more dominant in course offerings, college transfer or technical programs, and which of the major areas has the most success with the students in terms of grade point average, program retention, high school to college matriculation,

and college goals completion? Other questions of interest might include what is the ethnic and gender breakdown of the DCCE participants and what is their success rate in terms of grade point average, program retention, high school to college matriculation, and college goals completion. Lines of questions should seek to determine if adequate efforts and strategies are being made to insure that minority student populations such as African-American males are being given their due attention. Efforts like the Minority Male Mentoring initiative in North Carolina is a prime example of a state-level effort to address the needs of an identified group of students needing specialized and focused attention. Another enrollment question would include what secondary school groups, public, private, or home schooled, are taking the fullest advantage of the DCCE program and what is their success rate in terms of grade point average, program retention, high school to college matriculation, and college goals completion. Studies should also be designed to determine if the DCCE initiatives have any impact on reducing the number of students who are dropping out of high school.

Another major area of further research relates to the effective and equitable administration of the DCCE program. Studies should focus on finding out how the DCCE program is being marketed and to whom and what advising strategies have the administrators of the DCCE programs implemented to make sure that the participating students are getting the maximum benefits of the DCCE opportunity. Studies should also look at the possible obstacles that could hinder students from participating in the DCCE opportunities, which would include geography concerns such as courses being offered in remote locations or lack of transportation to where the DCCE courses are being offered.

Another question to ask is are students kept from taking DCCE courses because they are academically ill prepared and how students are faring with the college placement test. Although most DCCE programs are tuition-waived, if the LEAs do not cover the costs of textbooks and student fees, this potential financial obligation may have a negative impact on student participation. Other research studies should also look at the ratio of credits earned through the DCCE programs to the credits the students actually used once they matriculated into college. Further research should also ascertain if the DCCE courses are being respected by the four year institutions within the state and if the courses are truly transferable.

### **Conclusion**

Although the findings of this research study cannot be generalized to the larger populations of students who have participated in DCCE programs, the findings do raise several salient points that need to be considered by educational administrators of DCCE initiatives.

The findings clearly indicate that the students' parents are pivotal in the postsecondary decisions that students make and it appears that the parents do view the DCCE program as a benefit for their students. This view emerged in spite of the fact that the findings of the study revealed that the parents may not be completely aware of all of the nuances of the DCCE initiative. If the DCCE programs are to reach the intended population of students it is targeting, then the educational administrators of the DCCE programs will have to develop strategies to raise the parents' level of awareness and

understanding of the DCCE opportunities and procedures and better tap into this powerful sphere of influence.

DCCE program educational administrators will also need to take a comprehensive look at the middle and high school students' college planning processes and work to set school system goals that encourage all students to earn some college credit before they graduate high school. This will need to be balanced with an effective and timely college advising strategy to make sure that the credits that students earn can be tied directly to their predetermined college goals.

The DCCE program can have a very positive impact on high school reform; however, it will require deliberate attention and increased funding to make sure it operates at its most effective and beneficial potential.



## BIBLIOGRAPHY

- AEL. (2002). *High schools on college campuses*. Charleston, WV: Author.
- Adelman, C. (2002). The relationship between urbanicity and educational outcomes. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 35-63). New York: SUNY Press.
- Alvarado, B., & Peebles-Wilkins, W. (2003). Social work in early college high schools? *Children & Schools, 25*(3), 131-134.
- Andrews, H. A. (2001). *The dual-credit phenomenon!: Challenging secondary school students across 50 states* (1<sup>st</sup> ed.). Stillwater, OK: New Forums Press.
- Andrews, H. A. (2000). Lessons learned from current state and national dual-credit programs. *New Directions for Community Colleges, 111*, 31-39.
- Andrews, H. A., & Marshall, R. P. (1991). Challenging high school honor students with community college courses. *Community College Review, 19*(1), 47-51.
- Auerbach, S. (2002). *Exposing the rules of the game of college access: Making privileged information accessible in a family outreach program*. Paper presented at the annual meeting of the Sociology of Education Association, Asilomar, CA.
- Bader, G. E., & Rossi, C. A. (2002). *Focus groups: A step-by-step guide* (3<sup>rd</sup> ed.). San Diego, CA: The Bader Group.
- Bailey, T., & Karp, M. M. (2005). Expanding the reach of dual-enrollment programs. *Community College Journal, 75*(3), 9-11.

- Bazron, B., Osher, D., & Fleischman, S. (2005). Creating culturally responsive schools. *Educational Leadership*, 63(1), 83-84.
- Bennett, T., & Savage, M. (2004). Introduction: Cultural capital and cultural policy. *Cultural Trends*, 13(2), 7-14.
- Blair, J. (1999). More teens blending high school, college. *Education Week*, 18(31), 14-15.
- Bonous-Hammarth, M., & Allen, W. R. (2005). A dream deferred: The critical factor of timing in college preparation and outreach. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 155-172). New York: SUNY Press.
- Born, T. (2006). Middle and early college high schools – Providing multilevel support and accelerated learning. *New Directions for Community Colleges*, 135, 49-58.
- Borsuk, C. & Vest, B. (2002). Reaching higher: Secondary interventions. *Leadership*, 32(2), 16-18.
- Boswell, K. (2001). State policy and postsecondary enrollment options: Creating seamless systems. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 7-14). San Francisco: Jossey-Bass.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). Westport, CT: Greenwood Press.

- Bourdieu, P., & Passeron, J. (2000). *Reproduction in education, society and culture*, (2<sup>nd</sup> ed.), Thousand Oaks, CA: Sage
- Bragg, D., Rasch, E., & Orr, M.T. (forthcoming). *Re-connecting community colleges and high schools: Examining the growth and potential of dual credit*. New York: Community College Research Center, Teachers College, Columbia University.
- Brendtro, L. K., Brokenleg, M., & Van Bockern, S. (1990). *Reclaiming youth at risk: Our hope for the future*, (2<sup>nd</sup> ed.), Bloomington, IN: National Educational Services
- Bueschel, A. C. (2004). The missing link: The role of community colleges in the transition between high school and college. In M. W. Kirst, & A. Venezia (Eds.), *From high school to college: Improving opportunities for success in postsecondary education* (pp. 252-284). San Francisco: Jossey-Bass.
- Burns, H., & Lewis, B. (2000). Dual-enrolled students' perception of the effect of classroom environment on educational experience. *The Qualitative Report*, 4(1), Retrieved February 12, 2002, from <http://www.nova.edu/ssw/QR/QR4-1/burns.html>.
- Catron, R. K. (2001). Dual enrollment in Virginia. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 51-59). San Francisco: Jossey-Bass.
- Cavanagh, S. (2003). Study: Teens' unfamiliarity with college demands is seed of failure. *Education week*, 22(26), 6.
- Chapman, B. G. (2001). A model for implementing a concurrent enrollment program. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering*

- concurrent enrollment at high schools and community colleges* (pp.15-22). San Francisco: Jossey-Bass.
- Chatman, S., & Smith, K. (1998). Dual-credit preparation for further study in foreign languages. *NASSP Bulletin*, 82(597), 99-107.
- Colgan, C. (2002). No magic number. *Principal Leadership*, 2(9), 18-22.
- Collier-Thomas, B. (2004). Sister laborers: African American women, cultural capital, and educational philanthropy, 1865-1970. In V. P. Franklin & C. J. Savage (Eds.), *Cultural capital and black education: African American communities and the funding of black schooling, 1865 to the present* (pp. 97-115). Greenwich, CT: Information Age Publishing.
- Collins, J. (1999). The culture wars and shifts in linguistic capital: For combining political economy and cultural analysis. *Qualitative Studies in Education*, 12(3), 269-286.
- Conley, D. T. (2002). Preparing student for life after high school. *Educational Leadership*, 59(7), 60-63.
- Conley, D. T. (2005). *College knowledge: What it really takes for students to succeed and what we can do to get them ready*, (1<sup>st</sup> ed.), San Francisco, CA: Jossey-Bass
- Corwin, Z. B., Colyar, J. E., & Tierney, W. G. (2005). Introduction: Engaging research and practice – extracurricular and curricular influences on college access. In W. G. Tierney, Z. B. Corwin, & J. E. Colyar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 1-9). New York: SUNY Press.

- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*, (2<sup>nd</sup> ed.), Thousand Oaks, CA: Sage
- Crockett, L., Losoff, M., & Petersen, A. C. (1984). Perceptions of the peer group and friendship in early adolescence. *Journal of Early Adolescence*, 4, 155-181.
- Cunningham, C. L. & Wagonlander, C. S. (2000). Establishing and sustaining a Middle College high school. *New Directions for Community Colleges*, (111), 41-51.
- Delgado-Gaitan, C. (1992). School matters in the Mexican-American home: Socializing children to education. *American Educational Research Journal*, 29(3), 495-513.
- Delicath, T. A. (1999). The influence of dual credit programs on college students' integration and goal attainment. *Journal of College Student Retention*, 1(4), 377-398.
- Dumais, S. A. (2002). Cultural capital, gender, and school success: The role of habitus. *Sociology of Education*, 75(1), 44-68.
- Edmunds, H. (1999). *The focus group research handbook*, (1<sup>st</sup> ed.), Chicago: NTC/Contemporary Publishing Group, Inc.
- Evelyn, J. (2003). California governor orders audit of dual-enrollment courses. *The Chronicle of Higher Education*, 49(26), A26.
- Fallon, M. (1997). The school counselor's role in first generation students' college plans. *School Counselor*, 44, 384-394.
- Farkas, G. (1996). *Human capital or cultural capital?: Ethnicity and poverty groups in an urban school district*, (1<sup>st</sup> ed.), New York: Aldine de Gruyter.

- Finch, P. (1997). *Fall 1997 intervention assessment: The status of concurrent/dual enrollment*. Phoenix, AZ: Phoenix Think Tank.
- Fincher-Ford, M. (1997). *High school students earning college credit: A guide to creating dual-credit programs*, (1<sup>st</sup> ed.), Thousand Oaks, CA: Corwin Press.
- Finken, D. A. (2003). Double duty: Growing numbers of high-school students are enrolling in college while they're still in high school. *Community College Week*, 16(4), 6-8.
- Fowler, F. J. (2002). *Survey Research Methods*, (3<sup>rd</sup> ed.), Thousand Oaks, CA: Sage Publications.
- Franklin, V. P. (2002). Introduction: Cultural capital and African American education. *The Journal of African American History*, 87, 175-181.
- Franklin, V. P. (2004). Cultural capital and black higher education: The AME colleges and universities as collective economic enterprises, 1865-1910. In V. P. Franklin & C. J. Savage (Eds.), *Cultural capital and black education: African American communities and the funding of black schooling, 1865 to the present* (pp. 35-47). Greenwich, CT: Information Age Publishing.
- Franklin, V. P. (2004). Social capital, cultural capital, and the challenge of African American education in the 21<sup>st</sup> century. In V. P. Franklin & C. J. Savage (Eds.), *Cultural capital and black education: African American communities and the funding of black schooling, 1865 to the present* (pp. 159-171). Greenwich, CT: Information Age Publishing.
- Freeman, K. (2005). *African Americans and college choice*, (1<sup>st</sup> ed.), New York: SUNY

Press.

- Gandara, P. (2002). Meeting common goals: Linking K-12 and college interventions. In W. G. Tierney, & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 81-103). New York: SUNY Press.
- Gandara, P. & Mejorado, M. (2005). Putting your money where your mouth is: Mentoring as a strategy to increase access to higher education. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 89-110). New York: SUNY Press.
- Gehring, J. (2001a). Dual-enrollment programs spreading. *Education Week*, 20(32), 17-18.
- Gehring, J. (2001b). High school, with a college twist. *Education Week*, pp. 36-42.
- Gill, P. B. (2004). Community, commitment, and African American education: The Jackson school of Smith county, Texas, 1925-1954. In V. P. Franklin & C. J. Savage (Eds.), *Cultural capital and black education: African American communities and the funding of black schooling, 1865 to the present* (pp. 81-96). Greenwich, CT: Information Age Publishing.
- Girardi, A. G. & Stein, R. B. (2001). State dual credit policy and its implications for community colleges: Lessons from Missouri for the 21<sup>st</sup> century. In B. K. Townsend & S. B. Twombly (Eds.), *Community colleges: Policy in the future context* (pp. 149-172). Westport, CT: Ablex Publishing.
- Glazer, N. (1992). The real world of urban education. *Public Interest*, 106, 57-75.

- Greenberg, A.R. (1988). High school students in college courses: Three programs. In J.E. Lieberman, (Ed.), *Collaborating with high schools. New directions for community colleges*, 63, 69-84. San Francisco: Jossey-Bass.
- Hagedorn, L. S. & Fogel, S. (2002). Making school to college programs work. In W. G. Tierney, & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 169-193). New York: SUNY Press.
- Hagedorn, L. S. & Tierney, W. G. (2002). Introduction: Cultural capital and the struggle for educational equity. In W. G. Tierney, & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 1-11). New York: SUNY Press.
- Hallinan, M. T. (1997). Structural effects on children's friendship cliques. *Social Psychology*, 42, 43-54.
- Harry, B., Klingner, J. K., & Hart, J. (2005). African American families under fire: Ethnographic views of family strengths. *Remedial and Special Education*, 26(2), 101-112.
- Hebert, L. (2001). A comparison of learning outcomes for dual-enrollment mathematics students taught by high school teachers versus college faculty. *Community College Review*, 29(3), 22-38.
- Helfgot, S. R. (2001). Concurrent enrollment and more: Elements of a successful partnership. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 43-50). San Francisco: Jossey-Bass.



- Hoffman, N. (2003). College credit in high school. *Change*, 35(4), 43-48
- Hoffman, N. (2004). Challenging, not remediation: The early college high school initiative. In R. Kazis, J. Vargas, & N. Hoffman (Eds.), *Double the numbers: Increasing postsecondary credentials for underrepresented youth* (pp. 213-220). Cambridge, MA: Harvard Education Press.
- Hoffman, N. & Vargas, J. (2007). The college gap: Why integrating high school with higher education makes sense – And how to do it. *Education Week*, 27(7), A26.
- Hudson Valley Community College (1998). *College in the high school evaluation report*. Troy, NY: Author.
- Hugo, E. S. (2001). Dual enrollment for underrepresented student populations. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 67-72). San Francisco: Jossey-Bass.
- Huntley, H. J. & Schuh, J. H. (2002). Post-secondary enrollment: A new frontier in recruitment and retention. *Journal of College Student Retention*, 4(2), 83-94.
- Hursh, D. (2003). Imagining the future: Growing up working class; teaching in the university. *Educational Foundations*, 17(3), 55-68.
- Jacobson, J. (2005). 'The Early college experiment: High-school programs that offer low-income students personal instruction and postsecondary degrees are rife with good intentions and challenges'. *Chronicle of Higher Education*, 51(27). A36-A38.

- Jaeger, R. M. (1997). Survey research methods in education. In R. M. Jaegers (Ed.), *Complementary methods for research in education* (449-520). Washington, DC: American Educational Research Association.
- Johnson County Community College, Office of Institutional Research (2002). *Follow-up study of former College Now students—class of 2000 and class of 2001*. Overland Park, KS: Retrieved from <http://www.jccc.net/home/depts.php/6111/site/reprtlst> on November 24, 2005.
- Johnson County Community College, Office of Institutional Research (2005). *Survey of current College NOW students – spring 2005*. Overland Park, KS: Retrieved from [http://www.jccc.net/home/download/10156/2005\\_Colege\\_NOW\\_Report.pdf](http://www.jccc.net/home/download/10156/2005_Colege_NOW_Report.pdf), on November 24, 2005.
- Johnstone, D.B. & Del Genio, B. (2001). *College-level learning in high school: Purposes, policies, and implications*. Washington, DC: Association of American Colleges and Universities.
- Jordon, T. C. (2001). Dual enrollment options: Columbus state community college model for successful implementation. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 73-80). San Francisco: Jossey-Bass.
- Jordan, W. J., Cavalluzzo, L., & Corallo, C, (2006). Community college and high school reform: Lessons from five case studies. *Community College Journal of Research and Practice*, 30, 729-749.

- Joyce, M. (2001). High school students get ahead in college. *Community College Week*, 13(2), 15.
- Kass, J. (1998). Going to college to get a high school diploma. *Community College Week*, 10(13), 10.
- Kiger, D. M., & Johnson, J. A. (1997). Marketing the perceptions of a community college's postsecondary enrollment options program. *Community College Journal of Research and Practices*, 21(8), 687-693.
- Kirst, M. W., Venezia, A., & Antonio, A. L. (2004). What have we learned and where do we go next?. In M. W. Kirst, & A. Venezia (Eds.), *From high school to college: Improving opportunities for success in postsecondary education* (pp. 285-319). San Francisco: Jossey-Bass.
- Kisker, C. B. (2006). Integrating high school and the community college: Previous efforts and current possibilities. *Community College Review*, 34(1), 68-86.
- Kleiman, N.S. (2001, June). *Building a highway to higher ed: How collaborative efforts are changing education in America*. New York: The Center for an Urban Future.
- Kleiner, B., & Lewis, L. (2005). *Dual enrollment of high school students at postsecondary institutions: 2002-03* (NCES 2005-008). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Kraus, I. (1964). Sources of educational aspirations among working-class youth. *American Sociological Review*, 29(6), 867-879.
- Krueger, R. A., & Casey, A. C. (2000). *Focus groups: A practical guide for applied research* (3<sup>rd</sup> ed.). Thousand Oaks: Sage Publications, Inc.

- Lamont, M., & Lareau, A. (1988). Cultural capital: Allusions, gaps, and glissandos in recent theoretical developments. *Sociological Theory*, 6, 1153-168.
- Lawton, M. (1996). Carson city school vote puts middle-college idea on the line. *Education Week*, 16(8), 1-2.
- Lee, J., & Bowen, N. K. (2006). Parents involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal*, 43(2), 193-218.
- Lieberman, J. E. (1994). 'Today's teenagers are tomorrow's college students'. *Education Week*, 13(29), 23.
- Lieberman, J. E. (1998). Creating structural change: Best practices. *New directions for Community Colleges*, (103), 13-19.
- Lords, E. (2000). New efforts at community colleges focus on underachieving teens. *The Chronicle of Higher Education*, 46(43), A45-A46.
- Marshall, R. P., & Andrews, H. A. (2002). Dual-credit outcomes: A second visit. *Community College Journal of Research and Practice*, 26(3), 237-242.
- Marszalek, J., Zhu, R., Loeb, J. W., Bragg, D. D., & Brooks-Laraviere, M. (n.d.). *Career and technical education transition programs: Effects of dual credit participation readiness, retention, graduation, and time to degree*. Champion, IL: University of Illinois at Urbana-Champaign, Office of Community College Research and Leadership. Retrieved November 1, 2005 from <http://occr1.ed.uiuc.edu/Publications/papers/indew.asp>.

