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Perceptions of High School Principals and Senior Army Instructors  
Concerning the Impact of JROTC on Rates of Dropout and Transition to College

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A dissertation  
presented to  
the faculty of the Department of Educational Leadership and Policy Analysis  
East Tennessee State University

In partial fulfillment  
of the requirements for the degree  
Doctor of Education

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by  
Lawrence N. Marks  
May 2004

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Keywords: Attendance, Dropouts, JROTC, Leadership, Matriculation, Mentoring,  
Retention, Self-esteem, Transition, Truancy

## ABSTRACT

### Perceptions of High School Principals and Senior Army Instructors Concerning the Impact of JROTC on Rates of Dropout and Transition to College

By

Lawrence N. Marks

The purpose of this study was to determine the perceptions of high school principals and their Junior Reserve Officers' Training Corps (JROTC) senior Army instructors about the cost effectiveness and value of JROTC in impacting dropout and transition-to-college rates at their schools. The purposeful sample for this study included principals and senior Army instructors at three high schools, two in northwest North Carolina and one in northeast Tennessee.

The research investigated the per-student costs for the operation of the JROTC programs; the dropout rates for JROTC and non-JROTC students; the transition-to-college rates for JROTC and non-JROTC students; and the perceptions of the administrators as to the value and cost effectiveness of JROTC in impacting dropout and transition rates. The study found that the average annual JROTC program cost was \$731 per student; JROTC students had a dropout rate of 22.2 % and the non-JROTC students had a dropout rate of 21.2 %; and, 52.4% of JROTC students indicated that they would transition-to-college, and 84.6% of non-JROTC students indicated that they would transition-to-college.

The administrators' perceptions were evaluated in pretest posttest scenarios utilizing first a 30 question survey employing a Likert-type scale from "strongly agree" to "strongly disagree." The administrators were then interviewed using a semi-structured format. Principals and senior Army instructors stated that their JROTC programs were cost-effective in reducing the dropout rates and increasing the college attendance transitioning rates at their schools. In general, principals perceived a higher value for their JROTC programs than did the JROTC senior Army instructors.

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## DEDICATON

I dedicate this research to my wife, Cathy, and to my four children, Tamara, Matthew, Lauren and Derek, who have been the main source of encouragement throughout my years of academic pursuit.

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The third phase came from the wonderful group of men I met in the Army. Those individuals allowed me to be a student and teacher at the same time. The resulting experience was a wonderful confidence and self-esteem builder, and provided the funding through the GI Bill for me to attend the University of Miami (1956-64).

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## CHAPTER 1

### INTRODUCTION

Any young adult who decides to drop out of high school faces a difficult road through life's experiences. In these days of worldwide economic difficulty, jobs are scarce and the types of jobs available to high school dropouts are decreasing. Currently, technology advancements have reduced the physical requirements of many jobs and high school graduates now fill jobs that once were available to individuals without high school diplomas (Farmer & Payne, 1992). High school graduation, more than ever, is critical for success in the job market.

This study focuses on one program that is available as a voluntary activity in secondary schools that proposes to address students who are at risk of dropping out of school. Junior Reserve Officer's Training Corps (JROTC) is a volunteer curricular program that involves high school students in many types of school and community activities. Not all high schools offer JROTC programs, but for those high schools that do, the host high school or school system and the U. S. Department of Defense (DOD) share the funding of the program. The JROTC program is open to all male and female high school students at or above the age of 14 (ROTC Revitalization Act of 1964). At the core of the program is the development of citizenship and character traits found in leadership fundamentals.

The purpose of this study is to investigate the beliefs and perceptions of school administrators regarding the cost effectiveness of student participation in high school JROTC programs and to compare dropout and transition data of JROTC and non-JROTC students in these same schools.

#### *Background on JROTC*

The National Defense Act of 1916 first authorized the Army Senior Reserve Officer's Training Corps (then called SROTC) in post-secondary schools. Presently, the SROTC program is called the Reserve Officer's Training Corps (ROTC). ROTC programs can be found in all parts of the country in both public and private colleges and universities. As is the case for the JROTC in high schools, not all colleges offer the ROTC program.

In 1916, Europe was at war and the United States was soon to become involved. The professional Army of the United States prior to World War I (WWI) was thought to be of inadequate size to fight a war in Europe. Congress started the SROTC for the purpose of training college men for future service as reserve officers for the Army that would soon have to be expanded (Coumbe & Harford, 1996).

The National Defense Act of 1916 that created the SROTC also created the high school JROTC program. The major difference came in the commissioning process. Initially, high school students who successfully completed the JROTC program were granted certificates of eligibility for reserve officers' commission (2<sup>nd</sup> Lieutenant) at age 21. College ROTC students were to be commissioned at the completion of their ROTC military training program and the awarding of their baccalaureate degree (National Defense Act of 1916). After WWI the commissioning of high school JROTC students was discontinued as the need for commissioned officers declined. Presently, ROTC and JROTC programs are governed by a combination of Federal Statutes, Codes of Federal Regulations, Department of Defense Directives, and Department of the Army Regulations (Coumbe & Harford, 1996).

Title 10, United States Code, Section 2031, specifically requires the Secretaries of the Army, Navy, and Air Force to establish JROTC units in secondary schools equitably distributed across the United States. The purpose for the JROTC program is outlined in Department of Defense Directive 1205.13 as the Reserve Officer's Training Corps for Secondary Educational Institutions. That document also delineates responsibility to the United States Army and host high schools where JROTC programs are located. The Navy, Marines, and Air Force operate Junior ROTC training programs that are likewise governed by the same conditions as the Army JROTC (Coumbe & Harford, 1996).

Department of the Army Regulation AR 145-2 outlines how the United States Army is to operate JROTC programs and the National Defense Cadet Corps Organization. The personnel for JROTC instructors authorized by the National Defense Act of 1916 come from active or retired Army personnel and the equipment for the program is procured from federal military sources.

Each individual high school is to follow a prescribed military training program with a minimum enrollment of 100 students of at least 14 years of age (Coumbe & Harford, 1996).

During the 1990s, the number of JROTC programs in high schools expanded with support from President George H. W. Bush (Bachman, 1994; Department of Defense, 1992). In 1994, the number of JROTC programs (Army, Navy, Air Force, and Coast Guard) totaled 2,267 (Bartlett & Lutz, 1998). The monetary cost of adding a JROTC program to a school's curriculum can be expensive and the cost-effectiveness of a JROTC program is difficult to determine. Studies done prior to 1998 are not conclusive as to the relationship between participation in JROTC programs and a reduction in dropout rates (Bartlett & Lutz; Flowers, 2001). Although the Army, Navy, and Air Force JROTC Cadet Commands claim that participation in JROTC reduces the dropout rate, statistical information is not available for the Navy, Marine, Air Force, or Coast Guard JROTC programs (Bartlett & Lutz).

In 1998, the Department of Defense, through the US Army, operated 1468 JROTC programs across the United States in public secondary schools. Students participating in JROTC usually begin the program their freshman year. Where academic high school teachers usually have students for one course or class over one or two semesters, the JROTC instructors have the JROTC students in their programs for four continuous years. As a result, a mentoring relationship develops from the prolonged student-teacher interaction. The personal relationships developed between the student and JROTC instructor throughout the four-year program are thought to provide intervention counseling that is helpful to the students in dealing with their day-to-day problems. These counseling relationships are not only student to teacher but also student to student through peer counseling (R. Branch, personal correspondence, October 18, 1998).

### *Background on School Dropouts*

The Columbine High School shootings that occurred in May of 1999 caused many Americans to focus on the types of students enrolled in our high schools. We asked ourselves: "How could this happen?" Shortly after the Columbine incident, Toby (1999) published a study

indicating that 40% of high school students were internal dropouts (defined by Toby as students who remain in school even though they have little desire to participate in student activities and merely mark time). Toby's study indicated that even though the percentage of internal dropouts and at-risk students varied from one school to another, no school could ignore the potential problems of not addressing their at-risk student population.

In the 1950s, 50% of high school students received their high school diplomas (Allen, 1956). While there has been improvement in the percentage of high school graduates, dropouts continue to be a problem for educational administrators. Studies done by educators over the years have focused on factors influencing student dropouts, correlations suggesting as possible causes and effects, and recommendations for improving the dropout problem (Allen; Eckstein & Wolpin 1999; Epstein, 1992; Toby, 1999). In reading these studies I found as many pitfalls as I did potential remedies. However, the dropout problem remains a focus for administrators.

“Dropout rate” became a meaningful way to describe the percentage of students dropping out of high school in the 1960s. A high school education earlier in the century had not been highly valued. In historical perspective, a high school education has only recently become a mass phenomenon involving the socialization of teenagers. As long as there was a demand for unskilled labor, a high school diploma for most youths was not a requirement for obtaining a job (Dorn, 1996).

Some of the factors found in studies conducted regarding the dropout problem that help keep at-risk students in school and actively involved are student-teacher relations, extra-curricular activities, and intervention counseling (Eckstein & Wolpin, 1999; Epstein, 1992; Langbein & Snider, 1999; Rossi, 1995). JROTC programs in high schools potentially address each of the above factors that help to keep at-risk students in school.

Many studies have addressed the question, “Why does a student drop out?” Eckstein and Wolpin (1999) found that focusing on why students dropout illuminated lack of motivation, as one-reason students do not remain in school. Rossi (1995) determined that student lackadaisical attitudes about schooling contributed to their dropping out. It would seem, therefore, that

improving student' attitudes and motivations concerning their schooling would be a positive step towards reducing the dropout rate. Other studies have focused on different answers to solving the dropout decision of high school students.

Langbein and Snider (1999) found that positive academic experiences were associated with students remaining in school. This was especially true for students enrolled in highly rated courses.

In another study, Epstein (1992) found that student-faculty interaction (mentoring) was a major factor in students studied who remained in school. JROTC instructors interact with their students for four years both in and out of the classroom, thus enabling the mentoring relationship to develop over time.

Career Academy is a program jointly developed by the U. S. Department of Defense and the U. S. Department of Education aimed at at-risk youth for the propose of improving graduation rates. Elliott, Hanser, and Gilroy (2001) examined the administrative records of eight urban high schools with JROTC Career Academies (JROTCCA) and found the grade point averages for the JROTCCA cohort was substantially higher than was the case for students in the general academic programs. Twice as many JROTCCA students graduated (as were expected to) in the two cohorts' years studied.

### *Background on College Transition*

Traditional college students attend college the fall semester following high school completion. Although non-traditional students are going to college in ever-increasing proportions, the traditional student is still the focus of higher education marketing.

Since the Gulf War in 1990-91, the military in America has been downsizing. Where college ROTC participation was mandatory in the 1945-70 eras, this is no longer the case. The American armed forces are now composed of volunteers only. One of the requirements for enlistment is a high school diploma or GED.