- McCarthy, C. R. (1999). 'Dual-enrollment programs: Legislation helps high school students enroll in college courses'. *Journal of Secondary Gifted Education, 11*(1). 24-32.
- McClafferty, K. A., McDonough, P., & Fann, A. (2001). *Parent involvement in the college planning process*. Paper presented at the annual conference of the Association for the Study of Higher Education, Richmond, VA.
- McDonough, P. (1997). *Choosing colleges: How social class and schools structure opportunity* Albany: SUNY Press.
- McDonough, P. M. (2005). Counseling matters: Knowledge, assistance, and organizational commitment in college preparation. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 69-87). New York: SUNY Press.
- Mehan, H., Villanueva, I., Hubbard, L., & Lintz, A. (1996). *Constructing school success: The consequences of untracking low-achieving students*. New York: Cambridge University Press.
- Melican, C., Debebe, F., & Morgan, R. (1997). Comparing AP and college student learning of economics. *The Journal of Economic Education, 28*, 135-42.
- Monroe Community College (2003). *Dual credit tracking*. Rochester, NY: Monroe Community College, Office of Institutional Research.
- Nathan, L. & Myatt, L. (1998). A journey toward autonomy. *Phi Delta Kappan, 80*(4), 278.

- Nora, A. (2002). A theoretical and practical view of student adjustment and academic achievement. In W. G. Tierney, & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 65-77). New York: SUNY Press.
- Oakes, J., Rogers, J., Lipton, M., & Morrell. (2002). The social construction of college access: Confronting the technical, cultural, and political barriers to low-income students of color. In W. G. Tierney, & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 105-121). New York: SUNY Press.
- Orr, M. T. (1998). Integrating secondary schools and community colleges through school-to-work transition and educational reform. *Journal of Vocational Education Research*, 23(2), 93-113.
- Patiniotis, J., & Holdsworth, C. (2005). 'Seize that chance!' leaving home and transitions to higher education. *Journal of Youth Studies*, 8(1), 81-95.
- Peebles-Wilkins, W. (2003). Changing times. *Children & Schools*, 25(1), 3-4.
- Perna, L. W. (2005). The key to college access: Rigorous academic preparation. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 113-134). New York: SUNY Press.
- Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *The Journal of Higher Education*, 76(5), 485-518.

- Peterson, M. K., Anjewierden, J., & Corser, C. (2001). Designing an effective concurrent enrollment program: A focus on quality of instruction and student outcomes. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 23-32). San Francisco: Jossey-Bass.
- Piaget, J. (1991). Advances in child and adolescent psychology. In P. Light, S. Sheldon & M. Woodhead (Eds.), *Learning to think: Child development in social context* Vol. 2, (pp. 5-15). New York: Routledge.
- Plank, S. B., McDill, E. L., McPartland, J. M., & Jordan, W. J. (2001). Situation and repertoire: Civility, incivility, cursing, and politeness in an urban high school. *Teachers College Record*, 103(3), 504-524.
- Puyear, D. E., Thor, L. M., & Mills, K. L. (2001). Concurrent enrollment in Arizona: Encouraging success in high school. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 33-42). San Francisco: Jossey-Bass.
- Randolph, A. W. (2002). Building upon cultural capital: Thomas Jefferson Ferguson and the Albany enterprise academy in Southeast Ohio, 1863-1886. *The Journal of African American History*, 87, 182-195.
- Reay, D. (1999). Linguistic capital and home-school relationships: Mothers' interactions with their children's primary school teachers. *ACTA Sociologica*, 42(2), 159-168.
- Reay, D. (2004). Education and cultural capital: The implications of changing trends in education policies. *Cultural Trends*, 13(2), 73-86.

- Reisberg, L. (1998). Some professors question programs that allow high-school students to earn college credits. *Chronicle of Higher Education*, 44(42), A39-40.
- Robertson, P. F. (2005). Dual enrollment: Spanning the border between high school and college and reshaping the landscape of public education. *Education Week*, 24(48), 48.
- Robertson, P. F., Chapman, B. G., & Gaskin, F. (Eds.). (2001). *Systems for offering concurrent enrollment at high schools and community colleges*, San Francisco: Jossey-Bass
- Robbins, D. (2005). The origins, early development and status of Bourdieu's concept of 'cultural capital.' *The British Journal of Sociology*, 56(1), 13-30.
- Romanowski, M. H. (2003). Meeting the unique needs of the children of migrant farm workers. *Clearing House*, 77(1), 27-33.
- Roscigno, V. J., & Ainsworth-Darnell, J. W. (1999). Race, cultural capital, and educational resources: Persistent inequalities and achievement returns. *Sociology of Education*, 72(3), 158-178.
- Rudestam, K. E. & Newton, R. R. (2001). *Surviving your dissertation: A comprehensive guide to content and process* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey* (1<sup>st</sup> ed.). New York: John Wiley & Sons, Inc.
- Savage, C. J. (2002). Cultural capital and African American agency: The economic struggle for effective education for African Americans in Franklin, Tennessee, 1890-1967. *The Journal of African American History*, 87, 206-235.



- Schleicher, L. (2003). Educated by design. *Principal Leadership*, 3(7), 45-47.
- Schmerler, G. (2002). One man's continuing war against recentralization: A long struggle for school autonomy. *Phi Delta Kappan*, 83(5), 370-374
- Smith, S., & Wright, S. W. (1999). South Carolina prepares to open its first 'Middle College.' *Community College Week*, 11(16), 11-12.
- Span, C. M. (2002). "I must learn now or not at all": Social and cultural capital in the educational initiatives of formerly enslaved African Americans in Mississippi, 1862-1869. *The Journal of African American History*, 87, 196-205.
- Spurling, S., & Gabriner, R. (2002). *The effects of concurrent enrollment programs upon student success at City College of San Francisco: Findings*, City College of San Francisco, CA. Office of Institutional Development, Research, and Planning. ERIC Document ED 470 634.
- Swail, W. S., & Perna, L. W. (2002). Pre-college outreach programs: A national perspective. In W. G. Tierney & L. S. Hagedorn (Eds.), *Increasing access to college: Extending possibilities for all students* (pp. 15-34). New York: SUNY Press.
- Swartz, D. (1997). *Culture & power: The sociology of Pierre Bourdieu* (1<sup>st</sup> ed.). Chicago: University of Chicago Press.
- Tierney, W. G., & Auerbach, S. (2005). Toward developing an untapped resource: The role of families in college preparation. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 29-48). New York: SUNY Press.

- Tierney, W. G., & Coylar, J. (2005). The role of peer groups in college preparation programs. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 49-68). New York: SUNY Press.
- Tornatsky, L., Cutler, R., & Lee, J. (2002). College knowledge: What Latino parents need to know and why. Claremont, CA: Tomas Rivera Policy Institute.
- University of Arizona. (1999). Community college and AP credit: An analysis of the impact on Freshman grades. Tucson, AZ: Author.
- Urbaniak, G. O., Plous, S., & Lestik, M. (2003). [Online]. Retrieved August 8, 2007, from <http://www.randomizer.org/form.htm>.
- Villalpando, O., & Solorzano, D. G. (2005). The role of culture in college preparation programs: A review of the research literature. In W. G. Tierney, Z. B. Corwin, & J. E. Coylar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 13-28). New York: SUNY Press.
- Vogt, W. P. (1999). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences* (2<sup>nd</sup> ed.). Thousand Oaks: SAGE Publications.
- Watkins, W. H. (2001). *The white architects of black education: Ideology and power in America, 1865-1954* (1<sup>st</sup> ed.). New York: Teachers College Press.
- Watson, L. (1993). Working with schools to ease student transition to the community college. *New directions for Community Colleges*, 82, 53-58.
- Watts, T., Setzer, J. C., & Lewis, L. (2005). *Dual Credit and Exam-Based Courses in U. S. Public High Schools: 2002-03* (NCES 2005-009). U. S. Department of Education. Washington, DC: National Center for Education Statistics.

- Welsh, J. F., Brake, N., & Choi, N. (2005). Student participation and performance in dual-credit courses in a reform environment. *Community College Journal of Research and Practice*, 29(3), 199-213.
- White, M. A. (2002). Paradise lost? Teachers' perspectives on the use of cultural capital in the segregated schools of New Orleans, Louisiana. *Journal of African American History*, 87, 269-281.
- Windham, P. (1997). *High school and community college dual enrollment: Issues of rigor and transferability*. Tallahassee, FL: Florida State Board of Community Colleges. ERIC Document ED 413 936.
- Wolcott, N. M. (2001). New world school of the arts: Creativity across the curriculum. In P. F. Robertson, B. G. Chapman, & F. Gaskin (Eds.), *Systems for offering concurrent enrollment at high schools and community colleges* (pp. 59-66). San Francisco: Jossey-Bass.
- Yachnin, J. (2000). Education dept. to study high-school senior year. *Chronicle of Higher Learning*, 47(4), A35.
- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity, and Education*, 8(1), 69-91.

**Appendix A**  
**Individual Student Questionnaire**



7. Using the list provided below, how did you learn of the dual credit-concurrent enrollment program? If more than one answer applies, please rank them according to the most influential.

<b>Focus Group Responses</b>	<b>Most Influential</b>	<b>Very Influential</b>	<b>Influential</b>	<b>Hardly Influential</b>	<b>Not Influential</b>
Parents					
Friends					
High School Teachers					
High School Counselors					
College Representative					
College Promotional Material					
Other:					

8. What grade were you in when you seriously started to develop and plan for your college goals? ***Please mark only one grade level.***

7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade

9. What or who influenced you to plan for your college goals?

	<b>Most Influential</b>	<b>Very Influential</b>	<b>Influential</b>	<b>Hardly Influential</b>	<b>Not Influential</b>
Student Advisors (ex: high school teachers)					
Friends					
Parents					
Middle and High School Counselors					
High School Course of Study					
Community College Personnel					
Community College Material					
College Course of Study					
Other:					

10. Using the list provide below please indicate which two things were the most influential factors in helping you determine your college goals or write in your most influential factors. Please indicate why you chose these two things.

Focus Group Responses	<input checked="" type="checkbox"/>	Why:
A parent's past college difficulties.	<input type="checkbox"/>	
A parent's past hardships in life.	<input type="checkbox"/>	
A brother/sister's lack of college experience.	<input type="checkbox"/>	
A brother/sister's past college difficulties.	<input type="checkbox"/>	
Proximity of college to home.	<input type="checkbox"/>	
Professional goals.	<input type="checkbox"/>	
Ability to take college courses in high school.	<input type="checkbox"/>	
Because the tuition was waived.	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	

11. Using the list provided below please indicate the two most important reasons why you selected the dual credit-concurrent enrollment courses you chose or write in your influential reasons in the space(s) marked "other". Please indicate why you identified these two reasons.

Focus Group Responses	<input checked="" type="checkbox"/>	Why:
Courses met associate degree requirements.	<input type="checkbox"/>	
Courses met bachelor degree requirements.	<input type="checkbox"/>	
Courses met personal interests.	<input type="checkbox"/>	
Courses matched up with high school courses.	<input type="checkbox"/>	
Take advantage of the tuition waived opportunity.	<input type="checkbox"/>	
Wanted something beyond the high school experience.	<input type="checkbox"/>	
Because my friends signed up for the courses.	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	

12. In your opinion, what level of understanding did the following groups have about the dual credit-concurrent enrollment initiative?

	Very High Level of Understanding	High Level of Understanding	Low Level of Understanding	Very Low Level of Understanding	No Understanding
Student Advisors (ex: high school teachers)					
Friends					
Parents					
Middle and High School Counselors					
Community College Personnel					

13. In your opinion, how well did the following groups make the connections between your college goals and the overall dual credit-concurrent enrollment initiative?

	Very High Connections	High Connections	Low Connections	Very Low Connections	No Connections
Student Advisors (ex: high school teachers)					
Friends					
Parents					
Middle and High School Counselors					
Community College Personnel					



14. Using the list provide below and knowing what you know today, please indicate what you would have done differently concerning your participation in the dual credit-concurrent enrollment initiative or write in your response if it is not listed below. Please indicate why you do these things differently.

Focus Group Responses	<input checked="" type="checkbox"/>	Why:
I would have taken more college courses.	<input type="checkbox"/>	
I would have started taking college courses earlier in high school.	<input type="checkbox"/>	
I would have better planned the college courses I took with my ultimate college goals.	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	
Other:	<input type="checkbox"/>	

15. In retrospect, please indicate how each of the following groups could have done things differently to help you make better use of your dual credit-concurrent enrollment experience?

Student Advisors (ex: high school teachers)	
Friends	
Parents	
Middle and High School Counselors	
Community College Personnel	

**Appendix B**

**NCCCS Annualized Curriculum and Continuing Education Full-Time Equivalent**

**(ANNTBL26) Report**

**North Carolina Community College System  
Course/FTE Information  
Annualized Curriculum and Continuing Education Full-Time Equivalent (FTE)**

ANNTBL26

Report Period: 2005-2006

Last Refresh on: 7/7/2006

College	Curriculum Programs (Fall & Spring)					Continuing Education Programs (Spring, Summer & Fall)										SUBTOTAL BUDGET	TOTAL					
	Associate	Certificate	Diploma	Transfers	TOTAL	Basic Skills	Occ No	SUBTOTAL BUDGET	Continuing Education Programs (Spring, Summer & Fall)	Continuing Education Programs (Spring, Summer & Fall)	Continuing Education Programs (Spring, Summer & Fall)	Continuing Education Programs (Spring, Summer & Fall)	Continuing Education Programs (Spring, Summer & Fall)	Continuing Education Programs (Spring, Summer & Fall)	Continuing Education Programs (Spring, Summer & Fall)			Continuing Education Programs (Spring, Summer & Fall)				
Alamance CC	2,273	178	324	343	3,118	312	263	605	65	2	0	0	0	0	8	21	10	5	56	3,623	3,623	
Albemarle-Burke CC	2,695	164	287	1,218	4,323	373	652	1,025	53	3	0	0	0	0	34	58	35	5	178	5,008	5,008	
Beaufort County CC	832	38	186	79	1,211	268	201	467	34	1	-5	0	0	0	8	21	2	2	65	1,732	1,732	
Bladen CC	826	35	100	96	1,159	72	202	273	5	1	0	0	0	0	5	3	0	1	16	1,477	1,477	
Blue Ridge CC	1,001	179	111	289	1,581	105	504	692	1	4	0	0	0	0	34	130	14	1	174	2,394	2,394	
Brunswick CC	524	78	178	0	841	215	227	442	0	1	0	0	0	0	6	37	4	1	48	1,201	1,201	
Caldwell CC & TI	1,848	230	579	277	2,832	367	498	765	17	4	0	0	0	0	17	58	10	11	82	3,799	3,799	
Cape Fear CC	4,520	597	393	241	5,952	412	604	1,016	35	4	-5	0	0	0	100	23	28	3	234	6,642	6,642	
Carteret CC	691	74	128	92	1,227	120	247	367	7	1	0	0	0	0	7	15	8	36	1,631	1,631		
Catawba Valley CC	2,872	228	202	388	3,691	364	427	791	32	5	0	0	0	0	25	38	73	3	173	4,005	4,005	
Central Carolina CC	2,094	511	519	435	3,559	813	521	1,434	41	3	0	0	0	0	28	6	25	0	89	5,081	5,081	
Central Piedmont CC	6,787	174	281	3,179	10,322	863	983	1,828	1	1	0	0	0	0	157	69	315	0	674	12,732	12,732	
Cleveland CC	1,427	138	385	390	2,341	168	207	425	16	1	0	0	0	0	12	13	3	1	48	2,813	2,813	
Coastal Carolina CC	2,568	107	207	155	3,147	238	777	1,016	33	1	0	0	0	0	2	40	8	7	92	4,205	4,205	
College of The Albemarle	1,165	95	185	183	1,627	276	214	490	0	2	0	0	0	0	5	31	1	11	50	2,119	2,119	
Concord CC	1,722	60	124	184	2,090	210	332	542	35	4	0	0	0	0	40	30	1	2	111	2,744	2,744	
D Davidson County CC	1,612	268	275	298	2,343	416	520	936	0	5	0	0	0	0	1	19	10	3	36	3,319	3,319	
Durham CC	2,306	105	148	784	3,323	444	715	1,159	0	5	0	0	0	0	18	77	20	0	80	4,574	4,574	
Edgecombe CC	1,317	18	210	231	1,776	113	294	398	10	1	0	0	0	0	1	1	40	4	20	2,401	2,401	
Fayetteville CC	5,962	72	817	1,048	7,899	1,130	1,372	2,502	103	4	-5	0	0	0	0	0	50	45	4	169	10,285	10,285
Forsyth CC	4,064	194	358	321	4,948	564	693	1,257	25	6	0	0	0	0	124	66	25	6	200	6,475	6,475	
Gaston College	3,348	143	255	273	3,919	378	358	614	5	1	0	0	0	0	12	36	20	2	82	4,814	4,814	
Guilford CC	6,259	42	343	322	6,976	727	540	1,307	33	4	0	0	0	0	0	72	109	2	220	8,503	8,503	

## North Carolina Community College System Course/FTE Information

### Annualized Curriculum and Continuing Education Full-Time Equivalent (FTE)

ANNTBL26

Report Period: 2005-2006

Last Refresh on: 7/7/2006

Colleges	Curriculum Programs (Fall & Spring)						Continuing Education Programs (Spring, Summer & Fall)										SUBTOTAL NON-SUBJECT	TOTAL
	Associate	Certificate	Diploma	Transferrable	TOTAL	Basic Skills	Odd Rn	SUBTOTAL SUBJECT	Comments of Service - Support & Support	Expanded Industry Training FTE	Human Resources Development FTE	Learning Laboratory	New And Expanded Programs N/A & EA	Self Study Non-Occasional	Self Study Occasional	Small Business Center Svc		
Hertie CC	951	152	153	40	1,307	84	143	227	13	3	0	0	36	2	4	6	1,931	
Haywood CC	1,071	88	157	247	1,562	61	162	244	12	1	0	9	25	5	0	2	1,854	
Lenoir CC	1,371	87	184	122	1,724	143	218	982	6	1	0	0	3	88	0	2	2,178	
James Sprunt CC	671	107	227	102	1,107	52	161	254	16	0	-2	3	0	25	0	3	1,410	
Johnson CC	1,811	542	180	858	3,192	280	335	625	15	3	0	0	8	28	6	6	3,704	
Lenoir CC	1,726	185	112	204	2,227	378	553	901	22	2	0	0	1	46	0	5	3,295	
Marion CC	818	13	71	80	782	186	190	308	37	0	0	0	0	0	1	1	1,128	
Mayland CC	510	340	127	208	1,185	232	265	501	1	0	33	0	5	13	1	3	1,742	
McDowell TCC	630	101	214	78	1,022	136	162	297	17	3	0	0	11	8	4	1	1,364	
Michell CC	1,342	128	183	140	1,874	152	269	441	1	0	0	0	31	37	18	3	2,205	
Montgomery CC	470	88	83	53	684	70	133	203	7	0	-2	0	0	2	7	2	914	
Nash CC	1,275	87	80	254	1,684	210	370	581	22	2	0	0	281	10	11	3	2,574	
Pamlico CC	128	117	31	37	313	82	72	163	13	0	0	0	0	1	0	1	490	
Piedmont CC	1,048	354	182	403	2,088	145	247	362	9	2	0	0	12	0	14	2	2,488	
PIH CC	4,038	200	204	633	4,874	285	297	542	8	2	0	0	8	19	3	26	5,474	
Randolph CC	1,222	75	264	93	1,654	325	403	728	17	7	0	0	16	23	8	2	2,438	
Richmond CC	1,020	38	28	49	1,135	422	204	626	0	3	0	0	32	0	4	2	1,529	
Ronoke-Chowan CC	422	42	72	25	561	127	85	192	4	0	0	0	0	5	0	2	562	
Robeson CC	1,493	163	184	43	1,883	1,025	587	1,628	22	0	0	0	0	26	18	6	2,065	
Rockingham CC	1,098	254	168	115	1,635	110	342	451	19	3	0	0	18	19	5	3	2,070	
Roanoke-Chowan CC	2,408	207	880	269	3,765	321	686	1,076	10	2	0	0	58	16	30	4	4,883	
Sampson CC	851	65	118	71	1,075	328	257	585	28	4	0	0	0	15	5	1	1,715	
South Hills CC	2,037	116	64	210	2,627	326	288	624	6	1	0	0	36	16	6	6	3,815	

## North Carolina Community College System Course/FTE Information Annualized Curriculum and Continuing Education Full-Time Equivalent (FTE)

ANNTBL26

Report Period: 2005-2006

Last Refresh on: 7/7/2006

College	Curriculum Programs (Fall & Spring)						Continuing Education Programs (Spring, Summer & Fall)										SUBTOTAL BUDGET	SUBTOTAL NON-BUDGET	TOTAL
	Associate	Certificates	Diplomas	Transitions	TOTAL	Basic Skills	Occ. Hrs.	SUBTOTAL BUDGET	Community Service - Supported	Transfer - Industry Training	Human Resources Development	Learning Laboratory	New And Expanded Industry (NIBI)	Self-Supported Occupations	Self-Sponsored Occupational Extension	Small Business Center Site			
Southwestern CC	1,264	133	146	117	1,660	218	344	592	19	0	0	0	7	1	1	7	20	2,208	
South Piedmont CC	585	126	229	193	1,423	278	372	648	4	3	0	0	0	13	12	4	26	2,037	
Southwestern CC	1,325	81	86	186	1,518	178	420	805	0	1	0	0	4	50	8	4	27	2,080	
Blinn CC	1,059	264	51	142	1,486	158	409	567	6	1	0	0	0	0	6	2	14	2,078	
Berry CC	1,896	38	397	225	2,216	169	458	627	15	5	0	0	8	24	1	4	52	2,808	
Tri-County CC	573	13	81	128	795	39	173	212	32	0	0	0	21	3	7	5	56	1,074	
Wake-Garratts CC	2,140	320	368	246	3,094	351	627	968	31	5	0	0	42	0	2	3	82	4,164	
Wake TCC	7,076	260	368	605	8,198	881	1,218	2,210	143	20	0	56	117	8	43	11	402	10,628	
Wayne CC	2,048	149	185	133	2,315	365	511	876	15	4	-3	4	7	16	0	6	36	3,448	
Western Piedmont CC	1,743	104	86	165	2,078	444	337	780	23	5	0	3	3	10	27	3	75	2,823	
Wilkes CC	1,872	53	103	181	2,079	236	513	791	41	11	0	0	26	1	6	3	93	2,862	
Wilson TCC	1,154	83	204	85	1,526	259	353	642	32	3	0	0	11	3	17	1	67	2,245	
<b>Total 2005-2006</b>	<b>116,479</b>	<b>8,738</b>	<b>12,895</b>	<b>16,843</b>	<b>148,795</b>	<b>19,276</b>	<b>23,619</b>	<b>41,898</b>	<b>1,211</b>	<b>108</b>	<b>32</b>	<b>116</b>	<b>1,232</b>	<b>1,215</b>	<b>1,109</b>	<b>197</b>	<b>5,857</b>	<b>194,211</b>	
<b>Total 2004-2005</b>	<b>116,026</b>	<b>8,933</b>	<b>12,875</b>	<b>16,869</b>	<b>148,525</b>	<b>19,270</b>	<b>22,552</b>	<b>46,822</b>	<b>1,348</b>	<b>191</b>	<b>17</b>	<b>102</b>	<b>811</b>	<b>1,134</b>	<b>1,038</b>	<b>192</b>	<b>4,880</b>	<b>194,233</b>	
<b>Total 2003-2004</b>	<b>106,732</b>	<b>9,023</b>	<b>13,451</b>	<b>17,238</b>	<b>148,441</b>	<b>17,927</b>	<b>21,480</b>	<b>38,407</b>	<b>1,388</b>	<b>188</b>	<b>8</b>	<b>72</b>	<b>748</b>	<b>1,160</b>	<b>1,106</b>	<b>173</b>	<b>4,844</b>	<b>182,683</b>	

**Appendix C**  
**Counties of North Carolina**



**Appendix D**

**Presidential Invitation Letter**



Dear Dr. \_\_\_\_\_:

Thank you for agreeing to allow me to include \_\_\_\_\_ Community College in my doctoral research study. As I mentioned during our telephone conversation I will need you to please print and sign the attached consent letter on your college's letterhead and please send it back to me in the enclosed self-addressed stamped envelope.

Also as I indicated over the telephone, due to your college's size and geographical location within North Carolina, it would be perfect to include in my doctoral research study. My research study is designed to determine how well North Carolina's Dual Credit-Concurrent Enrollment (DCCE) initiatives are addressing three areas of high school students' knowledge of college: 1) their basic college knowledge and the knowledge of their advisors, (2) their college enrollment plans/hopes, and (3) their actual college planning practices. Identifying this sort of data can be very useful in improving students' chances for success in DCCE programs.

The initial phase of the research study will involve retrieval of students' "directory information" which will include the students' name, address, and phone number for all \_\_\_\_\_ Community College students who meet the following criteria:

- a. Students who are 18 years or older,
- b. Students who graduated from high school in either 2005 or 2006,
- c. Students who participated in dual credit/concurrent enrollment initiatives while in high school, and
- d. Students who were enrolled in a curriculum course at your community college during the fall 2006 semester.

Of those students who meet the criteria listed above seventy-five will be randomly selected and asked to complete an Individual Student Questionnaire. Attached is a copy of the rough draft of the questionnaire and the consent form that will accompany the questionnaire.

As part of the study I will need to know how many secondary institutions \_\_\_\_\_ Community College serves and this research study defines 'secondary institutions' as traditional public high schools (grades 9-12), "secondary" public high schools (grades 6-12), private/proprietary high schools, middle colleges, and early colleges.

I will also need to know the name of a contact person I can work with to retrieve the "directory information" for your students.

Please complete the enclosed information document and include it with the consent letter that you will be mailing me in the enclosed self-addressed stamped envelope.

Thank you in advance for your help. If you have any questions or concerns about this request, please feel free to contact me at either 704-450-2740 or [waltbartlett@msn.com](mailto:waltbartlett@msn.com).

Sincerely,  
Walter C. Bartlett

**Appendix E**

**Example Presidential Support Letter**

May 15, 2007

UNCG Institutional Review Board  
Office of Research Compliance  
2718 HHRA Building

Dear Colleagues,

I am writing to inform you of my support for the doctoral research study entitled “Dual Credit-Concurrent Enrollment Initiatives (DCCE) and Cultural Capital” which will be conducted by Walter C. Bartlett.

I support the research proposed by Walter C. Bartlett. I agree with and approve of the research procedures that were previously provided by Mr. Bartlett and believe that the findings of this research will be beneficial to all students and institutions that are participating in DCCE initiatives.

This research will provide Walter C. Bartlett, a UNCG doctoral candidate, with important evaluative information which can be used to assist future high school students develop and achieve their postsecondary aspirations.

Sincerely,

Dr. \_\_\_\_\_, President  
\_\_\_\_\_ Community College

**Appendix F**

**Community College Information Document**

## University of North Carolina at Greensboro

Research Title: Dual Credit-Concurrent Enrollment Initiatives and Cultural Capital

Information Document for \_\_\_\_\_ Community College

1. As part of the study I will need to know how many secondary institutions \_\_\_\_\_ Community College serves; for this research study ‘secondary institutions’ will include traditional public high schools (grades 9-12), “secondary” public high schools (grades 6-12), private/proprietary high schools, middle colleges, and early colleges.

Number of Secondary Institutions served by \_\_\_\_\_ Community College: \_\_\_\_\_

2. I will also need to know the name of a contact person I can work with to retrieve the “directory information” for your students.

Contact Person: \_\_\_\_\_

**Appendix G**  
**Research Confidentiality Document**

## UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

*CONSENT TO ACT AS A HUMAN PARTICIPANT INFORMATION: INDIVIDUAL STUDENT QUESTIONNAIRE*

Project Title: **Dual Credit-Concurrent Enrollment (DCCE) Initiatives and Cultural Capital**

Project Director: **Walter C. Bartlett**

I would like to invite you to participate in a research study that asks you to reflect back when you were a high school student. The purpose of this study is to look at three areas of a high school student's knowledge of college : 1) their basic college knowledge and their advisors, (2) their college enrollment plans/hopes , and their actual college planning practices. This study will also examine how well these areas of a high school student's knowledge of college are being addressed by North Carolina's Dual Credit-Concurrent Enrollment (DCCE) initiatives.

**DESCRIPTION AND EXPLANATION OF PROCEDURES:**

You are asked to complete a questionnaire that will have you reflect back on your college knowledge-base, college enrollment aspirations, college planning practices , and your experience and impressions of the dual credit-concurrent enrollment courses you took in while in high school. The questionnaire will take approximately 15-20 minutes to complete.

**RISKS AND DISCOMFORTS:**

You should not encounter any risks as a result of participating in the study. If you feel uncomfortable at any point while participating in the study you may withdraw from the study with no penalty.

**POTENTIAL BENEFITS:**

You will not benefit from participating in this study, however, for future high school students the study's findings may help increase the benefits of participating in DCCE initiatives. These benefits may include reduced college costs, advanced college standing and a better overall understanding of the DCCE initiatives for high school students.

**CONFIDENTIALITY:**

The data gathered in the study will be kept strictly confidential. No reference will be made in oral or written reports which could link individual students to the study.

**DATA STORAGE AND DESTRUCTION:**

All data will be stored securely in locked file cabinet at the researcher's residence for a period of five years beyond the end of the research study and made available only to persons conducting the study. All written material will be shredded and audio tapes will be erased using a magnetic field bulk eraser.

**CONTACT:**

The University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations, has approved the research and this consent form. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself will be answered by Walter C. Bartlett by calling 704-450-2740 or by email at walbartlett@msn.com Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project.

**CONSENT:**

By completing and returning the questionnaire you are indicating that you understand the procedures and any risks and benefits involved in this research and you are willingly participating in this research. You are

free to refuse to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice; your participation is entirely voluntary.



**Appendix H**

**Email Correspondence to Community College DATATEL Contact Personnel**

Dear \_\_\_\_\_,

Thank you so much for agreeing to work with me and helping me gather the student information that I will use in my research study.

I am attaching two documents. The first document outlines the query statements that will be needed to get the information I need for the students.

The second document is the Research Confidentiality Agreement that I will need you to complete and send to me at the following address:

Walter C. Bartlett  
4010 N. Center St. Apt 301  
Hickory, NC 28601

Thank you again for all of your help and if you have any questions or concerns please feel free to contact me either by email or by phone at either 704-450-2740 or 828-726-2343.

Walter

**Appendix I**

**DATATEL Query Statements Information Sheet**

## University of North Carolina at Greensboro

Doctoral Research Title: Dual Credit-Concurrent Enrollment Initiatives and Cultural Capital

The following Datatel statements should be used to generate a list of students that meet the following criteria:

- e. Students who are 18 years or older,
- f. Students who graduated from high school in either 2005 or 2006,
- g. Students who participated in dual credit/concurrent enrollment initiatives while in high school, and
- h. Students who were enrolled in a curriculum course at your community college during the fall 2006 semester.

Please run the query so that it down loads the results into an Excel spreadsheet, I was told this could be accomplished by using the SETPTR statement to send the output to a HOLD file.

```
SELECT INSTITUTIONS.ATTEND WITH INSTA.END.DATES LIKE '...05'
'...06'
```

```
SELECT INSTITUTIONS.ATTEND WITH INSTA.INST.TYPE = 'HS'
```

```
SELECT INSTITUTIONS.ATTEND WITH INSTA.GRAD.TYPE = 'Y'
```

```
SELECT INSTITUTIONS.ATTEND SAVING UNIQUE INSTA.PERSON.ID
```

```
SELECT STUDENTS WITH STU.TERMS = '2006FA'
```

```
SELECT STUDENTS WITH STU.AGE >= '18'
```

```
SELECT STUDENTS WITH STU.ACAD.PROGRAMS = 'T90980' 'T90970'
```

```
LIST PERSON ID.SUP PERSON.NAME BEST.ADDRESS PERSONAL.PHONE
NUMBER LPTR
```

Thank you in advance for your assistance and if you should have any questions or concerns please feel free to contact me at 704-450-2740 or waltbartlett@msn.com.

Walter C. Bartlett

## **Appendix J**

### **Example Research Randomizer Results**

Research Randomizer Results													
Mitchell Community College							Western Piedmont Community College						
Individual Student Questionnaire							Individual Student Questionnaire						
1 Set of 75 Unique Numbers Per Set Range: From 1 to 83 -- Sorted							1 Set of 75 Unique Numbers Per Set Range: From 1 to 126 -- Sorted						
<b>Set 1</b>							<b>Set 1</b>						
1		21		41		63	1		35		70		100
2		22		42		65	3		41		71		101
3		23		43		66	6		42		72		103
4		24		44		67	7		45		74		104
5		25		45		68	8		46		75		105
6		26		46		69	10		47		77		106
7		27		47		70	12		49		79		107
8		28		48		71	13		51		80		108
9		29		49		72	14		53		81		109
10		30		50		74	16		54		83		110
11		31		53		75	19		55		84		111
13		32		54		76	21		56		87		112
14		33		55		77	22		58		88		114
15		35		57		78	24		61		91		116
16		36		58		79	25		63		92		118
17		37		59		80	26		64		93		122
18		38		60		81	27		65		94		123
19		39		61		82	30		66		96		124
20		40		62			31		67		97		

**Appendix K**

**Invitation Letter to Students: Focus Group Interview**

Student's Name  
Student's Address

May 30, 2007

Dear \_\_\_\_\_ (Student's Name):

My name is Walter Bartlett and I am a doctoral candidate conducting research at the University of North Carolina at Greensboro. This research study serves as my dissertation requirement to complete my PhD at UNC-Greensboro. I am sending you this letter to inform you that you have been selected to participate in a focus group session of my research study. As this will take about two hours of your valuable time, each focus group member will be eligible for one of two door prizes which will be \$25 gift certificates from Best Buy.

This research study is designed to examine the major influences on students' decisions regarding their participation in college courses while in high school. You are one of twelve students from Mitchell Community College who were selected to participate in this focus group session that will be held on Mitchell Community College's main campus in the Science Building in room 103 on Thursday, June 21, 2007 from 1 to 3 pm. Each of the twelve students selected has three common characteristics which are: (1) each graduated from high school in either 2005 or 2006, (2) each took college courses while in high school and (3) each was enrolled at Mitchell Community College during the fall 2006 semester.

I will be calling you within the next week to personally invite you to participate in this focus group session. I have enclosed an outline of the risks and benefits of the study along with the procedures that will be followed in conducting the research study. If you choose to participate, you will need to bring this same document to the focus group session to serve as your written consent to participate in the study. Please read through the document and call me at the number listed below if you have any questions or concerns.



It is my responsibility to inform you that you are free to refuse to participate in the study and it is your right to withdraw your consent to participate in this study at any time without penalty or prejudice and your participation is entirely voluntary. Let me assure you that your privacy will be protected because you will not be identified by name as a participant in this study. All findings are anonymous.

If you have any questions or concerns regarding your rights as a participant in this project, these questions and concerns can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself can be answered by me, Walter C. Bartlett, by calling 704-450-2740 or by emailing me at [waltbartlett@msn.com](mailto:waltbartlett@msn.com).

I truly hope you will agree to provide your thoughts and input about what influenced your decisions regarding your taking college courses while in high school. Your input and insight on this topic are very valuable and should prove to be beneficial to future high school students and their decisions to participate in college courses while in high school.

Thank you in advance for your time and possible participation.

Sincerely,

Walter C. Bartlett, Doctoral Candidate  
University of North Carolina at Greensboro

**Appendix L**

**Participant Consent Form: Focus Group Interviews**

**UNIVERSITY OF NORTH CAROLINA AT GREENSBORO**

***CONSENT TO ACT AS A HUMAN PARTICIPANT: FOCUS GROUP INTERVIEWS***

Project Title: **Dual Credit-Concurrent Enrollment (DCCE) Initiatives and Cultural Capital**

Project Director: **Walter C. Bartlett**

I would like to invite you to participate in a research study that asks you to reflect back when you were a high school student. The purpose of this study is to look at three areas of a high school student's knowledge of college: 1) their basic college knowledge and their advisors, (2) their college enrollment plans/hopes, and their actual college planning practices. This study will also examine how well these areas of a high school student's knowledge of college are being addressed by North Carolina's Dual Credit-Concurrent Enrollment (DCCE) initiatives.

**DESCRIPTION AND EXPLANATION OF PROCEDURES:**

You will be part of a group of community college students who will be asked to reflect back on their college knowledge-base, college enrollment aspirations, college planning practices, and their experience and impressions of the dual credit-concurrent enrollment courses they took in while in high school. This session will take approximately two hours of your time and will be audio recorded.

**RISKS AND DISCOMFORTS:**

You should not encounter any risks as a result of participating in the study. If you feel uncomfortable at any point while participating in the study you may withdraw from the study with no penalty.

**POTENTIAL BENEFITS:**

You will not benefit from participating in this study, however, for future high school students the study's findings may help increase the benefits of participating in DCCE initiatives. These benefits may include reduced college costs, advanced college standing and a better overall understanding of the DCCE initiatives for high school students.

**CONFIDENTIALITY:**

The data gathered in the study will be kept strictly confidential. No reference will be made in oral or written reports which could link you to the study.

**DATA STORAGE AND DESTRUCTION:**

All data will be stored securely in locked file cabinet at the researcher's residence for a period of five years beyond the end of the research study and made available only to persons conducting the study. All written material will be shredded and audio tapes will be erased using a magnetic field bulk eraser.

**CONTACT:**

The University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations, has approved the research and this consent form. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself will be answered by Walter C. Bartlett by calling 704-450-2740 or by email at walbartlett@msn.com. Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project.

**CONSENT:**

By signing this consent form, you agree that you understand the procedures, risks and benefits involved in this research. You are free to refuse to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice; your participation is entirely voluntary.

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

**Appendix M**

**Focus Group Telephone Screening Script**

University of North Carolina at Greensboro

Research Title: Dual Credit-Concurrent Enrollment Initiatives and Cultural Capital

FOCUS GROUP SCREENING QUESTIONNAIRE SCRIPT

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Call Start: \_\_\_\_ : \_\_\_\_

Call End: \_\_\_\_ : \_\_\_\_

Interviewer: Walter C. Bartlett

Student's Name: \_\_\_\_\_

Student's Contact Number: \_\_\_\_\_

{ Ask to speak with student listed above }

Hello, my name is **Walter Bartlett** and I am a doctoral candidate at the University of North Carolina at Greensboro. I recently sent you a letter informing you that you have been selected to participate in a focus group session of a research study that will assist me in getting my doctoral degree. You were selected because you have three important characteristics that will be described in a minute.