Magazines and newspapers are filled with articles on how personal lifetime income is directly related to educational attainment. Why some students do not get the message is puzzlement to some.

It could perhaps be said that any approach taken by school administrators that could be viewed as having a positive effect on keeping at-risk students in school should be implemented if costs and available funding are not prohibitive. The 21<sup>st</sup> Century began with the United States in a financial recession, prompting budgetary restraints while fighting a war on terrorism. Just now in the fall of 2003 is the country starting to recover. Funding for education is under constant review and any unnecessary programs find themselves under increasing scrutiny. With this in mind, this research will examine four questions concerning the high school JROTC programs:

1. Can a high school JROTC program impact dropout rates?
2. Are student transition-to-college rates impacted by JROTC?
3. How much does it cost to operate a JROTC program?
4. What are the perceptions and of high school administrators as to the cost effectiveness and value of the JROTC programs in their schools?

Despite the roadblocks disadvantaged students have to overcome, about 35% of students associated with risk factors (at-risk students) transition to college immediately following graduation from high school. Exactly why some at-risk students make the transition while others dropout of high school and still others become internal dropouts, is unknown. What is known is that certain factors help at-risk students make the transition. Positive factors identified promoting college attendances are better academic preparation, parents who encourage college attendance, and support from their friends and schools (U. S. Department of Education, 2000).

### *Research Questions*

The four areas related to JROTC that this study investigates are stated below as specific research questions.

#### Research Question 1

Do JROTC students have a different dropout rates than do the non-JROTC students in the high schools selected for this study?

#### Research Question 2

Is there a difference in the attendance rate of JROTC students' transition to post secondary schools when compared to the non-JROTC students at the high schools involved in this study?

#### Research Question 3

What are the costs associated with the operation of the JROTC programs in the high schools selected for this study?

#### Research Question 4

Considering the costs versus benefits associated with the operation of a JROTC program, how do the high school administrators (high school principals and the JROTC Senior Army Instructors) evaluate the cost-effectiveness and value of their JROTC programs?

### *Significance of the Study*

This study focuses on one of many volunteer activities available to students. Among the reasons school administrators consider before adopting an additional curricular program is whether the program makes a contribution towards keeping students enrolled and thereby reducing the dropout rate. This study will examine that question in terms of participation in the JROTC programs in selected secondary schools.

How much JROTC programs cost to implement and operate is an important consideration. Competition for funding already established school programs is aggravated by the limiting budget restraints under which many school systems find themselves. The states of Tennessee and North Carolina already have budget deficits to balance for the current budget year

and are searching for additional funding for future years. Funding for education more than likely will continue to face further budgetary scrutiny and restrictions in future years. Establishing the operational costs for the JROTC program at the high schools in this study will provide school administrators and the Army Cadet Command verifiable budget-expenditure estimates should they consider adding JROTC programs to their curricula.

This study proposes to determine the dropout and transition rates for JROTC students compared to the non-JROTC students at the high schools in the study. High school administrators involved in this study may or may not have the correct perception of their JROTC program's impact on these rates. This study will provide statistical information for school administrators, as well as the Army Cadet Command, that indicate the impact of participation in the JROTC programs and school dropout and transition rates at the participating high schools.

The investigation into the operational costs of the JROTC program at each of the host high schools in this study in conjunction with the other analysis (college transition and dropout rates) will be helpful in determining the administrators' perceptions of the cost effectiveness of their programs. These results, besides adding to the research presently available, could be an indication whether to expand or reduce JROTC programs in schools of similar student size and demographics.

#### *Delimitation and Limitations of the Study*

This study includes purposefully selected high schools and school administrators in northeastern Tennessee and northwestern North Carolina. Because the population demographics of these schools may differ from other high schools, the results of this study may not be generalized to other high school populations.

#### *Definition of Terms*

Academic

Term used as the identifier of the principals' group participating in this research study.

At-risk Student

A high school student identified as having one or more of characteristics

believed to be associated with withdrawal from school.

#### Cadet

A student who is enrolled in a ROTC or JROTC program is called a Cadet.

#### Cadet Command

Army headquarters (located in Fort Monroe, Virginia) for the supervision of all ROTC and JROTC programs.

#### College Qualified

A high school student who has taken and passed the required courses for minimal college entrance standards is considered to be college qualified.

#### Cost Share Deducted

JROTC program payroll costs are net of the amount reimbursed by the Army. For example, the host school pays the JROTC instructors and is reimbursed 50%, according to a set payroll amount for rank and years of service. In some cases, the host school pays a higher portion of payroll based on individual contracts with the JROTC instructors.

#### Costs

The use of the term “costs” is meant to include both indirect and direct costs associated with the operation of a JROTC program in a high school.

#### Data Sheet

Shortened name for the JROTC Study Data Requirements form used by the high schools to record the data needed for the study.

#### Department of Defense (DOD)

The Department of Defense is the federal government department that controls all military services.

#### Dropout

A student who withdraws from school prior to graduation or completing a high school program of study.

### Immediate College Enrollment

A high school graduate who enrolls in higher education the first semester after completion of high school is called an immediate college enrollment (also a student who transitions to college).

### JROTC

Junior Reserve Officers Training Corps is a high school extra-curricular program in which students join and participate on a voluntarily basis. Term is also used as the identifier of the Senior Army Instructors' group.

### JROTC Program Cost

JROTC program costs are the total monetary or applied overhead expenditures necessary to operate each high school JROTC unit.

### Non-JROTC Student

A non-JROTC student is a high school student who does not participate in the JROTC program.

### Non-traditional student

A student who enters college several years after high school completion is commonly called a non-traditional student.

### OCS

Officers Candidate School is a 90-day Army training program designed to allow enlisted personnel to become officers and fulfill immediate personnel needs. The officers are often called "90-day wonders."

### PMS&T

The PMS&T is the Professor of Military Science and Tactics and Army officer in charge of a ROTC or JROTC training unit, usually a Major, Lieutenant Colonel, or Colonel. For ROTC units they are active duty officers. For JROTC units they are retired officers.

### Senior Army Instructor (SAI)

The Army instructor in charge of the JROTC program in each high school is referred to as the Senior Army Instructor (SAI). The SAI is usually a retired officer selected by the Army Cadet Command and acceptable to the host high school district.

## SES

SES is an abbreviation indicating a student's socioeconomic status. SES is a factor used in evaluating a student's academic risk. It is believed that the lower the socioeconomic families backgrounds, the more risk there is of academic difficulty and for the student dropping out of school.

## SPSS

Statistical Package of Social Sciences (SPSS) is a computer program used for data analysis at East Tennessee State University.

## Transition to college

Transition is when a high school student immediately enrolls and attends a higher education institution the semester following completing of high school.

### *Organization of This Study*

Chapter 1 began with an introduction to the problems facing high school dropouts. This was followed by background information on JROTC programs and background information on school dropouts and college transition. The next section stated the four research questions this study researched. Sections on the Significance of the Study, Delimitation and Limitations, Definition of Terms, and the Organization of the Study conclude the chapter.

Chapter 2 is made up of three sections and begins with a review of the history of JROTC and early in the twentieth century literature. There have been two major legislative expansions or changes in the JROTC program since WWI. The first occurred in 1964 and the second in 1991 (Flowers, 2001). These expansions and relevant legislations will be reviewed as well as the prevailing thoughts and studies relevant to the two eras.

The second section of chapter 2 includes a review of the literature on school dropouts. This review will focus on the literature that relates to this study and how it corresponds to the JROTC programs in the demographic area covered by the high schools involved in this study.

The next section will include a review of the demographics and literature on college transitions and projected transitions for the coming years. The final section will be a summary of the Review of Literature Chapter.

Chapter 3 is an explanation of the research methodology used in this study. Data gathering, statistical procedures, populations, instrument, and interviews used in the study and null hypotheses based on the research questions are presented. Both quantitative and qualitative methodology was used in this study.

Chapter 4 describes the findings and analysis of the collected data. Each instrument used in this study is explained and the analysis of the data is presented. The participants' JROTC Questionnaire results are listed and discussed using bar graphs to clearly define the mean answers of the principals and senior Army instructors. The participants' semi-structured interviews that followed the questionnaires are analyzed in the same order as listed in the Interview Protocol.

Chapter 5 describes the conclusions, inferences and recommendations resulting from this research.

## Chapter 2

### REVIEW OF LITERATURE

The Junior Reserve Officer's Training Corps (JROTC) may have been a proper name for the training program begun in 1916, but today the name is a misnomer. The JROTC program does not develop Army reserve officers, nor is it a military training corps. Students are not obligated to serve in the military and they are not part of any operational organization beyond their enrollment in the high school JROTC. The prefix "Junior" does not designate a subordinate position to anything except perhaps as an introduction to military regimentation and military history. The name is merely indicative of an association with a military training program begun decades ago and no longer relevant.

#### *JROTC*

JROTC traces its beginnings to 1827 when Captain Alden Partridge, a former superintendent of the U.S. Military Academy at West Point, opened a military preparatory school in Norwich, Vermont. Partridge believed in the citizen-soldier ideal and wanted to prepare young men for higher education and possible military careers (Coulme & Harford, 1996).

The present JROTC and ROTC programs evolved from a time when military service for many American males was compulsory and the world was much different. The evolution has gone through several stages. First there were the personnel demands brought about by the events of World War I (WWI). Next there were the critical events brought about by the depression following the stock market crash of 1929 and World War II (WWII). The civil rights legislation of 1964 and the ROTC Revitalization Act of 1964 provided the impetus for the next expansion. The JROTC expansion program of the 1990s was set in motion by President George H. W. Bush and supported by his Chairman of the Joint Chiefs of Staff, General Colin Powell.

WWI was already in process in Europe when the National Defense Act of 1916 was introduced. The professional army of the United States of America (USA) of that time was limited by its size and the primary purpose of establishing the SROTC and JROTC programs was to train male students for military service. By 1918, just prior to the USA becoming involved in



WWI, most of the participants in the ROTC programs were still in the early part of their training program (Lutz, 1995).

Because it took several years for a student to process through the ROTC training process, officers' training camps were established for selected army personnel. This training camp program, which would later be known as Officers' Candidate School (OCS), lasted three months (Collins, 1986; Matloff, 1969). After a brief suspension of the ROTC program in 1918, the program was reestablished in 1919 with a renewed vigor (Matloff). There were many debates as to the validity of JROTC and only 30 JROTC programs were established from 1916-1919 (Coumbe & Harford, 1996).

Approximately 90,000 Reserve Officers were called up for service during WWI (Collins, 1986). The Reserve Officers who were called to duty preformed satisfactory (Clifford, 1987; Collins; Lyons & Masland, 1959). After the war, the need for military personnel diminished, as did the need for Reserve officers (Coumbe & Harford, 1996).

In 1925 there were 63 high school JROTC programs in the entire nation. Not everyone at that time was in favor of the military training in educational settings and the debate for and against JROTC programs was the subject of many magazine and newspaper articles. The sociopolitical discussions of 1925 are still prevalent today. Then as now, these debates included racial and socioeconomically disadvantaged youth. Now however, the discussions are about high school students being militarized for the benefit of the current all-volunteer Military (Bartlett & Lutz, 1998).

Determined not to be unprepared for future national emergencies, the National Defense Act of 1920 authorized the War Department to train the National Guard and Organized Reserves. This legislation resulted in additional regular Army officers being assigned to ROTC duty as instructors in secondary and higher education (Lyons & Masland, 1958).

In the years that followed WWI, civilian components of the military were expanded to provide reserve personnel should another national emergency occur. The expansion of the military reserve component was not without opposition. Pacifists and educational liberals

established the Committee on Militarism on Education, which was supported by John Dewey and opposed military training in secondary and higher education schools. (Lyons & Masland, 1959). This opposition resulted in some universities dropping their ROTC programs (Pollard, 1962).

The Great Depression of the 1930s era restricted funding for military training and the size of the regular army was again diminished. Despite funding restrictions, the total number of JROTC units nationwide remained consistent, although the number of students enrolled in JROTC diminished (Coumbe & Harford, 1996).

World War II brought urgent personnel expansion needs and the SROTC was thought to take too long for immediate needs for junior grade officers. The advanced course of the SROTC program was suspended in favor of Officers Candidate School (OCS), but the basic course was retained (Lyons & Masland, 1959). College students enrolled in SROTC their freshman year. SROTC was divided into two courses of study. The first two years were called the basic course and the second two years were called the advanced course. Those students wishing to continue with ROTC after the two year basic course must sign a contract with the Army obligating them to reserve military status upon graduation and receiving their commissions (Collins, 1986).

OCS was to provide the bulk of junior grade officers needed for the WWII war effort. The Selective Service Act of 1940 commonly referred to as the "Draft" enlisted large quantities of men. OCS provided an opportunity for enlisted men to become officers. OCS also allowed SROTC students who had completed the basic course to obtain their commissions (Palmer, Wiley, & Keast, 1948).

After WWII there were no new JROTC units begun in public high schools until the ROTC Vitalization Act of 1964 (Harford, 1992). This does not mean that there was no interest in the program. More than 500 high schools across the USA applied for the JROTC program for their schools and were turned down. In 1962, just prior to the passing of the ROTC Vitalization Act of 1964, there were 295 active high school JROTC units with 60,766 students (Coumbe & Harford, 1996).

America was becoming involved in the Vietnam War in 1962, and the Secretary of Defense, Robert S. McNamara, proposed eliminating the JROTC as a cost saving (Coumbe & Harford, 1996). As a result of the proposed elimination of the JROTC, the Department of Defense received about 500 letters and telegrams from elected officials against the proposed suspension of the JROTC (Harford, 1992).

Because the DOD was the only voice against the JROTC, the DOD “agreed to conduct a study of the JROTC/NDCC programs nation-wide to determine the benefit to the nation” (Harford, 1992). The result of the study was an expansion, not the retraction proposed by McNamara, of the JROTC program, and the passage of the ROTC Revitalization Act of 1964.

The ROTC Revitalization Act of 1964 provided several new opportunities for JROTC students. Women were permitted, for the first time, to join the JROTC programs. Each service branch (Army, Air Force, Navy, Marines, and Coast Guard) would be responsible to establish and maintain JROTC programs. JROTC units were to be equitably distributed through out the nation (Johnson, 1999).

Department of Defense regulations state the parameters for a high school to qualify for the establishment of a JROTC unit. As stated by Johnson (1999) the minimum qualifications are:

1. The school must have a minimum of 100 students’ eligible to enter the program;
2. The school must provide adequate facilities for classrooms, equipment storage, and drill areas; and
3. The school is to provide, at a minimum, a three-year course of instruction (p. 5).

Once a program is established, the program costs are to be shared between the host high school and the Department of Defense or branch of military service. The branch of military service is then “obligated to provide the necessary personnel, texts, equipment, uniforms and performance standards for their respective organizations” (Johnson, 1999).

Department of Defense Directive 1205.13 (1968) stated that the goals of the JROTC were (Johnson, 1999):

1. Develop informed and responsible citizens;
2. Strengthen character;
3. Promote an understanding of the basic elements and requirements for national security;
4. Help form habits of self-discipline;
5. Develop respect for and understanding of the need for the constituted authority in a democratic society; and
6. Develop an interest in the military as a possible career (p. 5).

As a result of the ROTC Revitalization Act of 1964, the JROTC expanded across the USA with JROTC units in all branches of the military service. The number of high school JROTC programs in operation by 1968 exceeded 1200 with more than 250,000 participants (Johnson, 1999).

By 1991, Army JROTC programs could be found in the United States, Puerto Rico, American Samoa, United States Virgin Islands, Commonwealth of the Northern Marinas Islands, Department of Defense Schools in Germany, Panama, Korea, and Japan (Rivas, 1995). The third expansion of the JROTC in the 1990s came about through the efforts and directives of two individuals, President George H. W. Bush and General Colin Powell (Flowers, 1999).

The Leadership and Training manual provided first-year JROTC students listed the mission of the JROTC as: “The mission of the JROTC is to motivate young people to be better citizens” (Department of the Army, 1997). The manual states that the first year classes are organized into nine units. These units are:

1. The Spirit of American Citizenship and the Army JROTC;
2. Communication and Behavior;
3. Leadership;
4. Cadet Challenge;
5. Leadership Lab;
6. First Aid and Your Health;
7. Map Reading;
8. Overview of American Citizenship through American History; and
9. Your American Citizenship (p. 2).

It is inferred from the nine units for the first year of classes that JROTC concentrates the first year on Citizenship, Leadership, Health, and History.

### *Dropouts*

The personal and social costs of dropping out of high school are high. Alexander, Entwisle & Kabbani (2001) reported, “About half of all welfare recipients and half the prison population lack high school degrees (p. 760).” A high school student does not wake up one morning and decide to drop out. The dropout decision is the result of a long-term process whereby the student slowly loses interest and disengages from school (Alexander et al.). Toby (1999) referred to the disengagement process as high school students first becoming internal drops out. Toby’s research implied that many students merely marked time by staying enrolled would not have anything better to do if they withdrew from school.

Most people do not know that the term “dropout” comes from the military. Both the military and education are social institutions and both provide educational opportunities to their participants (Dorn & Johanningmeier, 1999).

Researchers have studied the dropout problem with increasing fervor since the 1950s.

Allen (1956) identified four characteristics that dropouts tended to have in common:

1. Dropouts were unsuccessful in their schoolwork;
2. Most dropouts took little or no part in school activities;
3. Most dropouts placed a low value on schooling; and
4. Most dropouts were from low-income families and had difficulty in meeting school costs.

The Census of 1940 indicated that fewer than 50 % of USA natives between 20 and 24 years of age had received a high school diploma. In the decades since, the percentage of 20 to 24 age USA natives with high school diplomas has grown to over 84 % (Dorn, 1996). Most research has concentrated on the characteristics of dropout students and their families (Kaufman, McMillen, & Sweet, 1996). Other researchers have investigated school policies and structure (Fine, 1991).

The dropout problem is one of the issues that prompted the study portrayed in *A Nation at Risk* (1983). The report alarmed the public and educators alike by inferring that the USA educational system was mediocre. The 1983 report described about 23 million Americans as being “functionally illiterate.”

Alexander, et al. (2001), in a study of high school completion rates prior to the publication of *A Nation at Risk* in 1983, stated that:

Between 1972 and 1983 high school completion among 18-24 year-olds averaged around 83.5%, with annual figures varying by less than 1%. Since then, the average has been around 85.5%, again varying little year-to-year. Progress toward the national goal of 90% high school completion thus has been painfully slow, with no progress registered during the decade of the 1990s. And the distance yet to be traveled is greater for some segments of the population than for others. In central cities, for example, the rate of high school completion for 16-24 year-olds (a slightly different frame of reference) averaged 84.7%

from 1990 through 1996 versus 90.3% in the suburbs and 88.5% outside metropolitan areas (p. 761).

The positive trend in high school graduation rates that occurred during the 1950-1990 period appears to have now stabilized at approximately 85-90% nationally. There are differences among racial ethnicity, among school systems, among states, and among rural/city classifications. Research indicates that minorities have dropout rates that are higher than whites. In 1997, the dropout rate nationally for blacks was 13.4% compared to 7.6% for whites (Kaufman et al., 1996).

Dropouts tend to have certain common characteristics. Kronick and Harges (1990) listed 10 characteristics found during interviews with incarcerated males involved in the Community Alternatives to Prison Project in Knoxville, TN. The typical male inmate was white, 25 years of age, and an alcoholic or drug user, had quit school after the ninth grade, and was reading at the third-grade level. The 10 characteristics in descending order of importance were:

1. Academic ability - poor grades and standardized testing
2. Age - 2 years older than grade peer group
3. Socioeconomic - money matters and not having it raises dropout risk
4. Race - minority's dropout more than whites
5. Gender - male dropout more than females
6. Family background of not finishing high school
7. Locus of control - feeling destined to drop out
8. School social status - not being involved in school activities
9. Peer Group - being part of the truancy and dropout group
10. Self Concept – A low self-esteem and self-confidence (p. 65)

School administrators could find the characteristic list useful in discussions with students giving reasons and what to be aware of not to dropout.

Alexander et al. (2001) presented a socio-demographic profile from what they called “a life course perspective.” The life course perspective builds upon a student disenfranchisement theory that dropouts do not make the decision to dropout suddenly but over time. Table 1 on page 33 exhibits the thought process that Alexander et al. developed for their explanation of the dropout process. Table 1 contains six columns with each column representing the progression or phase a student goes through. The first phase begins the life course perspective with the pre-school family characteristics and background. The second phase is the first grade and the results of the student’s first year’s experiences. The third phase covers the balance of the elementary school years of grade 2-5. The fourth phase is middle school grades 6-8. The fifth phase is the first year of high school grade 9. The sixth and final phase in the dropout process occurs in high school with the decision to dropout or not.

The next section of Table 1 lists the factors each student encounters in each phase of the process. Column 1 represents factors a student encounters in the first grade that can have a positive or negative effect on the student’s life course perspective (School Performance, Grade Retention, Track-Like Placements, Parent Attitudes, the student’s Personal Resources, the Student’s Behaviors and Attitudes). Columns 3, 4, and 5 reflect the student’s continued life course perspective by illustrating the same factors for the elementary school years (grades 2-5), middle school (grades 6-8) and early high school (grade 9). Column 6 represents the student’s decision on whether to dropout out or not.