I am not selling anything and will only take a few minutes of your time and all of your responses will be kept confidential. The study is designed to examine the major influences on students' decisions regarding their participation in college courses while in high school. May I continue in describing to you the research study and how your participation is critical to the study?

**If the student's response is "yes" then proceed, if the response is "no" then go to alternative response #1 at the end of the script.**

Thank you \_\_\_\_\_

This research study will entail a three-phase approach involving student database inquiries, focus group interviews and individual student questionnaires. Ten community colleges within the North Carolina Community College System have been selected and each college represents one of five categories of the community colleges in terms of student enrollment.

During the first phase of the research study, Mitchell Community College was selected as the focus group interview site and with the college's assistance I was able to identify students, like yourself, that have three common characteristics: (1) students who graduated from high school in either 2005 or 2006, (2) students who took college courses while in high school and (3) students who were enrolled at Mitchell Community College during the fall 2006 semester.

The second phase of this study students selected during the first phase of the study will participate in the focus group interviews that will be administered at Mitchell Community College. The focus group session will involve 8 to 12 students who will be randomly selected from the list of students generated in the first phase of the study. The focus group session will take approximately 2 hours and two lucky students will win a twenty-five dollar gift certificate to Best Buy.

The third and final phase of the study will involve the completion of an individual student questionnaire that will be mailed to approximately 75 selected students from each of the ten participating community colleges.

As indicated earlier, the focus group interview will require approximately 2 hours of your time and will be held in **room 103** of the **Science Building** on the **main** campus of Mitchell Community College and is scheduled for **Thursday, June 21st from 1 to 3 pm**.

\_\_\_\_\_. (student's first name), would you be willing to participate in this research study on the date and time indicated? By participating in this focus group session you will be eligible to win one of two twenty-five dollar gift certificates from Best Buy.

Before you respond, it is my duty to inform you that you are free to refuse to participate in the study or to withdraw your consent to participate in this study at any time without penalty or prejudice and your participation is entirely voluntary. Let me assure you that your privacy will be protected because you will not be identified by name as a participant in this study.

Will you agree to participate?

**If the student's response is "yes" then proceed, if the response is "no" then go to alternative response #1 at the end of the script.**

\_\_\_\_\_. (student's first name), I truly appreciate your willingness to assist me in this research study. I will be mailing you a confirmation letter with the information pertaining to the focus group interview, my contact information and an example of the consent form I will need you to read and sign at the focus group interview will be included.

If you have any questions or concerns regarding your rights as a participant in this project, these questions and concerns can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself can be answered by me, **Walter C. Bartlett**, by calling **704-450-2740** or by emailing me at **walbartlett@msn.com**. Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in this project entitled **Dual Credit-Concurrent Enrollment Initiatives and Cultural Capital IRB # 067168**. All of these contact numbers will be included in the confirmation letter.

The University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations, has approved the research and this consent procedure.

\_\_\_\_\_. (student's first name), thank you again for agreeing to participate and I look forward to working with you. Do you have any questions at this time? Have a good day.

### **Alternative Response #1**

I appreciate the time you have taken with me so far and would like to ask you one last thing. The final phase of the study will involve the administration of an individual student questionnaire that will be mailed to approximately 75 selected students from each of the participating community colleges. If I sent you an individual student questionnaire, would you be willing to complete it and return it to me in an envelope that will be provided?

**If the student's response is "yes" then proceed, if the response is "no" then go to alternative response #2 at the end of the script.**

\_\_\_\_\_. (student's first name), thank you for agreeing to complete the questionnaire and you should receive the questionnaire in approximately two months.

### **Alternative Response #2**

I respect your decision and thank you for taking time to listen to my request. Have a good day.



**Appendix N**

**Focus Group Protocol Script**

University of North Carolina at Greensboro

Research Title: Dual Credit-Concurrent Enrollment Initiatives and Cultural Capital

Interview Date: Thursday, June 21, 2007

Community College: **Mitchell Community College**

#### **Focus Group Session Checklist**

- Set up audio tapes and check sounds.**
- Set up chairs according to shape of room.**
- Display the ground rules of the session on the wall.**
- Display the poster with the five categories for questions 8, 9, & 12.**
- Hand out name tags and clip boards (each clip board has twelve note cards) as students enter room.**
- Collect student consent forms, which are included on clip board. (Have two copies, one to keep and one for the students to take with them.)**
- Verify contact information.**
- After session is completed, administer the drawing for the gift certificate.**
- Send thank you letters.**

### **FOCUS GROUP PROTOCOL**

Hello, my name is **Walter Bartlett** and I am a doctoral student at the University of North Carolina at Greensboro. We are here today because I am interested in your thoughts relating to the major influences on students' decisions regarding their participation in college courses while in high school and I appreciate you taking time from your other activities to meet with me today.

The first thing I need to do is take care of a few boring, but necessary administrative tasks. The first task I need to do is have you review and sign the consent forms, please print your name under your signature and then I will collect your signed consent forms. However, before I collect the forms I feel it is my duty to remind you that you are free to refuse to participate in this study or to withdraw your consent to participate in this study at any time without penalty or prejudice; your participation is entirely voluntary. Your privacy will be protected because you will not be identified by name as a participant in

this study. Does anyone have any questions or concerns about any of the information that is provided on the consent forms? **{Collect the consent forms.}**

The next administrative task we need to take care of involves providing you a brief description of how the overall research study is being conducted and describing to you how this focus group session will be conducted.

This research study involves a three-phase approach which includes student information database inquiries, this focus group interview and individual student questionnaires. Ten community colleges within the North Carolina Community College System have been selected and each college represents one of five categories of the community colleges broken down in terms of student enrollment. Then I factored in geographical location to get a diverse representation of the community colleges in North Carolina.

During the first phase of the research study, the student information database of the ten selected community colleges were accessed to identify students, like yourselves, that have three common characteristics: (1) students who graduated from high school in either 2005 or 2006, (2) students who took college courses while in high school and (3) students who were enrolled at the selected community colleges during the fall 2006 semester.

We are currently in the second phase of this study which is the focus group interview. This session will take approximately 2 hours and at the end of this session two individuals will win a twenty-five dollar gift certificate to Best Buy.

The third and final phase of the study will involve the administration of an individual student questionnaire that will incorporate information from this focus group session. The questionnaire will be mailed to approximately 75 selected students from each of the ten participating community colleges. Similar to this focus group interview the students

selected to complete the individual student questionnaires will have the same three common characteristics that you have that were previously described.

I will be tape recording the session today so that I can accurately remember what has been said and I will also be taking notes during our conversations, just in case the tape recordings are faulty. I will be checking the tape recorders every 45 minutes. I will ask a question and I will give you a minute to write some brief thoughts about the questions on the appropriate page of the notepad provided, then you will present your thoughts as a group. You will notice that the first eleven pages of the notepads attached to your clip board have a question number on it representing the question being asked. At the end of the session I will be collecting the numbered pages from the notepads and you can keep the notepads and the pen. Due to the limited time we have together and the number of questions we need to cover, a certain amount of time will be allocated to each question. I promise, this session will be concluded by no later than 3:00 pm.

The last administrative task that we need to take care of is the covering of the ground rules for this session which are very basic and are displayed on the wall as a reminder.

They include:

- Everyone is encouraged to express his/her opinions.
- Be respectful of others and their responses and opinions.
- Please allow others to finish their thoughts without interruption.
- Allow everyone to speak.
- Please speak up so we can hear what you have to say.
- And remember there is no right or wrong answers.

Let us begin.

**Time ~ 1:10 pm**

## FOCUS GROUP QUESTIONS

### Opening Question

16. Tell us your first name and briefly describe your future plans.

Time ~ 1:15 pm

### Introductory Question

17. Reflecting back, how did you learn of the dual credit-concurrent enrollment initiatives?

{The time should be around 1:20 pm}

### Transition Questions {remind them to turn the page of their notepads.}

18. What grade were you in and what or who influenced you to seriously start to develop and plan for your postsecondary goals?

Time ~ 1:28 pm

19. Name two things that were the most influential elements in helping you determine your postsecondary goals and indicate why you chose these two things?

Time ~ 1:36 pm

20. Name two reasons why you selected the dual credit-concurrent enrollment courses you chose and indicate why you identified these two reasons?

{The time should be around 1:45 pm}

{Check the tape recorders.}

### Key Questions

21. When you first enrolled in dual credit-concurrent enrollment courses, describe your level of understanding about how the dual credit-concurrent enrollment courses were going to help you with your postsecondary goals?

Time ~ 1:53 pm

22. Did you know where you were going to college and which program of study you were going to enroll in when you enrolled in the dual credit-concurrent enrollment courses?

Time ~ 2:01 pm

23. In your perspective, what level of understanding did the following groups have of the dual credit-concurrent enrollment initiative?

- a. Student Advisors
- b. Friends
- c. Parents
- d. Middle and High School Counselors

e. Community College Liaisons

- i. These five group categories are displayed for your convenience, along with a brief description of each group. Time ~ 2:10 pm*

24. In your perspective, how well did the following groups make the connections between your postsecondary goals and the overall dual credit-concurrent enrollment initiative?

- f. Student Advisors
- g. Friends
- h. Parents
- i. Middle and High School Counselors
- j. Community College Liaisons

Time ~ 2:22 pm

25. What element of the dual credit-concurrent enrollment planning process was the most valuable to you?

{The time should be around 2:30 pm}

{Check the tape recorders.}

### Ending Questions

26. Knowing what you know today, what would you have done differently concerning your participation in the dual credit-concurrent enrollment initiative?

Time ~ 2:42 pm

27. In retrospect, how could any of the following groups have done things differently to help you make better use of your dual credit-concurrent enrollment experience?

- k. Student Advisors
- l. Friends
- m. Parents
- n. Middle and High School Counselors
- o. Community College Liaisons

{The time should be around 2:55 pm}

### Conclusion

Thank you for helping me today. I enjoyed hearing your thoughts on this topic.

**Administer Drawing**

**{This should be the conclusion time provided earlier.}**

**Probes**

- Can you tell us more about \_\_\_\_\_?
- Can you be more specific?
- Can you give us an example of what you are talking about?

**Appendix O**

**Student Participant Invitational Cover Letter**



Student's Name  
Student's Address

December 15, 2006

Dear \_\_\_\_\_ (Student's Name):

My name is Walter Bartlett and I am conducting a research project in order to earn my PhD at the University of North Carolina at Greensboro. You have been selected to participate in this research study that is designed to examine the major influences on students' decisions regarding their participation in college courses while they are still in high school.

Seventy-five students, like yourself, have been selected to complete the enclosed questionnaire because each of you has three common characteristics which are: (1) each graduated from high school in either 2004 or 2005, (2) each took college courses while in high school and (3) each was enrolled at the selected community colleges during the fall 2005 semester.

I am conducting this research study as the dissertation requirement to complete my doctoral degree at UNC-Greensboro. I have enclosed an outline of the risks and benefits of the study along with the procedures that are being followed in conducting the research study. Please read through the document and call me at the number listed below if you have any questions or concerns. Your completed and returned questionnaire will serve as your consent to participate in this research study and will indicate that you read and understood the risks, benefits, and procedures of the research study.

It is my responsibility to inform you that you are free to refuse to participate in the study and it is your right to withdraw your consent to participate in this study at any time without penalty or prejudice and your participation is entirely voluntary. Let me assure you that your privacy will be protected because you will not be identified by name as a participant in this study and you will only be referred by an assigned number.

I truly hope you will agree to complete the enclosed questionnaire and return it in the self-addressed stamped envelope provided because your input and insight on this topic are very valuable and will prove to be beneficial to future high school students and their decisions to participate in college courses while in high school.

Thank you advance for your time and participation and you can contact me by phone at 704-450-2740 or by email at [waltbartlett@msn.com](mailto:waltbartlett@msn.com).

Sincerely,

Walter C. Bartlett, Doctoral Candidate  
University of North Carolina at Greensboro

**Appendix P**  
**Student Participant Consent Form**

**UNIVERSITY OF NORTH CAROLINA AT GREENSBORO*****CONSENT TO ACT AS A HUMAN PARTICIPANT INFORMATION: INDIVIDUAL STUDENT QUESTIONNAIRE***

Project Title: **Dual Credit-Concurrent Enrollment (DCCE) Initiatives and Cultural Capital**

Project Director: **Walter C. Bartlett**

I would like to invite you to participate in a research study that asks you to reflect back when you were a high school student. The purpose of this study is to look at three areas of a high school student's knowledge of college: 1) their basic college knowledge and their advisors, (2) their college enrollment plans/hopes, and (3) their actual college planning practices. This study will also examine how well these areas of a high school student's knowledge of college are being addressed by North Carolina's Dual Credit-Concurrent Enrollment (DCCE) initiatives.

**DESCRIPTION AND EXPLANATION OF PROCEDURES:**

You are asked to complete a questionnaire that will have you reflect back on your college knowledge-base, college enrollment aspirations, college planning practices, and your experience and impressions of the dual credit-concurrent enrollment courses you took in while in high school. The questionnaire will take approximately 15-20 minutes to complete.

**RISKS AND DISCOMFORTS:**

You should not encounter any risks as a result of participating in the study. If you feel uncomfortable at any point while participating in the study you may withdraw from the study with no penalty.

**POTENTIAL BENEFITS:**

You will not benefit from participating in this study, however, for future high school students the study's findings may help increase the benefits of participating in DCCE initiatives. These benefits may include reduced college costs, advanced college standing and a better overall understanding of the DCCE initiatives for high school students.

**CONFIDENTIALITY:**

The data gathered in the study will be kept strictly confidential. No reference will be made in oral or written reports which could link individual students to the study.

**DATA STORAGE AND DESTRUCTION:**

All data will be stored securely in locked file cabinet at the researcher's residence for a period of five years beyond the end of the research study and made available only to persons conducting the study. All written material will be shredded and audio tapes will be erased using a magnetic field bulk eraser.

**CONTACT:**

The University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations, has approved the research and this consent form. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself will be answered by Walter C. Bartlett by calling 704-450-2740 or by email at walbartlett@msn.com Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project.

**CONSENT:**

By completing and returning the questionnaire you are indicating that you understand the procedures and any risks and benefits involved in this research and you are willingly participating in this research. You are

free to refuse to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice; your participation is entirely voluntary.

**Appendix Q**  
**Reminder Postcards**

**Dual Credit/Concurrent Enrollment Initiatives and Cultural Capital**

Hello!

Recently I sent you a questionnaire asking about your dual credit/concurrent enrollment experiences while in high school. It should take only a few minutes to complete and your answers will help develop plans to improve dual credit/concurrent enrollment offerings.

When you have completed the questionnaire, please mail it back in the postage-paid envelope that came with it. If you have already sent back a completed questionnaire, thank you!

**If you did not get the questionnaire or have lost it**, please call Walter Bartlett at **704-450-2740** or by email at **walbartlett@msn.com**, and I will send you another. You can also call that number if you have any questions.

THANK YOU!

Walter Bartlett

**First Reminder Postcard**

# **FINAL NOTICE**

This is my final request for your **voluntary participation** in this research project which is designed to learn your thoughts and experiences with dual credit/concurrent enrollment courses.

If you have completed and returned a questionnaire, I am truly grateful. If you have decided you do not want to participate, I respect that and wish you all the best.

**However, if you're still interested in taking part in this research but need another copy of the questionnaire**, please call Walter Bartlett at **704-450-2740** or by email at **walbartlett@msn.com**, and I will send you another. You can also call that number if you have any questions.

THANK YOU!

Walter Bartlett

**Second Reminder Postcard**

**Appendix R**

**Individual Student Questionnaire Responses Spreadsheet**

### Question 5 Results

Response	Gender	Ethnicity	High School	Community College	College Destination	Program of Study
1	F	C	PR	S	N	N
2	M	C	HS	WP	Y	Y
3	M	C	HS	FT	N	Y
4	F	C	PU	RC	Y	Y
5	M	C	PU	FT	Y	N
6	F	C	PU	FT	N	N
7	F	C	PU	RC	N	N
8	M	C	PU	GT	Y	Y
9	M	C	PU	W	Y	N
10	M	C	PR	FT	N	Y
11	F	C	PU	GT	N	N
12	F	C	PU	FT	Y	N
13	M	O	PU	FT	N	Y
14	F	C	PU	GT	Y	Y
15	F	C	PU	M	N	N
16	F	C	PU	FT	Y	Y
17	F	C	PU	W	Y	Y
18	F	C	PU	GT	Y	
19	M	C	PU	WP	Y	Y
20	F	C	PU	M	Y	N
21	M	C	HS	WP	Y	N
22	M	H	PU	FT	Y	N
23	F	C	PR	M	N	N
24	F	C	PU	M	Y	N
25	F	C	PU	RC	Y	Y
26	F	C	PU	FT	Y	Y
27	F	C	PU	W	Y	Y
28	F	C	HS	FT	N	N
29	M	C	PU	M	Y	
30	F	C	PU	DT	Y	Y
31	M	C	PR	M	Y	Y
32	M	C	PR	W	N	N
33	F	C	PU	P	N	Y
34	F	C	PU	W	N	N
35	F	C	PU	W	Y	Y
36	F	C	PU	W	Y	Y
37	M	C	PU	DT	Y	Y
38	F	C	PU	W	Y	Y
39	F	C	PU	W	N	Y
40	F	C	HS	W	Y	N
41	F	C	HS	DT	N	N
42	F	C	HS	W	N	N



### Question 6 Results

<b>Very High</b>	<b>High</b>	<b>Low</b>	<b>Very Low</b>	<b>No</b>
VH	H	L	VL	N

Response	Gender	Ethnicity	High School	Community College	Level of Understanding
1	F	C	PR	S	VH
2	M	C	HS	WP	H
3	M	C	HS	FT	H
4	F	C	PU	RC	H
5	M	C	PU	FT	H
6	F	C	PU	FT	H
7	F	C	PU	RC	H
8	M	C	PU	GT	L
9	M	C	PU	W	
10	M	C	PR	FT	H
11	F	C	PU	GT	H
12	F	C	PU	FT	H
13	M	O	PU	FT	H
14	F	C	PU	GT	H
15	F	C	PU	M	H
16	F	C	PU	FT	H
17	F	C	PU	W	H
18	F	C	PU	GT	VH
19	M	C	PU	WP	L
20	F	C	PU	M	H
21	M	C	HS	WP	VH
22	M	H	PU	FT	L
23	F	C	PR	M	VH
24	F	C	PU	M	H
25	F	C	PU	RC	VH
26	F	C	PU	FT	VH
27	F	C	PU	W	H
28	F	C	HS	FT	L
29	M	C	PU	M	H
30	F	C	PU	DT	VH
31	M	C	PR	M	VH
32	M	C	PR	W	VH
33	F	C	PU	P	VH
34	F	C	PU	W	VH
35	F	C	PU	W	H
36	F	C	PU	W	VH
37	M	C	PU	DT	H