The factors presented by Alexander et al (2001) associated with a student’s decision to dropout are considered background risks by other researchers. The impact “is determined by how



they intersect in children's lives, and their intersection varies by SES level" (Alexander et al). Alexander et al found that dropout risk moderated when family circumstances were favorable. Examples of family circumstances are: a two-parent home (in the 1<sup>st</sup> grade); parents who defer having their child until they are in their 20s; and, no stressful changes when the child is in the 1st grade. Lower socioeconomic level (SES) was found to be associated with more risk of a student's dropping out.

School performance examines academic risk factors such as report cards, educational track placements low-level courses in middle and high school, Special Education services, and not preparing to advance to higher education after high school. Finn (1989) referred to a child's response to negative academics feedback as discomfoting and likely to result in the student disengaging from school. Standardized tests are also relevant to negative academic feedback and contribute to low academic standing within a school hierarchy (Alexander et al., 2001).

Wehlage, Rutter, Smith, Lesko, and Fernandez (1989) did a cost/benefit analysis based on dropout trends in Texas as applied to ninth graders in 1986 and found that an estimated 86,000 students dropped out in Texas that year. They estimated lifetime loss of wages and tax revenues due to unemployment would be 17.5 billion.

The prevention cost to intervene and alter the dropout decisions of the ninth graders was estimated to be \$1.9 billion. The economic benefit of dropout prevention was estimated at \$15.6 billion.

Wehlage et al. (1989) concluded that school dropouts impacted social welfare, unemployment compensation, and crime and prison costs and estimated that the tax revenue

Table 1

Phases Towards High School Completion in Life Course Perspective

Phase: 1	2	3	4	5	6
Personal and Family Background Characteristic	First Grade	Elementary Years After First Grade Grades 2 –5	Middle School Grades 6 – 8	Early High School Grade 9	High School DROPOUT

Factors Influencing Dropout Decisions During Each Phase of a Student’s Development

Phase: 1	2	3	4	5	6
Family SES	<u>School Experiences</u>	<u>School Experiences</u>	<u>School Experiences</u>	<u>School Experiences</u>	Dropout Decision = Yes or No
Race	School Performance	School Performance	School Performance	School Performance	
Sex	Track-like Placements	Grade Retention	Grade Retention	Grade Retention	
Stressful Family Change	Parent Attitudes	Track-like Placements	Track-like Placements	Track-like Placements	
Mother’s Age	Personal Resources	Parent Attitudes	Parent Attitudes	Parent Attitudes	
Mother Employed	Pupil Behaviors	Personal Recourses	Personal Recourses	Personal Recourses	
Family Type	Pupil Attitudes	Pupil Behavior	Pupil Behavior	Pupil Behavior	
		Pupil Attitudes	Pupil Attitudes	Pupil Attitudes	

collected from intervention for the ninth graders after high school graduation would recapture the \$1.9 billion prevention costs in a matter of years.

The computation of dropout rates is expressed as a ratio of the incidence of something happening over time and is written as:  $n/d=rate$ , where  $n$  represents the number of dropouts, and  $d$  represents the total number of possible dropouts in the population or pool of students. In order to standardize the ratio, three practices must be consistent - the definition of the dropout rate, the time frame considered, and the base population (Noteririllo, 1987). According to Kronick and Harges (1990), poor school attendance has been found to be a good predictor of students that drop out. Students who become truant not only miss out on classroom work but also are in violation of the law. Not being in class leads to not doing assigned class work or homework and results in poor academic performance. Poor academic performance in turn leads to the likelihood of dropping out.

Schools have searched for years for answers to the problem of school absenteeism. Gough (1999) studied students who had overslept and missed school, finding that some school districts had become so frustrated as to provide students with new watches with built-in alarms. Still other school districts have changed the times that students report to school to avoid the oversleeping problem. Gough found this provided a temporary solution and did not work in the long run. Nearly 40% of high school seniors worked more than 20 hours a week in 1999. Their work schedules, sometimes late at night, may have had a negative effect on school attendance and personal health. Gough predicted no quick fixes to the sleepy student syndrome.

### *College Transition*

Epstein (1992) studied 20 students who had dropped out of high school then returned, graduated, and subsequently had gone on the college. The students were interviewed in depth regarding why they had dropped out, why they had returned to school, and why they had decided to advance to higher education. Concerning decisions to drop out, Epstein found that negative teacher-student relationships and daily interactions inside the school had both intensive and negative effects on the students studied. These were major factors on the decision to drop out. When these same students returned to school, the teacher-student relationships in the form of mentoring was used to foster a positive influence and thus became a major factor in decisions to remaining school, graduate, and advance their education by attending college.

Immediate college enrollment after high school graduation (transition-to-college) was 49% in 1972. The percentage had increased to 69% in 1998. Since 1984, Blacks have been transitioning at an increasing rate (from 40% to 62%). Studies have shown that the higher the family income, the more likely a high school graduate is to transition to college (U. S. Department of Education, 2000).

Academic qualifications have also been a good predictor of transition to college. Lower SES has not been a deterrent to matriculation where the students were college qualified and had taken the additional steps of taking college admission tests and submitted college applications (U. S. Department of Education, 2000).

Griffin (2002) investigated whether black and Hispanic students placed less importance on academic achievement than did white and Asian students. His finding indicated that blacks and Hispanics appeared to place less importance on academic achievement when considering dropping out of school.

### *JROTC Program Costs*

As previously stated, JROTC program costs are shared by the Department of the Defense via the Army Cadet Command and the host high school or host school system. These expenditures involve payment to the military instructors, equipment and uniforms for the cadets, classroom space at the high school, books and academic materials, telephone and other school overhead directly related to the JROTC program. How and what the Army is to pay is delineated in Army Regulations. What the host high school is to pay can be defined as whatever part of the JROTC program costs that the Army does not pay.

It is assumed that the biggest expenditure in operating the JROTC program will be payroll costs. Instructors for the JROTC programs come from retired military personnel who typically receive in retirement, 50% to 75% of their active-duty pay. Personnel selected to be JROTC instructors at high schools receive the same pay as if they were on active duty. The difference in their retirement pay and active duty pay is borne jointly by the host school and the Army Cadet Command. The Army, based on each individual's rank and length of service, standardizes the amount the instructor is paid and the instructor cannot receive less than that amount. Individual instructors can negotiate for additional pay above the standard amount if agreed by the host school and the individual (Appendix E, 2003). For example, let us assume an active duty Lieutenant Colonel (LTC) receives \$5,000 in salary per month. In retirement this same hypothetical LTC receives \$3,500 in retirement pension. The difference of \$1,500 is made up between the Army and the host school. Also, a hypothetical enlisted non-commissioned officer (Master Sergeant) in retirement receives \$2,400 in retirement pay, versus \$3,800 if on active-duty. The difference is \$1,200. The school pays the instructors and is reimbursed one-half of the expenditure by the Army.

### *Dissertations on JROTC*

JROTC has been the focus of other dissertations. Bachman (1994) analyzed the effects of JROTC or non-JROTC participation on leadership behavior and self-esteem among juniors at three public high schools in California. He found that the mean scores of the leadership behavior and self-esteem variables were significantly higher for the JROTC students at the .05 confidence level.

Flowers (1999) examined leadership behavior, self-esteem, school attendance, and out-of-school suspensions at three high schools, comparing the sophomore JROTC and non-JROTC students. He found statistically significant differences favoring the JROTC group on the leadership and school attendance variables at the .05 confidence level. Flowers found the means for self-esteem and out-of-school suspensions not statistically significant at the .05 confidence level, although the means were higher for the JROTC group. Flowers examined the relationship of grade point average (GPA) on the one hand, and leadership, self-esteem, and average daily attendance, finding significant relationships between the variables.

Rivas (1995) investigated self-esteem and learning skill development in JROTC students at two levels in the JROTC program attending four high schools in Illinois and Michigan. Rivas found that JROTC was increasing student's self-esteem but the learning skill results were mixed. The research indicated that there was no gender bias among the population studied.

Johnson (1999) researched two demographically equivalent samples of 408 high school seniors (JROTC and non-JROTC) from the High School and Beyond data-set. Johnson's findings suggested that the JROTC student population in the study was more likely to come from lower SES levels, was over-represented by African-Americans, and under-represented by women relative to their proportion of the population. The JROTC group was found to have higher levels

of self-confidence and self-esteem, to take more difficult programs of study, to have higher aspirations, and to have been better prepared for higher education. Johnson (1999) concluded that:

The study's most significant finding is that JROTC programs provide an organizational framework and structure that have the ability to indirectly influence the behavior and academic performance of lower SES students. Performance comparisons of lower SES JROTC and non-JROTC students found that JROTC did not significantly influence students' cognitive abilities as measured by students' standardized test scores, typical grades, and in several measures of behavior. But these comparisons did suggest that JROTC influences other student behavior and educational activities in a very positive manner. In particular, there were significant differences of lower SES JROTC students' academic behavior, academic achievement, and post-secondary educational plans (abstract section).

Not all JROTC programs have stood the test of time. Dohle (2001) analyzed the terminated JROTC program at Christian Brothers College High School (CBC) and the successful Cleveland Junior Naval Academy. Dohle found that the decline and fall of the JROTC at CBC concerned who were enrolled (predominately white males) and a move away from the military mission by the negative faculty. Meanwhile, the rise and success of the Cleveland Junior Naval Academy coincided with the renewed national interest in JROTC (NJROTC at Cleveland) and a positive administrative support.

Bogden (1984) studied the perceived value of JROTC at two high schools. One was an Air Force JROTC program and the other a Marine Corps JROTC program. During the study semi-structured interviews were conducted followed by the participant administrators being given a survey to rank their perceived program values for the JROTC. It was suggested from the analysis of the interviews and surveys that the JROTC programs studied had changing goals and poorly defined processes when the type of student was considered and the inclination of the instructors.

Harrill (1984) did a study to determine the attitudes of high school principals toward the

official objectives of Army JROTC and their beliefs about other aspects of the program. As stated in Harrill's dissertation abstract:

The results indicated that principals were in agreement with all the Army objectives as both ideals and current practices at their schools. The principals also indicated a favorable attitude toward the other various aspects of the program and identified the following specific benefits of Army JROTC participation: development of self-discipline, improvement of self-concept, provision of a source of identification, growth of patriotism and leadership ability; furthermore, JROTC serves the community by acting as a bridge between the school and community.

Hargrove (2001) studied the effects of an exploratory career curriculum for a 10-week period for implications on their maturity concerning the transition from school-to-work. No difference was found between the groups participating in the study.

Perusse (1997) studied the perceptions of school counselors towards JROTC in Virginia public schools. The results indicated that the counselors were knowledgeable about JROTC. It was also found that counselors used certain identifiers to identify students for whom they thought JROTC appropriate as an elective.