<b>Response</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>High School</b>	<b>Community College</b>	<b>Level of Understanding</b>
38	F	C	PU	W	VH
39	F	C	PU	W	H
40	F	C	HS	W	VH
41	F	C	HS	DT	VH
42	F	C	HS	W	H
43	M	C	PR	DT	VH
44	F	C	PU	W	H
45	F	C	PU	FT	L
46	M	C	PU	W	H
47	F	C	PU	FT	VH
48	F	C	PU	GT	H
49	F	AA	PU	FT	H
50	M	C	PU	M	H
51	F	C	PR	W	L
52	M	C	PU	GT	H
53	M	C	PU	GT	H
54	M	C	HS	M	L
55	M	AI	PU	S	L
56	F	C	PR	S	VH
57	M	O	PU	P	H
58	F	C	PU	M	VH
59	F	C	PU	WP	VH
60	F	C	HS	P	H
61	F	C	PU	S	H
62	F	C	PU	P	VH
63	M	AA	PU	DT	L
64	F	C	PU	S	H
65	F	C	PU	P	H
66	M	C	PU	GT	H
67	F	C	PU	GT	H
68	F	C	PU	GT	H
69	F	C	PU	M	VH
70	F	C	HS	M	VH
71	F	C	HS	DT	H

### Question 7 Results

<b>Most</b>	<b>Very</b>	<b>Influential</b>	<b>Hardly</b>	<b>Not</b>
M	V	I	H	N

Response	Gender	Ethnicity	High School	Community College	Parents	Friends	H.S. Teachers	H.S. Counselors	CC Rep.	CC Material	Other
1	F	C	PR	S	V	V	I	M	H	N	
2	M	C	HS	WP	M	V	N	N	N	N	
3	M	C	HS	FT	M						
4	F	C	PU	RC	M	V	I				
5	M	C	PU	FT	I	V	V	V	N	N	
6	F	C	PU	FT		V	M				
7	F	C	PU	RC	M			V			
8	M	C	PU	GT			I	V			
9	M	C	PU	W	H	I	M	V			
10	M	C	PR	FT	M	I	M	M	N	N	
11	F	C	PU	GT	I	V	H	I	I	V	
12	F	C	PU	FT	N	N	I	V	N	N	
13	M	O	PU	FT	V	H	I	H	I	I	
14	F	C	PU	GT	V				M		
15	F	C	PU	M	H	V	H	H	H	H	
16	F	C	PU	FT	N	N	I	M	N	N	
17	F	C	PU	W	N	V	I	V	I	I	M
18	F	C	PU	GT	I	M	I	V	N	N	
19	M	C	PU	WP	M	I	V	V	H	N	
20	F	C	PU	M	V	M		M			
21	M	C	HS	WP	M						
22	M	H	PU	FT	M	I	I	I	I	I	
23	F	C	PR	M	M	I	N	N	N	N	
24	F	C	PU	M	N	V	V	V	V	V	

Response	Gender	Ethnicity	High School	Community College	Parents	Friends	H.S. Teachers	H.S. Counselors	CC Rep.	CC Material	Other
25	F	C	PU	RC	V	M	M	I	I	I	
26	F	C	PU	FT	V			M			
27	F	C	PU	W	M	I	M	V	V	V	
28	F	C	HS	FT	M			I			
29	M	C	PU	M	M	M	M	N	N	N	
30	F	C	PU	DT	V	N	I	M	N		
31	M	C	PR	M	V	N	M	V	N	N	
32	M	C	PR	W	N	N	M	H	N	N	
33	F	C	PU	P	I	V	V	M	H	N	
34	F	C	PU	W	M	M					
35	F	C	PU	W	M	N	N	V	N	N	
36	F	C	PU	W	V	I	N	I	N	N	M
37	M	C	PU	DT	N	N	M	M	N	N	
38	F	C	PU	W	H	H	V	I	H	N	M
39	F	C	PU	W	V	N	V	N	V	V	
40	F	C	HS	W	M				V		
41	F	C	HS	DT	M	V					
42	F	C	HS	W	I	V	M	N	N	N	
43	M	C	PR	DT	M	I	H	N	N	N	
44	F	C	PU	W				M			
45	F	C	PU	FT	H	I	H	H	N	V	
46	M	C	PU	W	M	V	I	I	V	V	
47	F	C	PU	FT		M					
48	F	C	PU	GT	M	N	V	I	N	H	
49	F	AA	PU	FT		I	M	M	M	M	
50	M	C	PU	M	V	H	I	I	V	N	
51	F	C	PR	W	V	M	N	N	N	N	
52	M	C	PU	GT	M			M		M	
53	M	C	PU	GT	V			M			
54	M	C	HS	M	I	M	N	N	N	N	
55	M	AI	PU	S				V			

Response	Gender	Ethnicity	High School	Community College	Parents	Friends	H.S. Teachers	H.S. Counselors	CC Rep.	CC Material	Other
56	F	C	PR	S		M	V	V			
57	M	O	PU	P	I	V	V	H	H	N	
58	F	C	PU	M	M	V					
59	F	C	PU	WP	I	N	M	H	H	H	
60	F	C	HS	P	M	I	V				
61	F	C	PU	S	V	I	I	M	V	V	
62	F	C	PU	P	V	M	M	I	M	M	
63	M	AA	PU	DT	M	N	N	N	N	N	
64	F	C	PU	S				V	V		
65	F	C	PU	P	N	N	H	M	N	N	
66	M	C	PU	GT	V	N	N	N	N	N	V
67	F	C	PU	GT				M			
68	F	C	PU	GT	M	V	N	H	N	N	
69	F	C	PU	M		V	M	I			
70	F	C	HS	M	M	N	M	N	M	I	
71	F	C	HS	DT	M	I	N	N	N	N	

### Question 8 Results

Response	Gender	Ethnicity	H.S.	C.C.	Grade
1	F	C	PR	S	9
2	M	C	HS	WP	11
3	M	C	HS	FT	7
4	F	C	PU	RC	12
5	M	C	PU	FT	11
6	F	C	PU	FT	12
7	F	C	PU	RC	12
8	M	C	PU	GT	11
9	M	C	PU	W	11
10	M	C	PR	FT	12
11	F	C	PU	GT	10
12	F	C	PU	FT	8
13	M	O	PU	FT	11
14	F	C	PU	GT	9
15	F	C	PU	M	9
16	F	C	PU	FT	10
17	F	C	PU	W	10
18	F	C	PU	GT	9
19	M	C	PU	WP	10
20	F	C	PU	M	12
21	M	C	HS	WP	12
22	M	H	PU	FT	11
23	F	C	PR	M	11
24	F	C	PU	M	11
25	F	C	PU	RC	8
26	F	C	PU	FT	9
27	F	C	PU	W	10
28	F	C	HS	FT	12
29	M	C	PU	M	12
30	F	C	PU	DT	10
31	M	C	PR	M	11
32	M	C	PR	W	11
33	F	C	PU	P	8
34	F	C	PU	W	9
35	F	C	PU	W	11
36	F	C	PU	W	11
37	M	C	PU	DT	11
38	F	C	PU	W	10
39	F	C	PU	W	10
40	F	C	HS	W	9
41	F	C	HS	DT	11
42	F	C	HS	W	11
43	M	C	PR	DT	10

<b>Response</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>H.S.</b>	<b>C.C.</b>	<b>Grade</b>
44	F	C	PU	W	9
45	F	C	PU	FT	12
46	M	C	PU	W	9
47	F	C	PU	FT	9
48	F	C	PU	GT	10
49	F	AA	PU	FT	10
50	M	C	PU	M	10
51	F	C	PR	W	10
52	M	C	PU	GT	10
53	M	C	PU	GT	10
54	M	C	HS	M	11
55	M	AI	PU	S	11
56	F	C	PR	S	7
57	M	O	PU	P	12
58	F	C	PU	M	12
59	F	C	PU	WP	9
60	F	C	HS	P	11
61	F	C	PU	S	9
62	F	C	PU	P	8
63	M	AA	PU	DT	11
64	F	C	PU	S	11
65	F	C	PU	P	7
66	M	C	PU	GT	12
67	F	C	PU	GT	12
68	F	C	PU	GT	12
69	F	C	PU	M	9
70	F	C	HS	M	11
71	F	C	HS	DT	10

### Question 9 Results

<b>Most</b>	<b>Very</b>	<b>Influential</b>	<b>Hardly</b>	<b>Not</b>
M	V	I	H	N

Response	Gender	Ethnicity	High School	Community College	Student Advisor	Friends	Parents	MS/HS Counselor	HS Plan	CC Personnel	CC Material	CC Plan	Other
1	F	C	PR	S	M	V	M	I	I	H	N		
2	M	C	HS	WP	V	I	M	N	N	V	V	V	
3	M	C	HS	FT			M						
4	F	C	PU	RC			M	I				V	
5	M	C	PU	FT	I	H	V	I	I	I	N	I	
6	F	C	PU	FT		V	M				M		
7	F	C	PU	RC	H	H	M	I	I	N	N	I	
8	M	C	PU	GT	H	V	V	I	V	H	H	I	
9	M	C	PU	W	V	H	M			I			
10	M	C	PR	FT	M	V	M	I		V	V	V	
11	F	C	PU	GT	I	H	M	I	I	H	H	H	
12	F	C	PU	FT	V	H	H	V	N	N	N	N	
13	M	O	PU	FT									
14	F	C	PU	GT			M						
15	F	C	PU	M	H	V	I	N	V	I	H	H	
16	F	C	PU	FT	M	H	I	V	V	H	I	I	
17	F	C	PU	W	M	I	V	M	V	V	V	V	
18	F	C	PU	GT		I	V					V	
19	M	C	PU	WP	V	I	M	N	M	V	I	I	
20	F	C	PU	M		M	M	M					
21	M	C	HS	WP		I	M						
22	M	H	PU	FT	V	I	M	H	N	I	I	I	
23	F	C	PR	M	H	I	V	N	N	H	N	N	M
24	F	C	PU	M	I	I	M	I	I	I	I	I	
25	F	C	PU	RC	I	M	M	I	I	I	I	I	



Response	Gender	Ethnicity	High School	Community College	Student Advisor	Friends	Parents	MS/HS Counselor	HS Plan	CC Personnel	CC Material	CC Plan	Other
26	F	C	PU	FT			V	M					
27	F	C	PU	W			M			M		M	
28	F	C	HS	FT		V	M			I	V	I	
29	M	C	PU	M	N	M	M	N	M	N	N	N	
30	F	C	PU	DT	M		M						
31	M	C	PR	M	V	V	M	I	N	N		N	
32	M	C	PR	W	V	N	M	H	H	H	H	I	
33	F	C	PU	P	I	I	V	M	M	I	H	H	
34	F	C	PU	W	V	V	V					M	
35	F	C	PU	W	V	M	V	V					
36	F	C	PU	W			M						
37	M	C	PU	DT	M	I	V	M	M	N	N	V	
38	F	C	PU	W	V	I	I	I	I	M	V	V	
39	F	C	PU	W	I	N	V	N	V	V	V	M	
40	F	C	HS	W			M						
41	F	C	HS	DT		V	M						
42	F	C	HS	W	M	H	V	H	H	H	N	H	
43	M	C	PR	DT	H	H	M	N	H	H	I	I	
44	F	C	PU	W	M			M					
45	F	C	PU	FT	V	I	M	V	N	N	N	N	I
46	M	C	PU	W	I	I	V	H	I	V	V	N	N
47	F	C	PU	FT			M						
48	F	C	PU	GT	I	N	M	H	N	N	N	N	
49	F	AA	PU	FT	M		I	M					
50	M	C	PU	M	I	I	M	H		I	H	I	
51	F	C	PR	W		V	M	N	I	H	I	I	
52	M	C	PU	GT	M								M
53	M	C	PU	GT			M	V					
54	M	C	HS	M		M	V						
55	M	AI	PU	S	H	H	V	H	H	I	H	H	
56	F	C	PR	S			M	V					

Response	Gender	Ethnicity	High School	Community College	Student Advisor	Friends	Parents	MS/HS Counselor	HS Plan	CC Personnel	CC Material	CC Plan	Other
57	M	O	PU	P	H	M	I		M	V	I	M	
58	F	C	PU	M	V	I	M	H	I	H	I	V	
59	F	C	PU	WP	I	N	M	H	H	H	H	V	
60	F	C	HS	P			M						
61	F	C	PU	S	H	H	M	M	M	I	I	I	
62	F	C	PU	P		H	M	V	M	N	V	M	
63	M	AA	PU	DT	I	N	M	N	N	I	I	I	
64	F	C	PU	S	I		I	V	H	I	I		
65	F	C	PU	P	I	H	V	H	I	V	V	V	
66	M	C	PU	GT	N	H	M	N	N	I	H	I	V
67	F	C	PU	GT	M		I	V					
68	F	C	PU	GT	V	I	M	N	N	N	N	I	
69	F	C	PU	M	M		I	V					
70	F	C	HS	M	M	H	M	I	M	M	V	V	
71	F	C	HS	DT	N	V	M	N	N	N	N	N	V

### Question 10 Results

Focus Group Responses	Choice	Focus Group Responses	Choice
A parent's past college difficulties.	A	Professional goals.	F
A parent's past hardships in life.	B	Ability to take college courses in high school.	G
A brother/sister's lack of college experience.	C	Because the tuition was waived.	H
A brother/sister's past college difficulties.	D	Other:	I
Proximity of college to home.	E		