Roberts (1991) compared JROTC students to non-JROTC students for differences in leadership, citizenship, and self-reliance. The findings indicated that the JROTC students who had completed four years of Army JROTC scored higher on the three survey tests than did the non-JROTC students.

### *Summary*

JROTC has not always been popular with everyone and all cultural aspects of the nation. Supporters thus far have been able to win the continued support of Congress and funding for the JROTC programs. History indicates that two major expansions of the JROTC have occurred, one by legislation in 1964, and the other in 1992 by presidential leadership. Budgetary restraints and fiscal accountability indicate that future funding may restrict or retract JROTC programs unless



school administrators can provide evidence of the cost effectiveness and value of the program.

One of the main problems facing school districts continues to be the disenchantment and disengagement from school by school age youth. Studies have shown that up to 40% of high school students are internal dropouts and remain in school solely because they have nothing else to do (Toby, 1999).

## Chapter 3

### RESEARCH METHODOLOGY

#### *Restatement of the Problem*

Determining the cost-effectiveness of a JROTC program in any high school is difficult because an analysis of the social benefits derived from impacting the dropout rates and the high school graduates transitioning to college can be estimated only in terms of what goals are set for the JROTC programs.

Accountants use a cost-benefit analysis as a technique for determining potential social benefits in budgeting projections (Finkler, 2000). Miskell (1995) defined cost-benefit analysis as

...An analytical technique that compares social costs and benefits of proposed programs or policy actions. All losses and gains experienced by society are included and measured in dollar terms. The net benefits created by an action are calculated by subtracting the losses incurred by some sectors of society from the gains that accrue to others (p. 559).

Although some dollar costs of the JROTC can be determined, many positive factors associated with JROTC are assumed or philosophically projected. Certain social factors are known. For example, analysis of studies indicates that high school dropouts have been finding it more difficult to find work because our country has come to rely more and more on highly skilled and highly credentialed labor. Also, it has been documented that the earnings of high school dropout workers are much less than those of high school diploma holders (Alexander et al., 2001).

The stated national goal for high schools is to achieve a graduation rate of 90%. After the publication of *A Nation at Risk* in 1983, the national graduation rate improved to approximately 85 %, where it has stagnated. Meanwhile, the graduation rates for minorities are lower than those recorded for white students (Alexander et al., 2001).

The purpose of this study is to investigate the beliefs or perceptions of school administrators regarding the value and cost effectiveness of student participation in high school JROTC programs in two areas: dropout rates and student transition to higher education.

Cost-effectiveness analysis and cost-benefit analysis is different. Where cost-benefit analysis concerns itself with dollar differences, cost-effectiveness analysis is concerned with whether or not an organization is spending more on a program than it is worth – worth being defined in terms of dollars and intrinsic values (Finkler, 2001). There are perhaps-certain intrinsic values in the JROTC that cannot be stated in dollar terms.

There were two sources or types of data collected for this study. The first was quantitative archival data collected from each of the high schools on student dropout statistics, transition to college statistics, student demographics, and the dollar costs associated with the operation of the JROTC programs. The second source consisted of a survey questionnaire and interviews obtained from each high school principal and senior Army instructor. The data flow was then applied to the related research question for analysis. The analysis was then applied to the appropriate hypotheses.

Table 2 on page 45 provides a visual description of the research design and data collection flow.

### *Research Questions and Hypotheses*

Research Question 1: Do JROTC students in the high schools involved in this study have a different dropout rate from the non-JROTC students?

Hypothesis 1: There is no difference in dropout rates based on students who participate in JROTC and students who do not participate in JROTC at the high schools participating in the study.

Research Question 2: Is there a difference in the transition rate of JROTC students compared to non-JROTC students at the high schools participating in this study?

Hypothesis 2: There is no difference in the transition rate of JROTC students and the transition rate of non-JROTC students at the high schools participating in this study.

Research Question 3: What are the costs associated with the operation of the JROTC programs in the high schools involved in this study, and how much of the total cost is borne by the host school system?

Hypothesis 3: There is no difference in the costs of operating the JROTC programs at the high schools participating in this study.

Hypothesis 4: There is no difference in the per-student JROTC costs at the high schools participating in this study.

Hypothesis 5: There is no difference in the portion of cost shared by the host high school and the Army Cadet Command at each high school participating in this study.

Research Question 4: Considering the costs versus benefits associated with the operation of a high school JROTC program, what are the perceptions of high school administrators regarding the cost-effectiveness of the JROTC programs in their high schools?

Hypothesis 6: There are no differences in the perceptions of the JROTC senior Army instructors and the principals concerning the cost effectiveness of JROTC at the high schools in the study.

Hypothesis 7: There are no differences in the perceptions of the senior Army instructors and the high school principals concerning the cost effectiveness of JROTC impacting dropout rates at the high schools participating in this study.

Hypothesis 8: There are no differences in the perceptions of high school principals and senior Army instructors concerning the cost effectiveness of JROTC

impacting the transition-to-college rates of JROTC and non-JROTC students.

#### *Geographic Location of Study Population*

One high school in northeastern Tennessee and two high schools in northwestern North Carolina were purposely selected because they have Army JROTC programs at their schools. The purposeful sample selection of the high schools was also chosen because of their geographic proximity to East Tennessee State University (ETSU).

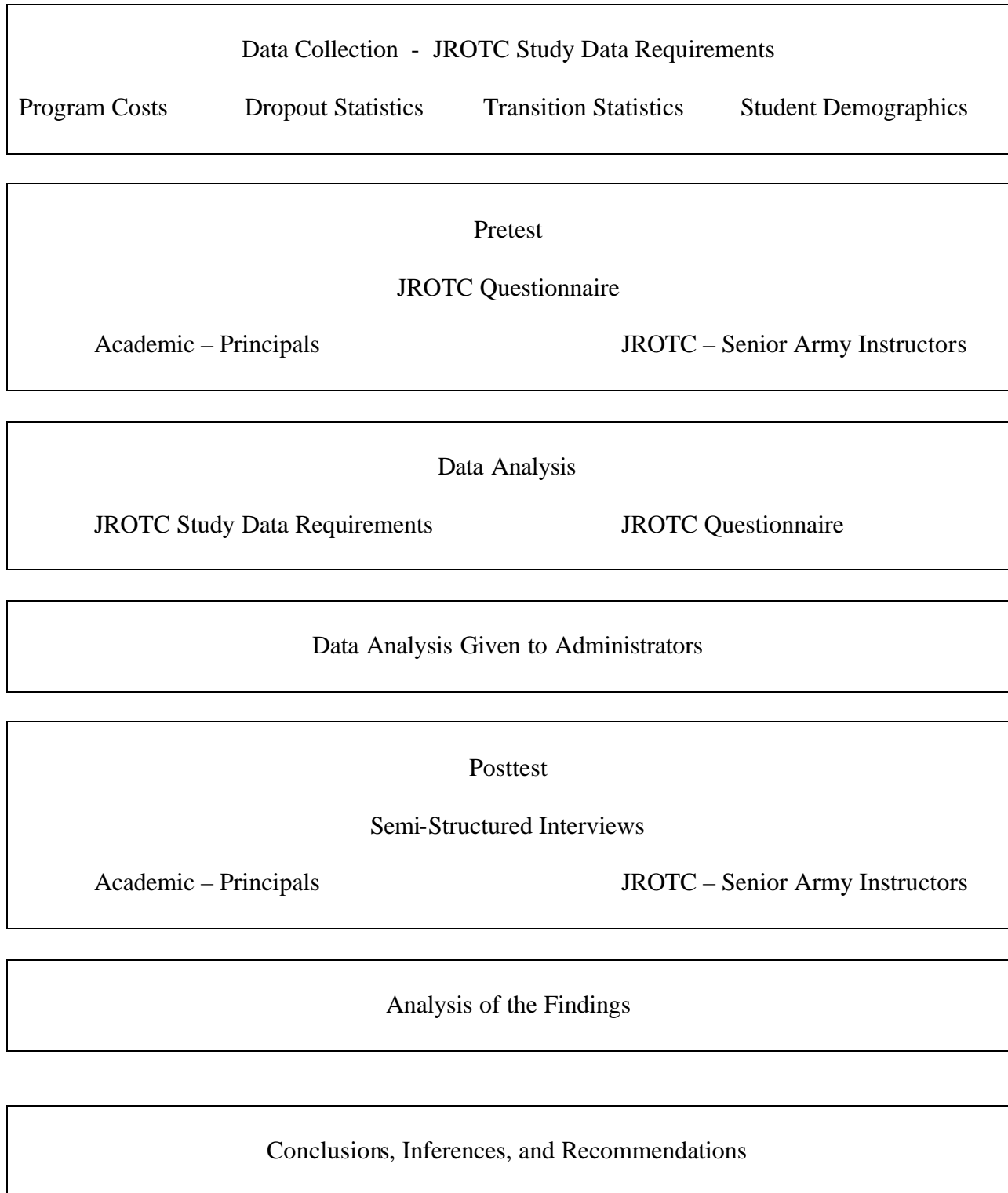
#### *Participants and Population*

The focuses of the study were the perceptions and expressed beliefs of the high school principals and senior Army instructors of the high schools participating in the study.

The high school principals and the senior Army instructors were asked to evaluate the recent cohort of students that entered high school in the fall of 1998 (year 1) and graduated at the 2002 school year end (year 4). The entire cohort of each of the high schools was used for the study and as such will be the population. It was estimated that the high schools would have a total student enrollment of approximately 3,000. The number of JROTC participants at the schools was expected to be approximately 350. The number of students in the high school population graduating in the 2002 cohort was estimated to be 900, with approximately 50 JROTC participating students. For statistical analysis, the students will be divided into two groups: the JROTC students and the non-JROTC students.

Table 2

Research Design and Data Flow



### *Research Instrumentation*

Three instruments were used to collect the data for analysis at East Tennessee State University (ETSU) and for the interviews of the participants. The first instrument used was the JROTC Study Data Requirements (Appendix C) and on which each high school entered numerical information on program costs, dropout rates, transition-to-college rates, and student demographics. The second instrument used was the JROTC Questionnaire (Appendix A).

The JROTC Questionnaire is a 30-question survey that was given all administrators after they had completed and returned their Informed Consent Document required by the Institutional Review Board at ETSU.

The third instrument used was an Interview Protocol (Appendix B). It was used as a guide in the semi-structured interviews of the participants. The participants were tape-recorded during the interviews and were later given an opportunity to proof read their transcriptions.

Research Question 1 investigated dropout statistics from the high schools. Archival data was collected from each of the high schools via the JROTC Study Data Requirements (Data Sheet) and then analyzed using quantitative procedures. Detailed instructions were given all administrators on how to report their school's data. The data reported by the schools were accepted at face value as no other conformation was made as to the validity.