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
1	F	C	PR	S	A	neither graduated from college & made sure I had opportunity to succeed & go to college.
1	F	C	PR	S	F	Anything to help get me closer to college & getting my degree, I would do.
2	M	C	HS	WP	G	This put me at an advantage / I had 1 year of college finished when I completed high school.
2	M	C	HS	WP	H	This made college much more affordable.
3	M	C	HS	FT	F	Knew what I needed to do early on....
3	M	C	HS	FT	G	Wanted to get courses, mainly lab type that could not be had at home.
4	F	C	PU	RC	C	My sister attended UNC- Chapel Hill for one semester and ended up back home. The transition was too extensive.
4	F	C	PU	RC	F	I decided I wanted to pursue nursing and RCCC has a good program that is not too far and is close to home.
5	M	C	PU	FT	I	None of these things were that influential to me.
5	M	C	PU	FT		
6	F	C	PU	FT	E	At the time I was not ready to leave Winston-Salem because I had an apartment and job here, that is why attend FTCC currently.
6	F	C	PU	FT	F	Finishing major credits before attending a university makes sense to me.
7	F	C	PU	RC	I	Parent's Influence: my parents have always expected me to go to college.
7	F	C	PU	RC	I	Guidance Counselor: my guidance counselor in the early years of high school encourage me greatly.
8	M	C	PU	GT	E	I live at home.
8	M	C	PU	GT	F	The class qualified as an elective for college.
9	M	C	PU	W	B	My father is a farmer and has to work very hard to get by and I did not want to have to live like that.
9	M	C	PU	W	F	I knew I wanted to go to college in order to get a good job.
10	M	C	PR	FT		
10	M	C	PR	FT		
11	F	C	PU	GT	F	They always say a good job comes with a college degree.
11	F	C	PU	GT	I	A Parent's Influence: my mom pushed the issue.
12	F	C	PU	FT	I	Because I failed my 1st semester @ UNCG (as far as my com. College goes).
12	F	C	PU	FT		
13	M	O	PU	FT	F	Aviation would be what.
13	M	O	PU	FT	G	I took in college.
14	F	C	PU	GT	A	My dad didn't get to go, no money. My mom went but didn't finish.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
14	F	C	PU	GT	E	I wanted to stay close to home, family is everything.
15	F	C	PU	M	C	I wanted to be the first to graduate college.
15	F	C	PU	M	G	It showed its easier than I thought.
16	F	C	PU	FT	F	I knew I wanted more opportunities than a HS diploma could get me.
16	F	C	PU	FT	G	Helpful in getting my college career started.
17	F	C	PU	W	B	I don't want to struggle like they did.
17	F	C	PU	W	F	I want to get the best/most education available.
18	F	C	PU	GT	G	This meant early graduation w/ associate degree.
18	F	C	PU	GT	H	Free classes are <u>not</u> to be passed up! Only idiots would pass up those kinds of opportunities if given the chance.
19	M	C	PU	WP	A	Mom was pregnant w/ me & dad was forced to dropout.
19	M	C	PU	WP	F	I wanted to better myself.
20	F	C	PU	M	B	
20	F	C	PU	M	C	
20	F	C	PU	M	E	
20	F	C	PU	M	G	
20	F	C	PU	M	H	
21	M	C	HS	WP	E	Just 20 minutes
21	M	C	HS	WP	G	double wammy
21	M	C	HS	WP	H	Of course if it is free and will help you in the future.
22	M	H	PU	FT	B	We need college to live life to fullest.
22	M	H	PU	FT	F	To succeed we need a degree.
23	F	C	PR	M	F	I knew/know that if I start earlier and stay determined I could sooner achieve my career.
23	F	C	PR	M	H	I know that without a college education it is impossible to reach my career/ personal goals and dreams.
24	F	C	PU	M	B	My dad quit college & it took him a while to get back on his feet & I don't want that to happen to me.
24	F	C	PU	M	E	I wanted to be closer to home b/c it makes me feel safer.
25	F	C	PU	RC	F	I want to be a nurse, that means I have to go to college that's the only reason.
25	F	C	PU	RC		
26	F	C	PU	FT	A	neither parent attended college.
26	F	C	PU	FT	H	Part-time job doesn't pay for college too well.
27	F	C	PU	W	G	time saver
27	F	C	PU	W	H	4 children in family, helped parents.
28	F	C	HS	FT	G	I was receiving credit for both college & HS.
28	F	C	HS	FT	H	I was ble to take college courses for practically free!
29	M	C	PU	M	A	
29	M	C	PU	M	E	
30	F	C	PU	DT	A	My dad did not attend college. My mom always stressed to me how important a college education is.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
30	F	C	PU	DT	F	I wanted to attend colleg so that I can have a decent job with decent salary to support my future goals and future family.
31	M	C	PR	M	F	I wanted to start my career sooner (go to school less).
31	M	C	PR	M	H	Why pay for it if you don't have to?
32	M	C	PR	W	B	Wanted better life.
32	M	C	PR	W	I	Occupational Outlook Handbook: guided me to the most promising careers.
33	F	C	PU	P	A	My dad has a master's degree.
33	F	C	PU	P	G	It was an easy opporitiunity.
34	F	C	PU	W	F	I knew I needed college to get a job like I wanted.
34	F	C	PU	W	G	I took these to get ahead & they were free.
35	F	C	PU	W	G	Allowed me to get a head start on college & get into the teaching program I'm in now.
35	F	C	PU	W	H	I was able to go to college for free.
36	F	C	PU	W	E	I saved money by staying at home.
36	F	C	PU	W	H	I saved money because I got a scholarship.
37	M	C	PU	DT	E	
37	M	C	PU	DT	F	
38	F	C	PU	W	B	Parents both had no opt to goto college until after Air Force.
38	F	C	PU	W	G	Being able to start college sooner.
39	F	C	PU	W	F	To pursue my goal of being a therapist I needed to pursue the appropriate educational requirements.
39	F	C	PU	W	G	B/c I wanted a head-start & assurance that I wanted to continue my intended course of study.
40	F	C	HS	W	E	It was close to home and easy to get to.
40	F	C	HS	W	I	I always wanted some type of college education.
41	F	C	HS	DT	G	This gave me the feedom to get intro courses out of the way & take it slower in my major at UNC-CH
41	F	C	HS	DT	H	Saved my parents money, very nice benefit of dual-enrollment.
42	F	C	HS	W	B	My mother has only a high school diploma & my father received his B.S. while working & married with children.
42	F	C	HS	W	F	In order to becroe a nurse, you MUST have a degree in nursing.
43	M	C	PR	DT	F	Looking ahead to what I wanted to do, I know I had to go to college and get a prestiguos degree.
43	M	C	PR	DT	G	Taking courses in high school helped me explore what areas I was interested in and helped me get realistic college goals.
44	F	C	PU	W	B	My parents were always saying "without an education you cannot become successful in life".
44	F	C	PU	W	G	This is why I could get a head start with my future.
44	F	C	PU	W	H	Tuition is so expensive so why not take advantage of education that is almost free.
45	F	C	PU	FT	G	Yes, because I knew I'd already be ahead.
45	F	C	PU	FT	I	Parents Nagging:Yes, because they drove me crazy to fiure out what I was going to do in/with my future.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
46	M	C	PU	W	G	This helped me decide my major, for transferring to ECU.
46	M	C	PU	W	I	My Parents (in general): They pushed me, in a good way, to go to college.
47	F	C	PU	FT	F	It would help me get my pre-reqs out of the way & focus on my major sooner.
47	F	C	PU	FT	G	I could have graduated early but I decided to get some college course & have the school pay for it.
48	F	C	PU	GT	E	Out of state tuition charges & living on camp;us expenses.
48	F	C	PU	GT	F	Chose 2 college based on the availability of the major I wanted.
49	F	AA	PU	FT	B	Neither parents finished college. I wanted to experience college life & wanted an early start.
49	F	AA	PU	FT	F	I wanted to pursue a career in the medical field all has recently changed to law (criminal justice) so educ is essential to my career goals.
50	M	C	PU	M	E	
50	M	C	PU	M	F	Always loved hiastory and took dual history course.
51	F	C	PR	W	G	I knew whatever I took it would benefit me. "Jumpp Start" is a great program.
51	F	C	PR	W	H	It seemed "wasteful" not to take advantage of this benefit. I was ready for "college" courses even in high school I liked doing this because it was different - it was benefical to my future.
52	M	C	PU	GT	B	I don't want to struggle.
52	M	C	PU	GT	I	Frends who have dropped out or died: to do what their not able to do.
53	M	C	PU	GT	G	to save time once in college.
53	M	C	PU	GT	I	Mom took college credit classes in colege: it helped her be ahead of the game in college.
54	M	C	HS	M	F	Wanted to become a mechanical engineer.
54	M	C	HS	M	G	This got me out of private school and into homeschool.
55	M	AI	PU	S	B	Did not want to be in situations they were in.
55	M	AI	PU	S	F	Did not want to work min. wage jobs.
56	F	C	PR	S	B	Parents worked harder w/out college.
56	F	C	PR	S	F	wanted to become dr.
57	M	O	PU	P	E	Being free, moving from a bad community.
57	M	O	PU	P	I	I wanted to feel like I accomplished something.
58	F	C	PU	M	E	Close to high school and home.
58	F	C	PU	M	F	When I graduated I received my Early Childhood Edu. Cert.
59	F	C	PU	WP	A	I saw my mom go to school late in life & how difficult it was w/ work & kids.
59	F	C	PU	WP	G	I could get credits for both high school and college - why waste the opportunity.
60	F	C	HS	P	F	I wanted to be able to attain a well paying job.
60	F	C	HS	P	G	There were no cost for tuition while in high school. I wanted to take full advantage of that.
61	F	C	PU	S	B	mother and father never went
61	F	C	PU	S	F	what I wanted to do had to go to college.
62	F	C	PU	P	H	It was free so I thought it would be a good thing.
62	F	C	PU	P	I	She was a nurse and I saw how much she enjoyed it.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
63	M	AA	PU	DT	F	
63	M	AA	PU	DT	G	
64	F	C	PU	S	F	Wanted to become an RN and SCC was close to home and offered an ADN program, plus my mother also attended SCC for nursing.
64	F	C	PU	S	G	Gave me a head start on prerequisite courses plus allowed me to get out of high school classes that would have been a waste of time.
65	F	C	PU	P	F	To make money.
65	F	C	PU	P	G	Get school done faster.
66	M	C	PU	GT	A	
66	M	C	PU	GT	B	Both my parents stopped at associates and they always want to have more education but they can't.
66	M	C	PU	GT	E	Proximity = money. If you live on campus you got rooming and food costs.
66	M	C	PU	GT	F	The more education you have, the more job freedom you have.
66	M	C	PU	GT	G	Less "we are preparing you for college" and more college.
66	M	C	PU	GT	H	Being in debt is rough, every penny I save while getting my education makes me a penny smarter. Doesn't equal to being cheap, just savvy.
67	F	C	PU	GT	I	Having a child mad grow up alor & focus on my college goals & become determined in reaching those goals.
67	F	C	PU	GT		
68	F	C	PU	GT	G	It got me to realize that I could perform well at a college level.
68	F	C	PU	GT	H	I could take as many classes as I wanted for free, I got a great headstart.
69	F	C	PU	M	G	I wanted to start college a.s.a.p.
69	F	C	PU	M	I	I knew I definitely wanted to finish a four-year degree.
70	F	C	HS	M	E	It was convenient and accessible - nice change from home schooling - the next step.
70	F	C	HS	M	G	I was homeschooled in H.S. it seemed very intersting to be able to get college & h.s. credit.
71	F	C	HS	DT	E	I could easily get rides.
71	F	C	HS	DT	G	Cheaper and faster.

### Question 11 Results

Focus Group Responses	Choice	Focus Group Responses	Choice
Courses met associate degree requirements.	A	Take advantage of the tuition waived opportunity.	F
Courses met bachelor degree requirements.	B	Wanted something beyond the high school experience.	G
Courses met personal interests.	C	Because my friends signed up for the courses.	H
Courses matched up with high school courses.	D	Other:	I

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
1	F	C	PR	S	B	Get certain classes out of the way so I could work on classes r/t my major.
1	F	C	PR	S	D	Get h.s. credit & college credit & raise my GPA w/ one course - looked good on transcript
2	M	C	HS	WP	B	I took every course with future colleges in mind.
2	M	C	HS	WP	C	I decided to take courses that I found interesting and helped me towards a degree.
3	M	C	HS	FT	B	Trying to work towards college goals too.
3	M	C	HS	FT	C	Interest in writing/screenplay.
3	M	C	HS	FT	D	needed for both hs & college.
4	F	C	PU	RC	A	This gave me a head start on the realitive required for the nursing program.
4	F	C	PU	RC	H	Courses were chosen by my school: the courses were already set for the semester I enrolled.
5	M	C	PU	FT	E	So I wouldn't have to pay much.
5	M	C	PU	FT	G	I had a few friends who used it.
6	F	C	PU	FT	E	My dual-enrolment courses were free so I didn't have anything to lose.
6	F	C	PU	FT	F	I could attend college and give it a trial run before being enrolled only in college.
7	F	C	PU	RC	B	My parents thought dual-enrollment was a good way to get a headstart on college.
7	F	C	PU	RC	D	
8	M	C	PU	GT	C	I found the subject matter interesting.
8	M	C	PU	GT	D	I needed one more class and it fit my schedule.
9	M	C	PU	W	B	I took genereal ed classes that I would have to take for almost any degree.
9	M	C	PU	W	F	I wanted to get an early start on college.
10	M	C	PR	FT	B	
10	M	C	PR	FT	C	
11	F	C	PU	GT	C	I was very interested in forensic psychology.
11	F	C	PU	GT	F	High school was boring and it was a chance to get out faster.
12	F	C	PU	FT	B	I wanted to finish those courses b 4 college.
12	F	C	PU	FT		
13	M	O	PU	FT	C	Needed my credits to graduate.
13	M	O	PU	FT	D	
14	F	C	PU	GT	C	I wanted to take calsses not offered in high school.
14	F	C	PU	GT	E	I could take the class & not worry about paying for it.
15	F	C	PU	M	C	I took classes to decide if I wanted to persue psychology.
15	F	C	PU	M	F	I wanted to get started on college.



Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
16	F	C	PU	FT	A	I could work towards a degree while still in high school.
16	F	C	PU	FT	F	I was ready for more of a challenge & was tired of high school.
17	F	C	PU	W	B	Transfer courses for a university.
17	F	C	PU	W	E	Courses offered at cheaper price.
18	F	C	PU	GT	A	courses I needed to take, ex: English, Sociology, Psychology
18	F	C	PU	GT	E	Once again - free classes* (* Middle College at GTCC)
19	M	C	PU	WP	A	I was pursuing an engineering degree.
19	M	C	PU	WP	E	government looks at parents gross income which is high due to them being self employed o I'm not eligible for any student financing.
20	F	C	PU	M	D	
20	F	C	PU	M	E	
20	F	C	PU	M	F	
21	M	C	HS	WP	A	I took classes that would apply for nearly any degree because I didn't know what I wanted to do.
21	M	C	HS	WP	H	I thought they would help me in any degree I took in the future.
22	M	H	PU	FT	C	I like math so I choose accounting.
22	M	H	PU	FT	D	Took kind of the same classes.
23	F	C	PR	M	A	These courses were needed for my basic studies, I just wanted a head start.
23	F	C	PR	M	B	These courses were needed for my basic studies, I just wanted a head start.
24	F	C	PU	M	C	They interested me.
24	F	C	PU	M	F	I wanted to try something different.
25	F	C	PU	RC	E	I'm broke!
25	F	C	PU	RC	H	Less classes to take in college: I wanted to shorten my time spent in college.
26	F	C	PU	FT	E	free college
26	F	C	PU	FT	F	needed a challenge.
27	F	C	PU	W	C	I enjoy readin g & learning.
27	F	C	PU	W	E	helped parents
28	F	C	HS	FT	C	They were classes I may have never thought about studying.
28	F	C	HS	FT	D	It lightened my HS course load by counting as HS & college classes.
29	M	C	PU	M	A	
29	M	C	PU	M	C	
30	F	C	PU	DT	A	Takin g dual enrollment classes helped me experience college without becoming overwhelmed, but also put me ahead with college credits and the transfer program.
30	F	C	PU	DT	E	Because I took dual enrollment classes, the countys public school system that I live in paid for the class, which saves me money in the long run.
31	M	C	PR	M	E	I wanted to get as much for free as I could.
31	M	C	PR	M	G	So I decided to join them.
32	M	C	PR	W	A	free general education courses
32	M	C	PR	W	E	free general education courses
33	F	C	PU	P	E	I wanted to get as much free as possible.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
33	F	C	PU	P	F	I wanted something more challenging.
34	F	C	PU	W	A	They helped me to get ahead.
34	F	C	PU	W	E	Free classes are awesome.
35	F	C	PU	W	B	I needed the classes for my degree.
35	F	C	PU	W	E	I took courses without paying for them.
36	F	C	PU	W	A	I would need the courses later on anyway.
36	F	C	PU	W	E	It was nice to not have to pay.
37	M	C	PU	DT	C	
37	M	C	PU	DT	D	
38	F	C	PU	W	C	to do crime scene work
38	F	C	PU	W	F	didn't like HS, gave me time with more mature people
39	F	C	PU	W	A	wanted to take the opportunity to get a headstart on my 1st college degree
39	F	C	PU	W	C	wanted to pursue my interest in psychology
40	F	C	HS	W	C	I didn't know what I wanted a degree in so I took many different classes trying to figure it out
40	F	C	HS	W	D	I only had to take the course once but got 2 credits for it
41	F	C	HS	DT	A	I was getting my AA and it allowed to transfer straight into my major at UNC, so I didn't move to apply to general college.
41	F	C	HS	DT	D	For my last two years of high school I was able to finish all math courses for high school and all required math courses for college at same time.
42	F	C	HS	W	A	why not get started early?
42	F	C	HS	W	E	I needed the courses anyway for my degree, so I may as well get them while they are free.
43	M	C	PR	DT	A	It was a good opportunity to knock some courses out ahead of time for reduced price.
43	M	C	PR	DT	F	It was the best education I could get.
44	F	C	PU	W	D	I would not only receive a credit from college but also at high school: 2 for price of 1.
44	F	C	PU	W	F	I wanted to go ahead & get a feel of what college would be like.
45	F	C	PU	FT	A	I just wanted an assoc. degree
45	F	C	PU	FT	D	I was already credits ahead.
46	M	C	PU	W	C	The courses matched what I wanted to do w/ my career.
46	M	C	PU	W	H	The course met the guide lines for my career in which I'm transferring.
47	F	C	PU	FT	A	I wanted to be able to get general courses out of the way to focus on my major.
47	F	C	PU	FT	E	Since I am paying for college myself, I wanted to have every opportunity I could to take advantage of college classes.
48	F	C	PU	GT	B	Would count as credit or get my undergrad.
48	F	C	PU	GT	H	Get a headstart on college: be a few courses ahead when I graduate high school.
49	F	AA	PU	FT	C	times/dates were good - I worked part-time at a clothing/retail store.
49	F	AA	PU	FT	D	Most classes I took while in dual-enrollment I needed these classes for better preparation of college & life.
50	M	C	PU	M	B	
50	M	C	PU	M	E	
51	F	C	PR	W	E	This made sense and was a win-win situation.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
51	F	C	PR	W	F	I actually started taking college classes in high school because my sister did and I went with her. I liked it and the ability to be able to be working toward the future.
52	M	C	PU	GT	F	high school is just too generic.
52	M	C	PU	GT	H	To get ahead: So I don't get left behind.
53	M	C	PU	GT	C	self-explanatory
53	M	C	PU	GT	E	self-explanatory
54	M	C	HS	M	A	
54	M	C	HS	M	E	I took the most difficult classes I placed into because waived tuition.
55	M	AI	PU	S	C	Wanted to study the subject in more detail.
55	M	AI	PU	S	E	Wanted to see what college would be like.
56	F	C	PR	S	B	
56	F	C	PR	S	D	I got high school credit along with the college classes offered.
57	M	O	PU	P	F	
57	M	O	PU	P	H	transfer: I would be able to get to a university faster.
58	F	C	PU	M	C	
58	F	C	PU	M	D	
59	F	C	PU	WP	B	I was taking course to transfer to university.
59	F	C	PU	WP	E	I knew it was going to be expensive so I took advantage of this.
60	F	C	HS	P	D	I could obtain college & HS credit at the same time.
60	F	C	HS	P	E	I wanted to get as much as I could under my belt while the fee was waived.
61	F	C	PU	S	A	
61	F	C	PU	S	C	
62	F	C	PU	P	A	It would go toward furthering my education.
62	F	C	PU	P	G	If they were doing it I wanted to also!
63	M	AA	PU	DT	A	
63	M	AA	PU	DT	B	
63	M	AA	PU	DT	C	
64	F	C	PU	S	F	It just made sense to take classes that would count as college credit instead of high school classes that were just for high school hours. Plus I was allowed to obtain college credit for free. Also allowed me to take classes for free that I would need for ADN program.
64	F	C	PU	S	G	It just made sense to take classes that would count as college credit instead of high school classes that were just for high school hours. Plus I was allowed to obtain college credit for free. Also allowed me to take classes for free that I would need for ADN program.
65	F	C	PU	P	C	I liked what I signed up for.
65	F	C	PU	P	D	I needed credit to graduate.
66	M	C	PU	GT	A	get a head start on college.
66	M	C	PU	GT	E	Save money for other needs (fiscal wisdom)
67	F	C	PU	GT	E	Came from a family that would not have a lot of money for college.
67	F	C	PU	GT	H	Dislike of "regular" public high schools - "regular" high schools didn't give me the same time and effort as the Middle College did & gave me a different environment to help me succeed in high school.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
68	F	C	PU	GT	A	I wanted to get as many free credits that weren't for any major out of the way (in case I ended up dropping b/c they weren't interesting).
68	F	C	PU	GT	C	I explored the possibility of a history major a little where it was free. (I didn't consider my HIS. Courses a waste of time).
69	F	C	PU	M	A	wanted to get assoc. then go on to bachelor
69	F	C	PU	M	F	I wanted something more challenging with benefits.
70	F	C	HS	M	A	There are 3 important reasons why I selected dualenrollment. All three of the reasons are practical and reasonable - especially when this opportunity is offered by the community college. Why not get high school and college credit. I have benefitted greatly and do now have a 4.0 GPA.
70	F	C	HS	M	C	There are 3 important reasons why I selected dualenrollment. All three of the reasons are practical and reasonable - especially when this opportunity is offered by the community college. Why not get high school and college credit. I have benefitted greatly and do now have a 4.0 GPA.
70	F	C	HS	M	D	There are 3 important reasons why I selected dualenrollment. All three of the reasons are practical and reasonable - especially when this opportunity is offered by the community college. Why not get high school and college credit. I have benefitted greatly and do now have a 4.0 GPA.
71	F	C	HS	DT	A	Because it will be easier to get a job with that piece of paper.
71	F	C	HS	DT	B	Because home-schooled high schoolers have to work extra hard for admission.