Research Question 2 investigated student transition to college after high school. The transition statistics were collected from each high school via the Data Sheet and then analyzed using quantitative procedures.

Research Question 3 investigated the dollar costs incurred in the operation of the JROTC programs. The schools provided the data on their JROTC program costs on the Data Sheet.

Research Question 4 investigated the perceptions of the JROTC senior Army instructors

and the high school principals regarding the cost effectiveness of their programs. Two instruments were used to evaluate the administrator's perceptions. This provided a pretest posttest scenario: first, the JROTC Questionnaire and then, the Interview Protocol for the semi-structured interview. The results were analyzed and compared for consistency and discovery of common themes.

The JROTC Questionnaire (Appendix A) contained 30 questions. The purpose of the JROTC Questionnaire was to gauge the perceptions of the administrators' prior to their having been informed of any statistical analysis of data derived from their schools. Later, the semi-structured interview was conducted with the administrators after they had been informed of the statistical analysis in a report titled JROTC Survey and Data Analysis Report (Appendix D).

The interview presented 8 questions pertaining to the JROTC Questionnaire and the JROTC Survey and Data Analysis Report. The open-ended form of questions was intended to elicit additional information from the high school principals and the senior Army instructors and to allow for the administrators to change, confirm, or explain their perceptions. According to Gall, Borg, & Gall (1996) this approach can provide "reasonably standard data across respondents, but at a greater depth than can be obtained from a structured interview."

Both instruments, the JROTC Questionnaire and the Interview Protocol, were designed to investigate the school administrators' attitudes towards program costs, program cost-effectiveness, per-student costs, evaluation factors, effectiveness towards impacting the dropout and transition rates, and overall perceptions concerning the value and maintenance of the JROTC program at their schools.

Data collection from the survey was obtained in a Likert-type scale. The Likert-type scale provided five possible answers ranging from "strongly agree" to "strongly disagree." In the



interviews, the administrators were given ample time to explain their answers. The interviews averaged 30-60 minutes each. Gall et al (1996) stated that interviews and questionnaires were forms of measurement that must meet the same standards of validity and reliability that apply to other data-collection measures in educational research.

The validity and consistency of the instruments used in this study were pretested in a pilot survey at two high schools that have JROTC programs but were not part of the purposely-selected schools participating in the study.

#### *Participant Releases*

Permission was obtained from the host school systems prior to contacting any of the high schools and the administrators that participated in the study. Permission was also obtained from the Army Cadet Command and high school principals prior to contacting any senior Army instructors. Several schools first selected rejected or disallowed the research to take place in their schools for various reasons. Several other high schools had to be withdrawn from the study when participants left their schools to take positions in schools not associated with this study.

No student or school in the study is identified by name or identification number. Only total data on students were provided by the high schools involved in the study. Archival data provided the statistical information and no student was personally involved or contacted; therefore, student participant releases and informed consent documents were not needed.

Informed Consent documents were required from the administrators who were surveyed and interviewed. All necessary ETSU Institutional Review Board (IRB) requirements were met.

#### *Data Collection*

The research design was segmented to relate to each of the research questions, corresponding null hypotheses, and statistical procedures. Archival data were collected from the

high schools for the number of cohort dropouts, for those students who enrolled in college following completion of the 2002 high school year, and for the JROTC program costs. Data collection consisted of:

1. Beginning cohort totals from year 1 for JROTC and non-JROTC students were compared to the students who graduated in year 4. The difference was the dropout number. There were necessary adjustments for transfers to other schools, deaths, or allowable official withdrawals such as for medical reasons or home study. Those JROTC students who withdrew from the program but stayed in school were to be deleted from both groups.
2. Data were collected for those students who transitioned to higher education after graduation for both groups were compared to those who did not transition.
3. Archival data on program costs and accounting detail both direct and applied were collected from the selected high schools. The costs attributed to operating the JROTC program included instructor payroll and payroll/benefit costs, materials and equipment, books, and the school's applied overhead. Cost comparisons were developed for each of the high schools for the total costs per school. Using enrollment numbers and total costs, average cost per student was determined.
4. Upon completion of the data collection and analysis, interviews were conducted with each of the school administrators. The JROTC Questionnaire and then the interview using the Interview Protocol document provided a pretest posttest scenario of the administrators' perceptions on of their JROTC programs. The data analysis was provided to the interviewees for their interpretation prior to the interviews.

### *Data Analysis*

The main focus of this study was to investigate the perceptions of high school administrators on the value of and cost effectiveness of JROTC as related to dropout and transition rates for JROTC and non-JROTC students at the selected high schools. Of additional concern was how the programs maintained their student population and integrity of their programs.

The Likert-type scale used in the survey document was analyzed using the Statistical Package of Social Sciences (SPSS) program's crosstabs analysis to determine the mean score of each question and for each type of administrator: Academic for the principals and JROTC for the senior Army instructors (Appendix B). Program costs were recorded on the Data Sheet, averaged, and then compared for total and per-student costs.

Student dropout and transition numbers were reported on the Data Sheet and complied for percentages of those dropping out, graduating, and transitioning. Analysis was done by mathematical computation.

Student demographics were also collected on the Data Sheet and totaled by Group, JROTC or non-JROTC, and by year (freshman to senior) to determine total cohort figures as well as JROTC student retention from year to year.

### *Summary of Methodology*

This study used a combination of qualitative and quantitative methodology to investigate the perceptions of the administrators concerning the cost effectiveness of the JROTC programs at the purposely-selected high schools participating in the study.

Four research questions and eight hypotheses were to be investigated. The findings of this study regarding the data collection, JROTC Questionnaire, Interview Protocol, the four research questions, and the null hypotheses are reported in Chapter 4 - Analysis of Data.

## CHAPTER 4

### ANALYSIS OF THE DATA

There are five sections in this chapter on the analysis of the data collected from the schools and participants involved with this research. The first section is the analysis of the numerical archival data that was collected from the schools participating in the study. The second section is the analysis derived from the 30-question survey completed by the principals and the senior Army instructors. The third section is the analysis of the semi-structured interviews and the predominant perceptions that were observed during the interviews. The fourth section applies the analysis results in the testing of the research questions and hypotheses pronounced in Chapter 1. The final section summarizes the major discoveries or themes obtained from the analysis of the collected data.

#### *Archival Data Analysis*

The JROTC Study Data Requirements form (Data Sheet) was provided for the schools to complete at the same time the Informed Consent Document was given to the participating administrators. The data collected on the Data Sheet are organized and reported below. The schools are identified as School 1, School 2, and School 3. Each school was given detailed instructions on how to accumulate and list its data for the Data Sheet, which students in the 2002 cohort to include in their count, and which students to disqualify from the count. The data reported by the schools were not independently verified as much of it came from each school's internal reports or its best estimate in the case of indirect and other JROTC costs. Each school was expected to use the same set of criteria in its accumulation and listing of their data.

The numerical data provided by the three schools on their Data Sheets' were analyzed using mathematical computation either addition or percentage computation. The primary focus of the data sheet was to be able to compare the reported information on the two groups, JROTC

students and the non-JROTC students. Table 3 on page 53 provides the information provided by the three schools. One school (School 3) did not report their information on their JROTC program costs and this is indicated by the symbol N/A.

Table 3 has four parts: JROTC Program Costs (cost share deducted), Dropout Statistics, Transition to College Statistics, and the JROTC and non-JROTC student population of the three schools by freshman to senior year.

Program costs include instructor payroll costs (cost share deducted), overhead applied by the schools for the operation of the JROTC program in the school, and other costs such as books and materials. Some schools were not able to give their overhead or other costs as their systems did not provide for such information. Estimates were provided where the administrator felt comfortable with the amount.

Dropout statistics are separated into the two groups, JROTC students and non-JROTC students. For each group, the number of graduating seniors and the number of group dropouts from the 1998 to 2002 cohort are reported. The data are reported as from School 1, 2, and 3.

The Transition to College statistics provides the number of graduating seniors who indicated they were going to attend college following graduation. JROTC seniors and non-JROTC seniors are reported separately and by School 1, 2, and 3. College is defined for this paper as any higher education institution.

The schools were asked to report their student population by JROTC and non-JROTC and by year in school (freshmen to senior). The student demographic data was given, along with the rest of the data in Table 3 to the administrators prior to their interviews so that they could have the statistical results for their interpolation.

Table 3

## Data Sheet Archival Data Collected and Summarized from Participating Schools

JROTC Program Costs	School 1	School 2	School 3	Totals
Payroll Costs	\$72,078	\$50,955	N/A	\$134,301
Overhead	4,768	6,000	N/A	10,768
Other	<u>N/A</u>	<u>500</u>	<u>N/A</u>	<u>500</u>
Totals	\$76,846	\$57,455	N/A	\$145,569

Per student JROTC cost for School 1 and 2 (\$145,569 / 199 students): \$ 731

Dropout Statistics	School 1	School 2	School 3	Totals
JROTC				
2002 Graduating Seniors:	12	4	7	23
1998-2002 Dropouts:	<u>0</u>	<u>5</u>	<u>1</u>	<u>6</u>
2002 JROTC Cohort	12	9	8	29
Non-JROTC				
2002 Graduating Seniors:	189	137	424	750
1998-2002 Dropouts:	<u>59</u>	<u>68</u>	<u>75</u>	<u>202</u>
2002 Non-JROTC Cohort	248	205	499	952

Transition-to-College Statistics	School 1	School 2	School 3	Totals
JROTC	6	2	3	11
Non-JROTC	<u>145</u>	<u>110</u>	<u>378</u>	<u>633</u>
Total Transitioning	151	112	381	744

Student Demographics	School 1	School 2	School 3	Totals
JROTC Students				
Freshman	61	30	52	143
Sophomore	35	17	50	102
Junior	19	16	32	67
Senior	<u>12</u>	<u>9</u>	<u>8</u>	<u>29</u>
Total JROTC	127	72	142	341
Non-JROTC Students				
Freshman	186	191	531	908
Sophomore	195	150	424	769
Junior	<u>167</u>	<u>131</u>	<u>434</u>	<u>732</u>
Total Non-JROTC	752	607	1,812	3,181
Total Students Enrolled	879	679	1,953	3,522

Table 3 provides the statistical information for comparing the two groups of students. Without the cost data from School 3, the only analysis derived was that School 1 and 2 together had an average per JROTC student cost of \$731 for the school year. School 1 had a JROTC per student cost of \$605 ( $\$76,846 / 127$  JROTC students). School 2 had a JROTC per student cost of \$798 ( $\$57,455 / 72$  JROTC students).

Statistics can be misleading depending on which data are used for making comparisons. For example, which numerical data should be used for comparisons to determine the dropout rate? One could use the 2002 Graduating JROTC Senior total of 21 and the cohort dropout total of 6. The total 2002 JROTC cohort total to consider would be 27 ( $21+6$ ). This example would determine that 22.2 % ( $6 / 27$ ) of the JROTC graduating seniors' cohort for 2002 dropped out. Or, one could use the JROTC student enrollment of 341 and the cohort dropout total of 6. This second comparison would determine that 1.8 % ( $6 / 341$ ) of the JROTC students dropped out.

One statistic is consistent, in the years 1998 to 2002 only 6 students who were associated with the JROTC program in the three schools studied dropped out of school. School 1 reported no JROTC dropouts (0.0 %) among the graduating senior class, School 2 reported 5 JROTC dropouts ( $5/9 = 55.6$  %) and School 3 reported 1 JROTC dropout ( $1/8 = 12.5$  %).

The 2002 non-JROTC total cohort was 952 ( $750 + 202$ ). Using the same two methods of comparison as used above for the JROTC group determines that the non-JROTC student group had either 21.2 % ( $202 / 952$ ) or 6.4 % ( $202 / 3181$ ) of students dropping out. Again the consistent statistic used is the 202 students who dropped out. School 1 reported 59 non-JROTC dropouts ( $59 / 248 = 23.8$  %). School 2 reported 68 non-JROTC dropouts ( $68 / 205 = 33.2$  %). And, school 3 reported 75 non-JROTC dropouts ( $75 / 499 = 15.0$  %).

Using the 2002 Graduating non-JROTC Senior's from School 1 with that school's non-

JROTC dropout number determined a 31.2 % (59 / 189) dropout rate. School 2 had a 49.3 % (68 / 137) dropout rate. School 3 had a 17.7 % (75 / 424) dropout rate.

Using the 2002 student cohort method of comparison for both groups indicated that for the schools studied the JROTC group and the non-JROTC group had similar dropout rates (22.2 % versus 21.2 % dropout rate). The student cohort method was used for this study.

School 2 had a JROTC 55.6 % dropout rate (5 / 9) using the student cohort method. That could be considered high and could have skewed the overall dropout results somewhat to the high side. The small sample size of JROTC seniors, 27, could be insufficient for this test.

Using the total groups' enrollment (JROTC 341 and non-JROTC 3181) and the dropout numbers (JROTC 6 and non-JROTC 202) indicated that the JROTC group ( $6/341 = 1.8\%$ ) had a lower dropout rate versus the non-JROTC group ( $202/3181 = 6.4\%$ ).

In determining the transition rate for the two groups, only the graduating seniors and the transitioning statistics were used. The JROTC group had 52.4 % (11 / 21) of students indicating that they were going to college following graduation. The non-JROTC group had 84.4 % (633 / 750) of students indicating that they were going to college following graduation. Therefore, in the schools studied, non-JROTC student indicated that they planned to transition at a higher rate (84.4 % versus 52.4 %) than did the JROTC students.

For the JROTC student group, School 1 had 50.0 % (6 / 12) transitioning to college following graduation. School 2 had 50.0 % (2 / 4). School 3 had 42.9 % (3 / 7).

For the non-JROTC students, School 1 had 76.7 % (145 / 189) of students who were transitioning to college. School 2 had 80.3 % (110 / 137). School 3 had 89.2 % (378 / 424).

Data on student demographics were collected from the three schools in order to determine the number of students enrolled at the schools in the two groups, JROTC and non-



JROTC. These numbers were needed for the per-student program costs. Ascertaining the student breakdown by year in school gave an indication of the number of students continuing on in the JROTC program from year-to-year. The demographics also enable calculations on percentages of students in the two groups.

The data sheets indicated that there were 3,522 students (342 JROTC and 3,181 non-JROTC) enrolled in the three schools at the end of 2002. There were 9.7 % of the total student enrollments participating in JROTC (341 / 3,522). School 1 had 14.5 % in JROTC (127 / 879). School 2 had 10.6 % (72 / 679). School 3 had 7.3 % (142 / 1,954).

These statistics derived from the Data Sheet's will be discussed later in this chapter in the section on the analysis of the semi-structured interviews.

#### *JROTC Questionnaire*

The survey given to the administrators was titled JROTC Questionnaire and can be reviewed in Appendix A. Each of the administrators completed all of the 30 questions. As stated in Chapter 3, the survey asked each administrator to answer each statement by marking one of five possible answers in a Likert-type scale. The Likert-type scale was given values of 5.0 for "Strongly Agree," 4.0 for "Agree," 3.0 for "No Opinion," 2.0 for "Disagree" and 1.0 for "Strongly Disagree." The analysis of the completed surveys for questions 1-29 was performed by using the Statistical Package of Social Sciences (SPSS) available at ETSU. The SPSS computer analysis program, using Crosstabs, determined the mean answer of each question for each type of administrator, principal (Academic) or senior Army instructor (JROTC).

Question 30 asked the administrators to rank the goals of their JROTC program and provided a column of 10 items to consider (Table 4). The ranking numbers given each item by the administrators were then separated by the Academic or JROTC group. The ranking values were added (for example, let's give Leadership three values:  $2 + 5 + 3 = 10$ ) with the lowest total

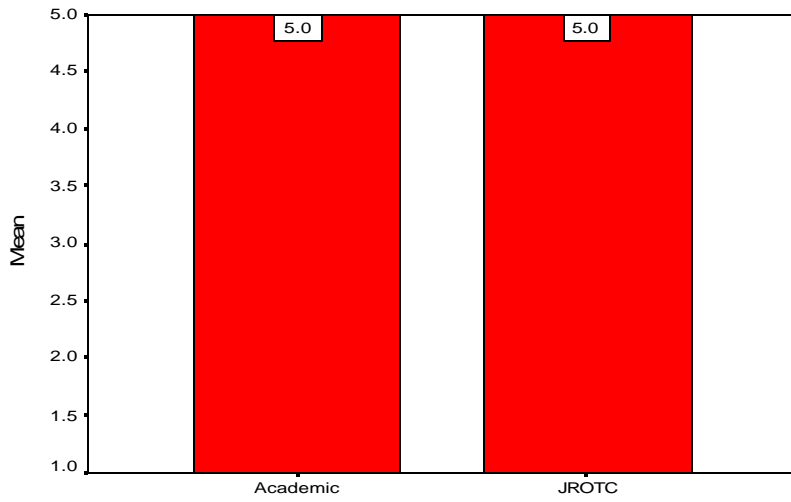
of the values being the highest ranked goal (ranked 1 through 10). The ranking analysis and computations are provided in Table 4 on page 87.

Administrators who were principals were classified as the Academic group. Administrators who were senior Army instructors were classified as the JROTC group. To determine the Academic from the JROTC group, the surveys were color coded with white paper used for the Academic group and yellow paper used for the JROTC group. Administrators were given stamped pre-addressed envelopes addressed to the investigator with no other means of identification. Because no administrator was identified on or by their survey prior to determining the mean value for questions 1 through 29, each administrator's survey was given a code number from 01 to 06.

The preference each administrator marked for each answer was given one of the values stated above (5.0 to 1.0) as indicated on their questionnaire. The mean derived from the analysis of each question was stated to the first place beyond the decimal (example: 3.1). A mean value above 3.0 indicates agreement with the question. A mean score below 3.0 indicates disagreement with the question.

The analysis for each question is displayed in bar graph form in Figures 1-29. The question or statement is restated followed by the bar graph depicting the mean perceptions for the principals and for the JROTC senior Army instructors. The bar graph is followed by a summary of the perceptions indicated by the mean value for each group. The summary will point out where differences in perceptions occur, or if one group is more, or less positive in their perception. The bar graph in Figure 1 represents the mean analysis for question 1. Figure 2 through 29 likewise represent questions 2 through 29.

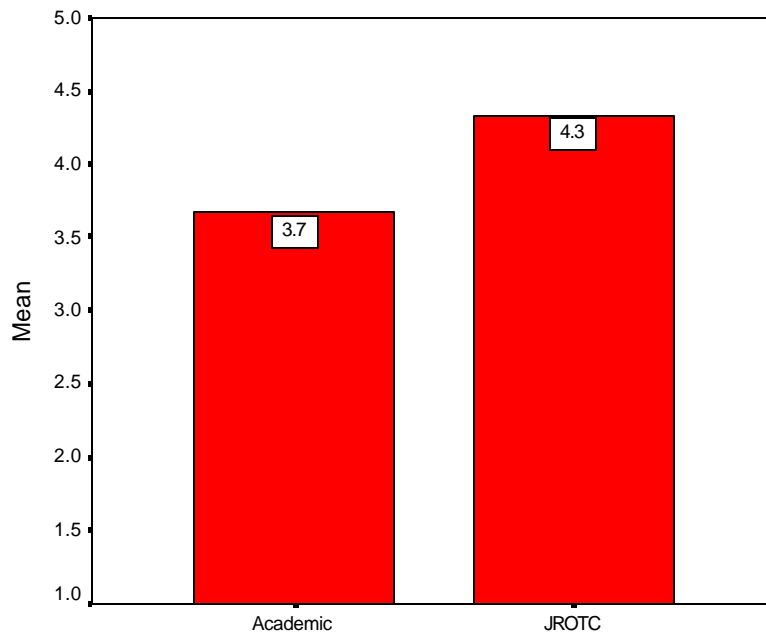
Figure 1. JROTC Questionnaire – Question 1



The JROTC program is an asset to our school.

Both Academic and JROTC strongly agreed (5.0) that the JROTC program is an asset to their schools.

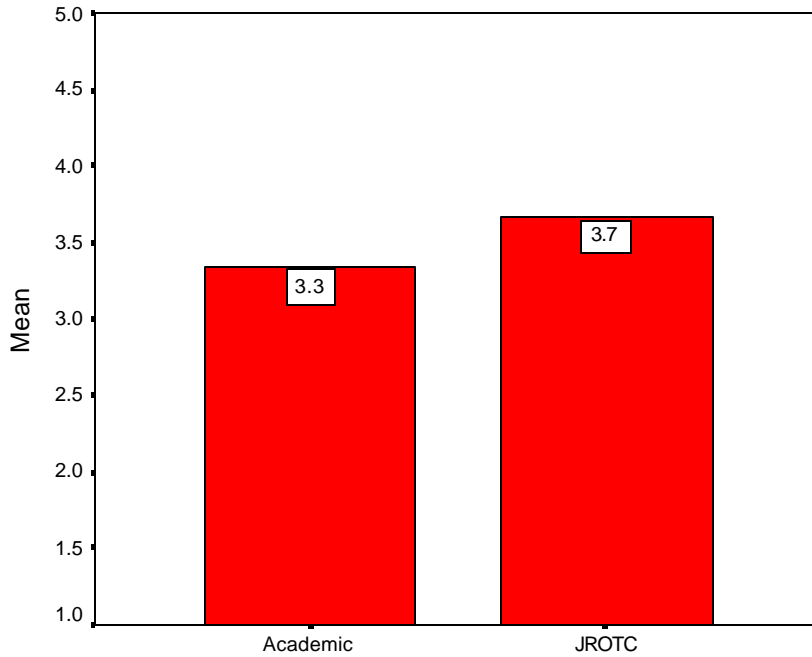
Figure 2. JROTC Questionnaire – Question 2



JROTC students exhibit more leadership abilities when compared to the non-JROTC students in our high school.