## Question 12 Results

<b>Very High</b>	<b>High</b>	<b>Low</b>	<b>Very Low</b>	<b>No</b>
VH	H	L	VL	N

Response	Gender	Ethnicity	High School	Community College	Student Advisors	Friends	Parents	MS/HS Counselors	CC Personnel
1	F	C	PR	S	VH	H	H	H	VH
2	M	C	HS	WP	N	L	VH	N	VH
3	M	C	HS	FT		N	VH		VH
4	F	C	PU	RC	H	H	H	H	VH
5	M	C	PU	FT	H	H	L	VH	VH
6	F	C	PU	FT	VH	L	L	VH	VH
7	F	C	PU	RC	L	H	VH	VH	H
8	M	C	PU	GT	H	H	L	L	L
9	M	C	PU	W	H	H	L	H	VH
10	M	C	PR	FT	H	H	VH	L	VH
11	F	C	PU	GT	H	L	L	L	H
12	F	C	PU	FT	VH	L	N	VH	L
13	M	O	PU	FT	L	L	VH	VL	H
14	F	C	PU	GT	L	VL	H	N	VH
15	F	C	PU	M	L	L	L	L	VH
16	F	C	PU	FT	H	L	H	M	M
17	F	C	PU	W	VH	H	VL	VH	VH
18	F	C	PU	GT	VH	H	L	H	L
19	M	C	PU	WP	VL	L	L	L	VH
20	F	C	PU	M		H	H		
21	M	C	HS	WP		H	VH		
22	M	H	PU	FT	H	VH	VH	L	L
23	F	C	PR	M	VL	L	H	N	VH
24	F	C	PU	M	H	H	VL	H	H
25	F	C	PU	RC	VH	VH	VH	VH	VH
26	F	C	PU	FT		N	H	VH	
27	F	C	PU	W	H	H	VH	H	H
28	F	C	HS	FT		VL	H		H
29	M	C	PU	M	N	L	H	N	N
30	F	C	PU	DT	VH	VL	VH		VH
31	M	C	PR	M	VH	H	H	L	VH
32	M	C	PR	W	VH	H	L	H	VH
33	F	C	PU	P	VH	H	L	VH	VL
34	F	C	PU	W	VH	H	H	L	VH
35	F	C	PU	W	H	VL	VH	VH	H
36	F	C	PU	W	H	L	L	H	H
37	M	C	PU	DT	H	N	L	VH	H
38	F	C	PU	W	L	VL	L	N	H
39	F	C	PU	W	H	L	L	N	M

Response	Gender	Ethnicity	High School	Community College	Student Advisors	Friends	Parents	MS/HS Counselors	CC Personnel
40	F	C	HS	W		L	VH		VH
41	F	C	HS	DT		H	VH		H
42	F	C	HS	W	VH	H	H	H	VH
43	M	C	PR	DT	H	H	H	H	VH
44	F	C	PU	W	VH	L	H	VH	VH
45	F	C	PU	FT	L	L	L	L	H
46	M	C	PU	W	N	L	VH	H	VH
47	F	C	PU	FT	L	VH	VH	L	H
48	F	C	PU	GT	H	VL	H	H	L
49	F	AA	PU	FT	H	VH	L	VH	H
50	M	C	PU	M	H	L	H	VL	VH
51	F	C	PR	W	VL	H	H	VL	VH
52	M	C	PU	GT	H	L	H	H	H
53	M	C	PU	GT	H	H	H	H	H
54	M	C	HS	M	H	M	H	N	M
55	M	AI	PU	S	H	VL	H	VL	H
56	F	C	PR	S	VH	H	H	H	VH
57	M	O	PU	P	VH	H	N	VH	VH
58	F	C	PU	M	VH	L	VH	H	VH
59	F	C	PU	WP	H	VL	H	L	VL
60	F	C	HS	P		VL	VH		L
61	F	C	PU	S	H	H	H	H	H
62	F	C	PU	P	L	L	M	N	M
63	M	AA	PU	DT	N	N	N	N	M
64	F	C	PU	S	H	H	H	H	VH
65	F	C	PU	P	H	VL	L	VL	H
66	M	C	PU	GT	VL	VL	H	VL	L
67	F	C	PU	GT	H	VL	VL	H	H
68	F	C	PU	GT	H	N	H	VL	L
69	F	C	PU	M	H	H	L	M	H
70	F	C	HS	M	VH	VL	VH	L	VH
71	F	C	HS	DT	N	N	VH	N	H

## Question 13 Results

<b>Very High</b>	<b>High</b>	<b>Low</b>	<b>Very Low</b>	<b>No</b>
VH	H	L	VL	N

Response	Gender	Ethnicity	High School	Community College	Student Advisors	Friends	Parents	MS/HS Counselors	CC Personnel
1	F	C	PR	S	VH	H	VH	L	VH
2	M	C	HS	WP	N	H	VH	N	VH
3	M	C	HS	FT			VH		VL
4	F	C	PU	RC	H	H	VH	VH	VH
5	M	C	PU	FT	H	VL	H	VH	VH
6	F	C	PU	FT	L	VL	VL	H	H
7	F	C	PU	RC	L	H	VH	VH	H
8	M	C	PU	GT	L	H	L	L	L
9	M	C	PU	W	H	L	L	H	H
10	M	C	PR	FT	H	H	VH	L	VH
11	F	C	PU	GT	H	H	H	L	L
12	F	C	PU	FT	N	VL	VL	H	N
13	M	O	PU	FT	L	L	H	L	H
14	F	C	PU	GT	L	VL	H	N	VH
15	F	C	PU	M	VL	H	L	L	VL
16	F	C	PU	FT	H	L	L	M	H
17	F	C	PU	W	VH	H	L	VH	VH
18	F	C	PU	GT	VH	H	H	N	L
19	M	C	PU	WP	VL	L	H	VL	L
20	F	C	PU	M	H	H	H	H	
21	M	C	HS	WP		N	M		
22	M	H	PU	FT	H	H	VH	L	L
23	F	C	PR	M	VL	H	VH	N	H
24	F	C	PU	M	H	L	L	H	H
25	F	C	PU	RC	VH	VH	VH	VH	VH
26	F	C	PU	FT			H	VH	
27	F	C	PU	W	H	H	VH	H	VH
28	F	C	HS	FT	L	L	H		H
29	M	C	PU	M	N	N	N	N	N
30	F	C	PU	DT	VH	VL	VH		
31	M	C	PR	M	H	H	H	L	VH
32	M	C	PR	W	VH	L	VL	VL	H
33	F	C	PU	P	VH	H	L	VH	N
34	F	C	PU	W	VH	H	H	N	VH
35	F	C	PU	W	H	L	VH	VH	H
36	F	C	PU	W	L	L	VH	L	L
37	M	C	PU	DT	VH	VL	H	VH	H
38	F	C	PU	W	H	L	H	L	VH
39	F	C	PU	W	L	VL	H	N	VH

Response	Gender	Ethnicity	High School	Community College	Student Advisors	Friends	Parents	MS/HS Counselors	CC Personnel
40	F	C	HS	W		L	VH		VH
41	F	C	HS	DT		H	VH		H
42	F	C	HS	W	VH	N	H	L	H
43	M	C	PR	DT	H	H	VH	H	L
44	F	C	PU	W	VH	H	VH	VH	VH
45	F	C	PU	FT	H	L	H	L	M
46	M	C	PU	W	H	H	VH	L	VH
47	F	C	PU	FT	L	VH	H	L	H
48	F	C	PU	GT	H	VL	VH	L	L
49	F	AA	PU	FT	H	H	H	H	H
50	M	C	PU	M	VH	L	H	L	H
51	F	C	PR	W	VL	L	H	L	H
52	M	C	PU	GT	VH	H	H	VH	VH
53	M	C	PU	GT	H	L	H	H	H
54	M	C	HS	M	N	VL	VH	N	H
55	M	AI	PU	S	L	N	L	N	N
56	F	C	PR	S	VH	H	H	H	VH
57	M	O	PU	P	VH	H	N	VH	H
58	F	C	PU	M	H	H	H	H	H
59	F	C	PU	WP	L	N	VH	L	L
60	F	C	HS	P			VH		VH
61	F	C	PU	S	H	H	H	H	H
62	F	C	PU	P	H	L	M	N	M
63	M	AA	PU	DT	N	N	H	N	M
64	F	C	PU	S	H	L	H	H	H
65	F	C	PU	P	H	VL	L	VL	H
66	M	C	PU	GT	N	VL	H	N	L
67	F	C	PU	GT	H	N	VL	L	L
68	F	C	PU	GT	H	VL	VH	N	VL
69	F	C	PU	M	VH	H	H	VH	H
70	F	C	HS	M	VH	VL	VH	VL	VH
71	F	C	HS	DT	N	N	H	N	H



### Question 14 Results

Focus Group Responses	Choice
I would have taken more college courses.	A
I would have started taking college courses earlier in high school.	B
I would have better planned the college courses I took with my ultimate college goals.	C
Other:	D

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
1	F	C	PR	S	B	Get more credit & get more gen-ed classes over with.
1	F	C	PR	S		
2	M	C	HS	WP	C	Not all of my classes were able to transfer.
2	M	C	HS	WP		
3	M	C	HS	FT		
3	M	C	HS	FT		
4	F	C	PU	RC	A	I would have been that much closer to having all of my requirements for my program of study out of the way.
4	F	C	PU	RC	B	Starting earlier would have allowed me to take more and the school would be paying for them.
5	M	C	PU	FT	A	I would have liked to take more, its a lot cheaper for those credits.
5	M	C	PU	FT	B	I would have loved to get a better headstart.
5	M	C	PU	FT	C	I would take more class that would help to my major.
6	F	C	PU	FT	A	I could have finished more credits and graduated earlier.
6	F	C	PU	FT	B	More credit would have benefit me now.
6	F	C	PU	FT	C	I have already obtained credits I don't need for my college goals.
7	F	C	PU	RC	A	
7	F	C	PU	RC	B	I would have tried to take college course a semester earlier.
8	M	C	PU	GT	A	It would have meant less time in college.
8	M	C	PU	GT		
9	M	C	PU	W	A	Because I would classes behind me now.
9	M	C	PU	W	B	So I could possibly finish earlier.
10	M	C	PR	FT	A	
10	M	C	PR	FT	C	
11	F	C	PU	GT	C	I would have made sure I knew everything about the scholarship opportunities. A.k.a. deadlines
11	F	C	PU	GT		
12	F	C	PU	FT	A	To save my parents money in the long run & to not have to do these in college.
12	F	C	PU	FT	B	To save my parents money in the long run & to not have to do these in college.
13	M	O	PU	FT		
13	M	O	PU	FT		
14	F	C	PU	GT	A	It would have jumped started my college ed. I would have to worry about paying for so many classes now.
14	F	C	PU	GT	B	It would have jumped started my college ed. I would have to worry about paying for so many classes now.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
14	F	C	PU	GT	C	I would have take general ed. Classes instead of what I took.
15	F	C	PU	M	A	I could have gotten more experience.
15	F	C	PU	M	B	I could have taken more classes.
15	F	C	PU	M	C	I ended up taking classes within my college goals.
16	F	C	PU	FT	D	I took no high school classes while dual enrolled, I wish I had taken at leaSt 1-2 classes in high school to still be around friends. I was trying t o "grow up" too fast.
16	F	C	PU	FT		
17	F	C	PU	W	A	They were great learning experiences.
17	F	C	PU	W	C	I would have taken more academic courses, such as Math or English instrad of electives.
18	F	C	PU	GT	A	Toe get <u>free</u> classes & yo get closer to my degree in a shrter period of time.
18	F	C	PU	GT		
19	M	C	PU	WP	D	I would have researched it more depth instead of looking at it as a chance to get off campus.
19	M	C	PU	WP		
20	F	C	PU	M	C	
20	F	C	PU	M		
21	M	C	HS	WP	C	Now that I know what my major to be .
21	M	C	HS	WP		
22	M	H	PU	FT	C	Would have helped I didn't put me back a year.
22	M	H	PU	FT		
23	F	C	PR	M	A	I do not think, even now, that I will have enough credits to receive my associates in 2 years.
23	F	C	PR	M	D	I would have worked harder: I didn't realize (at the time) the effect that my dual-enrollment classes would have on my college GPA.
24	F	C	PU	M	B	So I wouldn't have to take them in college.
24	F	C	PU	M		
25	F	C	PU	RC	C	I have 2 classes that I have to take with the nursing program.
25	F	C	PU	RC		
26	F	C	PU	FT	A	School paid for my college.
26	F	C	PU	FT		
27	F	C	PU	W	D	I wouldn't do different. I took all I could.
27	F	C	PU	W		
28	F	C	HS	FT	A	The courses were not as difficult as I had been told.
28	F	C	HS	FT	B	I would have even a better head start for college & a really nice high school transcript.
29	M	C	PU	M	C	
29	M	C	PU	M		
30	F	C	PU	DT	A	So that I could be more ahead and closer to my ultimate college goal.
30	F	C	PU	DT	C	I would have taken the college course more seriously and would have tried to make higher than a (B)... more of an (A) to also help my GPA and ultimate college goals.
31	M	C	PR	M	A	I slacked off and only took 4 classes.
31	M	C	PR	M	B	Get more done sooner.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
32	M	C	PR	W	A	Have to take them now.
32	M	C	PR	W	C	Took all the easy courses early on.
33	F	C	PU	P	C	I would have gone to a 4 year university.
33	F	C	PU	P		
34	F	C	PU	W	A	To get even more ahead.
34	F	C	PU	W		
35	F	C	PU	W	B	I could have gotten more college credit.
35	F	C	PU	W		
36	F	C	PU	W	A	So I could get to UNCW faster.
36	F	C	PU	W	B	I would have started the dual credit enrollment in the 11th grade, but I didn't know about it till the 12th.
37	M	C	PU	DT	B	
37	M	C	PU	DT	C	
38	F	C	PU	W	B	I started the spring semester my senior year.
38	F	C	PU	W	D	Also taken as many as I could.
39	F	C	PU	W	A	Could have been fartherh along by the time I graduated HS & might have been ready for a 4 yr university.
39	F	C	PU	W	B	Could have been fartherh along by the time I graduated HS & might have been ready for a 4 yr university.
40	F	C	HS	W	A	Take as many classes as I can when you're in the learning mode.
40	F	C	HS	W	C	If I had known what I wanted a degree in I could have taken just those classes instead of taking classes that would not count towards my degree.
41	F	C	HS	DT		
41	F	C	HS	DT		
42	F	C	HS	W	C	I would have taken some additional courses necessary for my B.S.N. rather than having such a narrow focus on my current education.
42	F	C	HS	W		
43	M	C	PR	DT		
43	M	C	PR	DT		
44	F	C	PU	W	B	I should have taken them while I had more spare time in high school. Now I live on my own & a job & barely have any time for anything.
44	F	C	PU	W	C	I took a history class at the time I wasn't told if that actually went with my major. It is not a class I needed for dental assoc.
45	F	C	PU	FT	A	Just bvecause it would benefit me more.
45	F	C	PU	FT	B	So I would be ahead w/ my credits in case I needed to take a semester easy I would still be ok with time.
46	M	C	PU	W	A	To further my progress in trasferring to ECU.
46	M	C	PU	W	B	I would have take the courses in my junior year of high school instead of just my senior yr.
47	F	C	PU	FT	A	I would have liked to have taken more classes if I I could have knew about the program sooner.
47	F	C	PU	FT	B	Just because the opportunity is great. They should definitely get the word out sooner!
48	F	C	PU	GT	B	I believe it's a great opportunity to get ahead & save money at the same time.
48	F	C	PU	GT		
49	F	AA	PU	FT	C	I would have took the dual enrollment much more seriously considering the fact that that was a leway to my college career/opp.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
49	F	AA	PU	FT	D	Stayed in college: right I am not taking college courses but instead to start by January 2008.
50	M	C	PU	M	A	Should have taken English too.
50	M	C	PU	M	B	Would have liked to started junior year.
51	F	C	PR	W	C	When I started I took classes my sister did - then what my friends did. I had no concrete idea what my ultimate college study would be at the time.
51	F	C	PR	W		
52	M	C	PU	GT	A	To get ahead, have more knowledge
52	M	C	PU	GT	C	things just didn't match for me.
53	M	C	PU	GT	A	I helped to have some under my belt in high school.
53	M	C	PU	GT		
54	M	C	HS	M	B	I would have gotten more classes out of the way had I known I could have.
54	M	C	HS	M		
55	M	AI	PU	S	D	nothing: I took what I could, it didn't hurt or help me.
55	M	AI	PU	S		
56	F	C	PR	S	D	Since the school was located 30 min. from SCC there was not as many courses available to us. The teacher drove to our school.
56	F	C	PR	S		
57	M	O	PU	P	B	Help me better prepare for college.
57	M	O	PU	P		
58	F	C	PU	M	A	
58	F	C	PU	M		
59	F	C	PU	WP	A	It's a great opportunity/program.
59	F	C	PU	WP	B	I would have taken as many as possible.
60	F	C	HS	P	A	b/c of being able to graduate early & not pay tuition.
60	F	C	HS	P	B	b/c of being able to graduate early & not pay tuition.
60	F	C	HS	P	C	I wouldn't have wasted time on unnecessary courses.
61	F	C	PU	S	B	Takes a long time to finish when you start.
61	F	C	PU	S		
62	F	C	PU	P	B	Therefore I could have entered the nursing program sooner.
62	F	C	PU	P		
63	M	AA	PU	DT	A	
63	M	AA	PU	DT	B	
64	F	C	PU	S	A	I started taking classes the summer before my senior year and took as many courses as possible but if I could have taken more I would have.
64	F	C	PU	S		
65	F	C	PU	P	C	I would have taken classes that went towards my degree instead of what I thought was fun.
65	F	C	PU	P		
66	M	C	PU	GT	A	To push myself & to save finances.
66	M	C	PU	GT	B	to go farther than I did by graduation.
67	F	C	PU	GT	A	b/c it is free.
67	F	C	PU	GT	B	b/c 9th graders now entering high school that begin college course can graduate high school w/a 2 yr. associate degree.

Response	Gender	Ethnicity	H.S.	C.C.	Choice	Comment
68	F	C	PU	GT	B	Just so I could geotten more of them out of the way.
68	F	C	PU	GT	D	More electives: I would have tried out a few more positive majors to get a feel for it and save time later (when I was paying).
69	F	C	PU	M	C	Wish I planned classes for the next 2 yrs out of H.S.
69	F	C	PU	M	D	researched how to take more.
70	F	C	HS	M	D	I would not have done anything differently.
70	F	C	HS	M		
71	F	C	HS	DT	A	As it stgands, I have gotten an associates in 3 full-time semesters.

### Question 15 Results

Focus Group Responses	Choice
Student Advisors (ex: high school teachers)	A
Friends	B
Parents	C
Middle and High School Counselors	D
Community College Personnel	E

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
1	F	C	PR	S	A	some taught college classes on campus more convenient
1	F	C	PR	S	B	took classes with me
1	F	C	PR	S	C	allowed me to take classes; encouragement gave opportunity & got professors to teach on campus (high-school)
1	F	C	PR	S	D	Since classes were taught at high school campus, I did not interact much with community college personnel.
1	F	C	PR	S	E	
2	M	C	HS	WP	A	n/a
2	M	C	HS	WP	B	
2	M	C	HS	WP	C	Could have allowed me to take more courses a semester.
2	M	C	HS	WP	D	n/a
2	M	C	HS	WP	E	could have been more knowledgeable about transferring courses to a 4-yr school
3	M	C	HS	FT	A	
3	M	C	HS	FT	B	
3	M	C	HS	FT	C	
3	M	C	HS	FT	D	
3	M	C	HS	FT	E	more guidance instead of figuring out for self.
4	F	C	PU	RC	A	encourage the dual-credit enrollment more.
4	F	C	PU	RC	B	my friends were the most helpful because they had done this already.
4	F	C	PU	RC	C	my parents did everything well by encouraging me to do it.
4	F	C	PU	RC	D	communicate with the college more and be more knowledgeable about it.
4	F	C	PU	RC	E	offer more courses to choose from so the students can pick courses that apply to their program of study.
5	M	C	PU	FT	A	nothing
5	M	C	PU	FT	B	nothing
5	M	C	PU	FT	C	nothing
5	M	C	PU	FT	D	advertise more
5	M	C	PU	FT	E	advertise more
6	F	C	PU	FT	A	
6	F	C	PU	FT	B	could have been more focused on school - less partying and more study-groups.
6	F	C	PU	FT	C	could have given me a curfew or acted interested in my curriculum.
6	F	C	PU	FT	D	could have gotten to know me on a more personal level for better understanding of my goals.

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
6	F	C	PU	FT	E	could have found me an advisor that might help me, rather than me having to seek advise from someone different every time.
7	F	C	PU	RC	A	
7	F	C	PU	RC	B	
7	F	C	PU	RC	C	
7	F	C	PU	RC	D	my counselor could have helped me arrange my schedule to start c.c. earlier.
7	F	C	PU	RC	E	
8	M	C	PU	GT	A	never ever mentioned it to me
8	M	C	PU	GT	B	they were the ones who suggested the idea
8	M	C	PU	GT	C	didn't know anything about it.
8	M	C	PU	GT	D	same as student advisors (never ever mentioned it to me)
8	M	C	PU	GT	E	same as student advisors (never ever mentioned it to me)
9	M	C	PU	W	A	could have told me more about it
9	M	C	PU	W	B	my friends did not know about it
9	M	C	PU	W	C	my parents did not know anything about it
9	M	C	PU	W	D	nothing differently
9	M	C	PU	W	E	they did everything they needed to do
10	M	C	PR	FT	A	more knowledgeable about various programs
10	M	C	PR	FT	B	
10	M	C	PR	FT	C	pushed me harder earlier
10	M	C	PR	FT	D	
10	M	C	PR	FT	E	
11	F	C	PU	GT	A	encourage it more
11	F	C	PU	GT	B	carpooled - gas is expensive
11	F	C	PU	GT	C	mom did her best
11	F	C	PU	GT	D	be more optimistic, knowledgeable - principle was no help he did not want it to happen he was more worried about #'s and AP courses.
11	F	C	PU	GT	E	work more with the high schools
12	F	C	PU	FT	A	to have been more organized in the physical process
12	F	C	PU	FT	B	to have done those courses too & not slacked off
12	F	C	PU	FT	C	to have paid attention to what I was ever doing
12	F	C	PU	FT	D	to openly explain the benefits of dual enrollment
12	F	C	PU	FT	E	to have ... even been in the picture
13	M	O	PU	FT	A	
13	M	O	PU	FT	B	
13	M	O	PU	FT	C	
13	M	O	PU	FT	D	more dual enrollment training
13	M	O	PU	FT	E	
14	F	C	PU	GT	A	they could have told me about it instead of pushing pointless class on me just to take up time.
14	F	C	PU	GT	B	they didn't know about dual enrollment
14	F	C	PU	GT	C	if they had made me take general ed. Instead of what I took
14	F	C	PU	GT	D	they could have told me about it instead of pushing pointless class on me just to take up time.

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
14	F	C	PU	GT	E	they helped a lot. I wouldn't change anything.
15	F	C	PU	M	A	educated more about it and earlier
15	F	C	PU	M	B	pushed me to take more
15	F	C	PU	M	C	pushed me to take more
15	F	C	PU	M	D	prepared students -> offered it sooner
15	F	C	PU	M	E	speak to students - in freshmen year
16	F	C	PU	FT	A	
16	F	C	PU	FT	B	been more supportive
16	F	C	PU	FT	C	nothing
16	F	C	PU	FT	D	nothing
16	F	C	PU	FT	E	
17	F	C	PU	W	A	encourage more students to take advantage of program
17	F	C	PU	W	B	take dual- enrollment classes
17	F	C	PU	W	C	be more involved
17	F	C	PU	W	D	help make sure students qualify
17	F	C	PU	W	E	educate more students
18	F	C	PU	GT	A	I don't feel it was their place but to inform of opp. & be encouraging
18	F	C	PU	GT	B	
18	F	C	PU	GT	C	let me attend Middle College earlier than senior year
18	F	C	PU	GT	D	Middle: they did nothing -> high school counselor was <u>very</u> encouraging (@ Middle College)
18	F	C	PU	GT	E	nothing - they did their job
19	M	C	PU	WP	A	they could have mentioned that the courses -> counted for half a high school credit.
19	M	C	PU	WP	B	
19	M	C	PU	WP	C	
19	M	C	PU	WP	D	they could have mentioned that the courses -> counted for half a high school credit.
19	M	C	PU	WP	E	they could have mentioned that the courses -> counted for half a high school credit.
20	F	C	PU	M	A	
20	F	C	PU	M	B	
20	F	C	PU	M	C	
20	F	C	PU	M	D	
20	F	C	PU	M	E	
21	M	C	HS	WP	F	with me not knowing my major, it would have been hard for my experience to have been better.
21	M	C	HS	WP	B	
21	M	C	HS	WP	C	
21	M	C	HS	WP	D	
21	M	C	HS	WP	E	
22	M	H	PU	FT	A	they made me realize what I need
22	M	H	PU	FT	B	we were all on the same path
22	M	H	PU	FT	C	do not change
22	M	H	PU	FT	D	didn't really care what we did
22	M	H	PU	FT	E	n/a
23	F	C	PR	M	A	been more open to the idea



Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
23	F	C	PR	M	B	
23	F	C	PR	M	C	
23	F	C	PR	M	D	been open to the idea. They were very against it.
23	F	C	PR	M	E	better placed me in classes I needed.
24	F	C	PU	M	A	they did their best
24	F	C	PU	M	B	they helped me choose what to take
24	F	C	PU	M	C	they didn't know anything about dual-enrollment
24	F	C	PU	M	D	they did their best
24	F	C	PU	M	E	they did their best
25	F	C	PU	RC	A	need to take time to care
25	F	C	PU	RC	B	they just suck
25	F	C	PU	RC	C	having known about the program before
25	F	C	PU	RC	D	they just need to take time & pay attn.
25	F	C	PU	RC	E	they need to advertise the program
26	F	C	PU	FT	A	encourage
26	F	C	PU	FT	B	learn more about DCCE
26	F	C	PU	FT	C	encourage
26	F	C	PU	FT	D	let every student know; not a select few
26	F	C	PU	FT	E	should a have visited H.S. to inform students
27	F	C	PU	W	A	no changes
27	F	C	PU	W	B	no changes
27	F	C	PU	W	C	no changes
27	F	C	PU	W	D	no changes
27	F	C	PU	W	E	no changes
28	F	C	HS	FT	A	made the decision seem less intimidating
28	F	C	HS	FT	B	
28	F	C	HS	FT	C	encouraged me to start sooner
28	F	C	HS	FT	D	
28	F	C	HS	FT	E	better advising on what classes to take
29	M	C	PU	M	A	inform me more
29	M	C	PU	M	B	
29	M	C	PU	M	C	
29	M	C	PU	M	D	inform me more
29	M	C	PU	M	E	inform me more
30	F	C	PU	DT	A	really stressed to <u>all</u> students the benefits of dual-enrollment
30	F	C	PU	DT	B	
30	F	C	PU	DT	C	
30	F	C	PU	DT	D	
30	F	C	PU	DT	E	talk with students at local/surrounding schools and also tell students about dual-enrolling and now can help them get ahead for college.
31	M	C	PR	M	A	explained it earlier
31	M	C	PR	M	B	started with me earlier
31	M	C	PR	M	C	nothing
31	M	C	PR	M	D	didn't have any counseling
31	M	C	PR	M	E	they were good
32	M	C	PR	W	A	they did all they could

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
32	M	C	PR	W	B	they weren't really a factor
32	M	C	PR	W	C	they knew very little, maybe a better orientation session
32	M	C	PR	W	D	weren't helpful at all , better counseling needed
32	M	C	PR	W	E	needs more interaction with counselors in charge of other areas
33	F	C	PU	P	A	offered more classes
33	F	C	PU	P	B	gave good advise
33	F	C	PU	P	C	need to be more aware
33	F	C	PU	P	D	need to know more in depth
33	F	C	PU	P	E	need to be more informative
34	F	C	PU	W	A	everyone did fine
34	F	C	PU	W	B	
34	F	C	PU	W	C	
34	F	C	PU	W	D	
34	F	C	PU	W	E	
35	F	C	PU	W	A	principal could have allowed me to start my junior year instead of making me wait until senior year
35	F	C	PU	W	B	nothing
35	F	C	PU	W	C	nothing
35	F	C	PU	W	D	nothing
35	F	C	PU	W	E	nothing
36	F	C	PU	W	A	more encouragement to take the courses
36	F	C	PU	W	B	more willingness to try the courses.
36	F	C	PU	W	C	nothing - they supported 100%
36	F	C	PU	W	D	I didn't talk to them much about it
36	F	C	PU	W	E	noting - they were very pleasant!
37	M	C	PU	DT	A	
37	M	C	PU	DT	B	
37	M	C	PU	DT	C	
37	M	C	PU	DT	D	
37	M	C	PU	DT	E	
38	F	C	PU	W	A	
38	F	C	PU	W	B	
38	F	C	PU	W	C	
38	F	C	PU	W	D	
38	F	C	PU	W	E	
39	F	C	PU	W	A	0 (did their part)
39	F	C	PU	W	B	0 (not involved)
39	F	C	PU	W	C	0 (did their part)
39	F	C	PU	W	D	been more informative & willing to explain & help with the process
39	F	C	PU	W	E	0 (were very helpful in all areas)
40	F	C	HS	W	A	
40	F	C	HS	W	B	
40	F	C	HS	W	C	
40	F	C	HS	W	D	

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
40	F	C	HS	W	E	I think they did things just fine. They were always there if I needed them and that really helped out a lot.
41	F	C	HS	DT	A	
41	F	C	HS	DT	B	
41	F	C	HS	DT	C	
41	F	C	HS	DT	D	
41	F	C	HS	DT	E	allowed dual enrollment students to register at the same time as other students.
42	F	C	HS	W	A	they did very good
42	F	C	HS	W	B	n/a
42	F	C	HS	W	C	known more information
42	F	C	HS	W	D	n/a
42	F	C	HS	W	E	suggested possible courses necessary for achieving my B.S.N.
43	M	C	PR	DT	A	they were as helpful as I needed them to be
43	M	C	PR	DT	B	
43	M	C	PR	DT	C	my parents were really great
43	M	C	PR	DT	D	
43	M	C	PR	DT	E	I really don't regret anything about my experience
44	F	C	PU	W	A	
44	F	C	PU	W	B	
44	F	C	PU	W	C	
44	F	C	PU	W	D	let me know of the program earlier I didn't find out until the 11th grade in high school
44	F	C	PU	W	E	
45	F	C	PU	FT	A	
45	F	C	PU	FT	B	they did all they could do
45	F	C	PU	FT	C	they did enough! (as much as they knew how to)
45	F	C	PU	FT	D	
45	F	C	PU	FT	E	
46	M	C	PU	W	A	explained more of the dual-credit enrollment
46	M	C	PU	W	B	they could have enrolled, as I did
46	M	C	PU	W	C	they did their part
46	M	C	PU	W	D	could have given a better notice, to the entire school
46	M	C	PU	W	E	did every exceptional
47	F	C	PU	FT	A	have more knowledge about the program and inform students
47	F	C	PU	FT	B	none
47	F	C	PU	FT	C	none
47	F	C	PU	FT	D	have more knowledge to inform students sooner
47	F	C	PU	FT	E	inform the high schools of <u>all</u> the information& forms students need to have done at one time instead of students making 3 & 4 trips back & forth
48	F	C	PU	GT	A	I didn't get the chance to take college courses until I was a senior I'd like to change that
48	F	C	PU	GT	B	I don't think anything because it really doesn't have anything to do with them.
48	F	C	PU	GT	C	I think they did what they could & got all the info they could.
48	F	C	PU	GT	D	I just wish they would have made the college courses available before the 12th grade

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
48	F	C	PU	GT	E	they just never made a big deal about taking these courses. I don't think I ever got info about the courses from them It is mainly a "self" issue that the individual needs to went to work hard to accomplish. No matter how much teachers, friends, & family wanted me to go to a 4-year college, it was something I should have wanted for myself.
49	F	AA	PU	FT	F	
49	F	AA	PU	FT	B	
49	F	AA	PU	FT	C	
49	F	AA	PU	FT	D	
49	F	AA	PU	FT	E	
50	M	C	PU	M	A	needed info handout
50	M	C	PU	M	B	not important
50	M	C	PU	M	C	researched on their own
50	M	C	PU	M	D	were not helpful & uninformed
50	M	C	PU	M	E	very helpful - need handout infor
51	F	C	PR	W	A	I learned start "jump start" through friends. High schools should promote it especially to good students.
51	F	C	PR	W	B	some friends wondered why I pursued extra work? my parents were great and motivated me to take advantage of this opportunity.
51	F	C	PR	W	C	private school - no influence
51	F	C	PR	W	D	college are knowledgeable; some professors don't encourage younger students enough.
51	F	C	PR	W	E	I did not get dual credit- I took classes in high school on my "own time", and they did not carry over for any high school credits. "Jump start" was a program I pursued on my own and it was not discussed in our private school. However, we did have several students involved. College courses were done on WCC campus – nothing on our private school campus.
51	F	C	PR	W	F	
52	M	C	PU	GT	A	more information
52	M	C	PU	GT	B	more support
52	M	C	PU	GT	C	couldn't have done better
52	M	C	PU	GT	D	more information
52	M	C	PU	GT	E	more information
53	M	C	PU	GT	A	
53	M	C	PU	GT	B	
53	M	C	PU	GT	C	
53	M	C	PU	GT	D	maybe earlier info could have given a big jump start to me (middle school gave me no info)
53	M	C	PU	GT	E	
54	M	C	HS	M	A	my high school teachers told me they would not allow me.
54	M	C	HS	M	B	I had some friends that were dual enrolled, they were helpful
54	M	C	HS	M	C	my parents should have started the process earlier
54	M	C	HS	M	D	I never talked to middle or high school counselors the personnel walked me through every step and were extremely helpful
54	M	C	HS	M	E	
55	M	AI	PU	S	A	
55	M	AI	PU	S	B	would not have been a factor to me

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
55	M	AI	PU	S	C	nothing
55	M	AI	PU	S	D	known more about my goals & future goals could have shown/presented material to high school students that would help us understand what dual- enrollment was and how it would benefit us.
55	M	AI	PU	S	E	
56	F	C	PR	S	A	
56	F	C	PR	S	B	?
56	F	C	PR	S	C	?
56	F	C	PR	S	D	?
56	F	C	PR	S	E	make more available to our school
57	M	O	PU	P	A	talked more about it
57	M	O	PU	P	B	nothing
57	M	O	PU	P	C	supported me more, understanding what I was trying to do
57	M	O	PU	P	D	explain the importance of dual-enrollment
57	M	O	PU	P	E	nothing
58	F	C	PU	M	A	n/a
58	F	C	PU	M	B	understand dual-enrollment better
58	F	C	PU	M	C	n/a
58	F	C	PU	M	D	n/a
58	F	C	PU	M	E	n/a
59	F	C	PU	WP	A	they were very helpful
59	F	C	PU	WP	B	don't rely on friends for this type of advise
59	F	C	PU	WP	C	make sure the school informs them about the program
59	F	C	PU	WP	D	they need to know more overall they need to have more than one person who knows about the program
59	F	C	PU	WP	E	
60	F	C	HS	P	A	could encourage this more & be more knowledgeable
60	F	C	HS	P	B	could have been more knowledgeable
60	F	C	HS	P	C	encouraged more courses.
60	F	C	HS	P	D	
60	F	C	HS	P	E	advertise more
61	F	C	PU	S	A	talked about it more
61	F	C	PU	S	B	stop partying and think
61	F	C	PU	S	C	nothing
61	F	C	PU	S	D	nothing
61	F	C	PU	S	E	nothing
62	F	C	PU	P	A	told me more about it earlier
62	F	C	PU	P	B	n/a
62	F	C	PU	P	C	n/a
62	F	C	PU	P	D	told me sooner
62	F	C	PU	P	E	they were great I couldn't ask for anything better!
63	M	AA	PU	DT	A	inform me more about the program
63	M	AA	PU	DT	B	
63	M	AA	PU	DT	C	more information about the program
63	M	AA	PU	DT	D	
63	M	AA	PU	DT	E	tell me more advantages of taking the program

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
						starting in the summer of 2004 I began taking dual enrollment classes. By the start of senior year, I was planning to take 2 college classes and 2 high school classes a semester. When I graduated I had all my prerequisite courses completed as well as several of my required courses, such as Anatomy & Physiology I and MAT 140.
64	F	C	PU	S	F	
64	F	C	PU	S	B	
64	F	C	PU	S	C	
64	F	C	PU	S	D	
64	F	C	PU	S	E	
65	F	C	PU	P	A	Could have told me to take diff courses
65	F	C	PU	P	B	I have no idea
65	F	C	PU	P	C	I have no idea
65	F	C	PU	P	D	be more knowledgeable about the college courses
65	F	C	PU	P	E	did a fair job
66	M	C	PU	GT	A	Eh, no comment! Too few for so many students = nothing gets accomplished
66	M	C	PU	GT	B	participated, If everyone of my peers would of pushed themselves to go the output of their education would be greatly increased
66	M	C	PU	GT	C	my parents were great but I think a lot of parents fail to place importance on becoming an educated individual
66	M	C	PU	GT	D	Eh, no comment!
66	M	C	PU	GT	E	if they were more aware of these students without changing their expectations, I believe college faculty could better adjust students to this new=age form of learning
67	F	C	PU	GT	A	Middle College teachers were great, knowledgeable while regular high school teachers knew nothing.
67	F	C	PU	GT	B	none
67	F	C	PU	GT	C	didn't know about the program & not much influence while in school.
67	F	C	PU	GT	D	should have been more knowledgeable & let students know about the program (Middle College counselors were great)
67	F	C	PU	GT	E	No real influence until after I had enrolled in college class but they could have been more helping.
68	F	C	PU	GT	A	at the college I attended they were awesome My friends that didn't take dual classes thought it was just required at my school - they viewed it as negative. I feel I need to explain that my friends who were influential in me learning about the dual-credit courses were ones that were involved with them. My friends that still went to a regular public school (I transferred to a Middle College) were very negative about the whole thing. They thought it was required by my school that we take then and considered it a waste of time.
68	F	C	PU	GT	B	my parents were supportive and helpful if there was anything I needed help in
68	F	C	PU	GT	D	they didn't even inform me of dual-credit - I didn't know I could do it until I went to Middle College I hardly had any interaction with them outside of class
68	F	C	PU	GT	E	class
69	F	C	PU	M	A	student need H.S. teacher/advisor for college plans

Survey #	Gender	Ethnicity	H.S.	C.C.	Factor	Comment
69	F	C	PU	M	B	
69	F	C	PU	M	C	need more info about college opportunities and funding
69	F	C	PU	M	D	middle school supply more info for high school career plans
69	F	C	PU	M	E	ensure classes are needed in college plans
70	F	C	HS	M	A	
70	F	C	HS	M	B	
70	F	C	HS	M	C	
70	F	C	HS	M	D	
70	F	C	HS	M	E	Everything has worked out great!
71	F	C	HS	DT	A	n/a
71	F	C	HS	DT	B	n/a
71	F	C	HS	DT	C	n/a
71	F	C	HS	DT	D	n/a
71	F	C	HS	DT	E	It would have been nice to have not felt like I was in a stockyard during registration every semester.

**Appendix S**  
**Demographics Results**





31. High School Attended: ? Public ? Private ? Home-schooled

Public Schools	PU		52	73.24%
Private Schools	PR		8	11.27%
Home Schooled	HS		11	15.49%
			<b>71</b>	<b>1</b>