Both Academic and JROTC administrators agreed that the JROTC students exhibited more leadership ability when compared to the non-JROTC students in their high school, although the JROTC (4.3) perceived a stronger agreement than did the Academic (3.7).

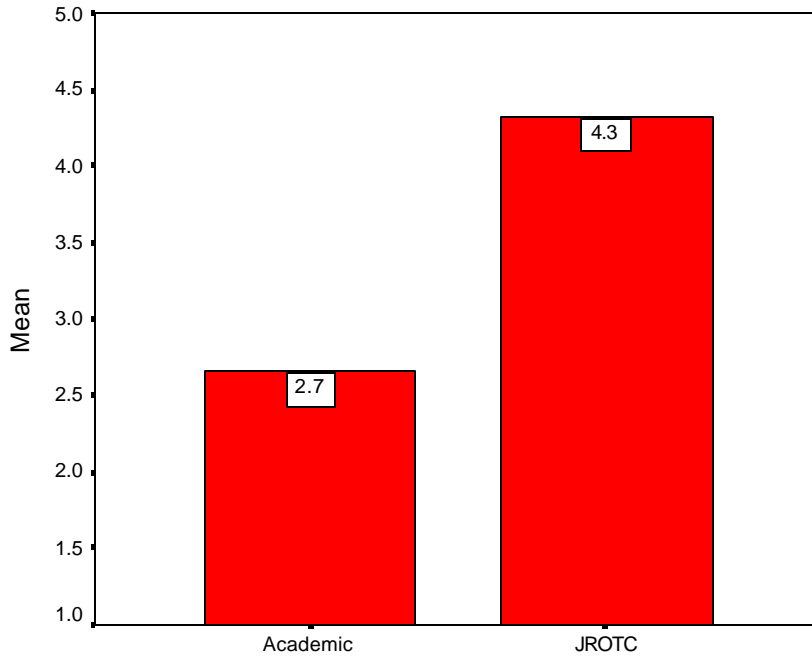
Figure 3. JROTC Questionnaire – Question 3



JROTC students would wear their BDU or other designated uniform daily if allowed.

Both Academic (3.3) and JROTC (3.7) agreed with the statement that the JROTC students would wear their BDU or other designated uniform daily if allowed. The JROTC group was more in agreement with the statement than did the Academic.

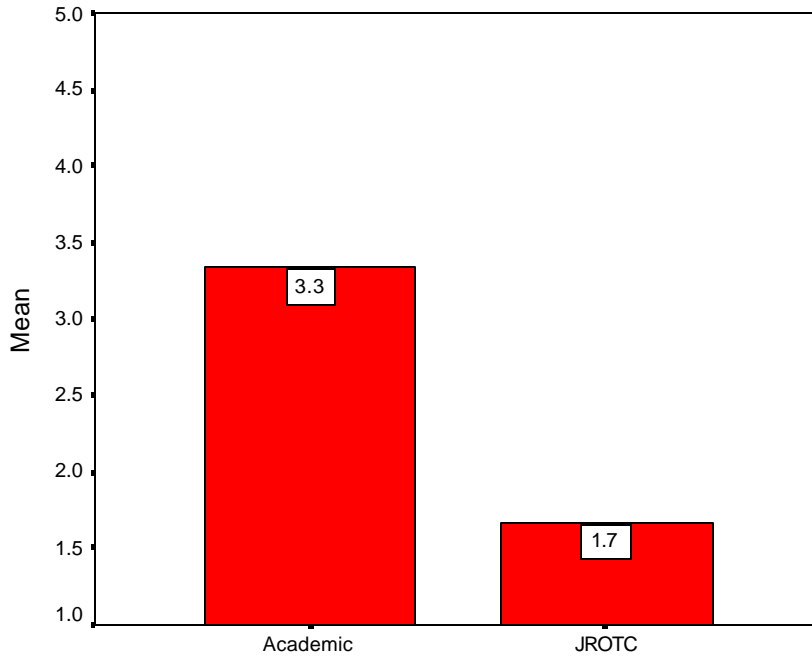
Figure 4. JROTC Questionnaire – Question 4



The JROTC students are more active in extra curricular activities than the non-JROTC students.

The Academic administrators (2.7) weakly disagreed that JROTC students are more actively involved in extra-curricular activities than the Non-JROTC. The JROTC administrators (4.3), however, agreed with the statement.

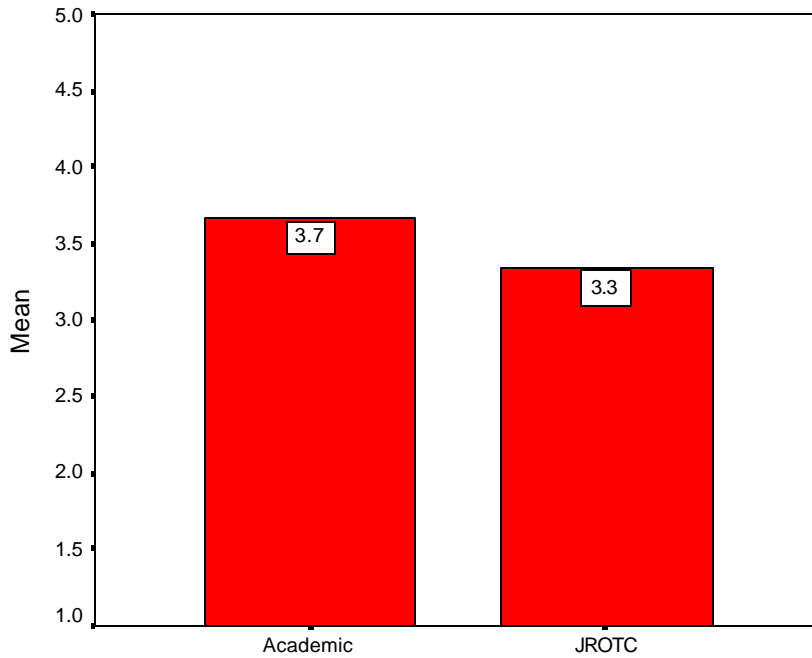
Figure 5. JROTC Questionnaire – Question 5



The student wearing of uniforms is an effective recruitment tool.

There is a difference in perception between the administrators to the question about the JROTC students wearing their uniforms being an effective recruitment tool. Academic (3.3) was slightly positive in agreement, while JROTC (1.7) was solidly in disagreement.

Figure 6. JROTC Questionnaire – Question 6

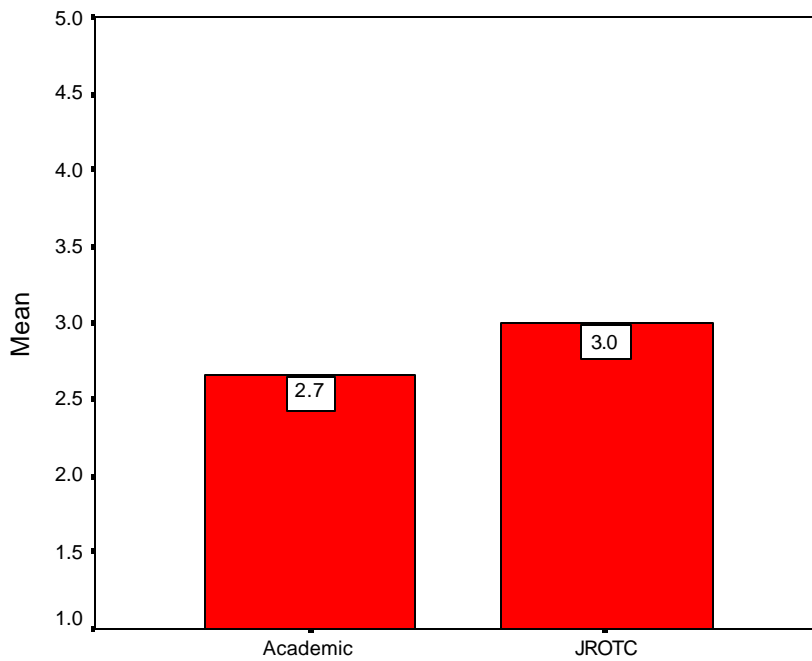


JROTC students are less likely to receive failing grades when compared to the non JROTC students.

Both Academic (3.7) and JROTC (3.3) were in agreement that JROTC students were less likely to receive failing grades. The principals had a more favorable perception of the JROTC students than did the JROTC instructors.



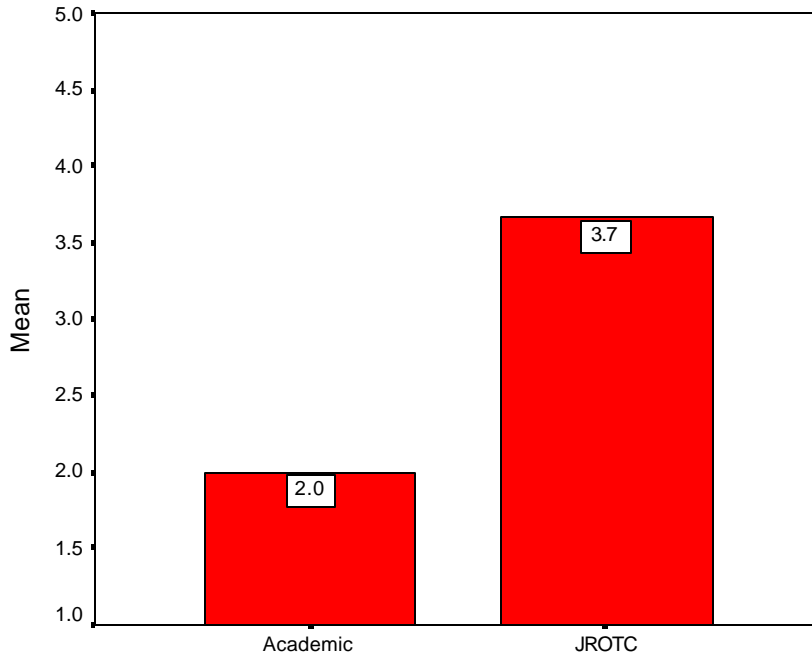
Figure 7. JROTC Questionnaire – Question 7



JROTC students are more likely to come from lower socioeconomic family backgrounds.

JROTC (3.0) indicated that they had no opinion on the question of socioeconomic family backgrounds. Academic (2.7) was slightly in disagreement.

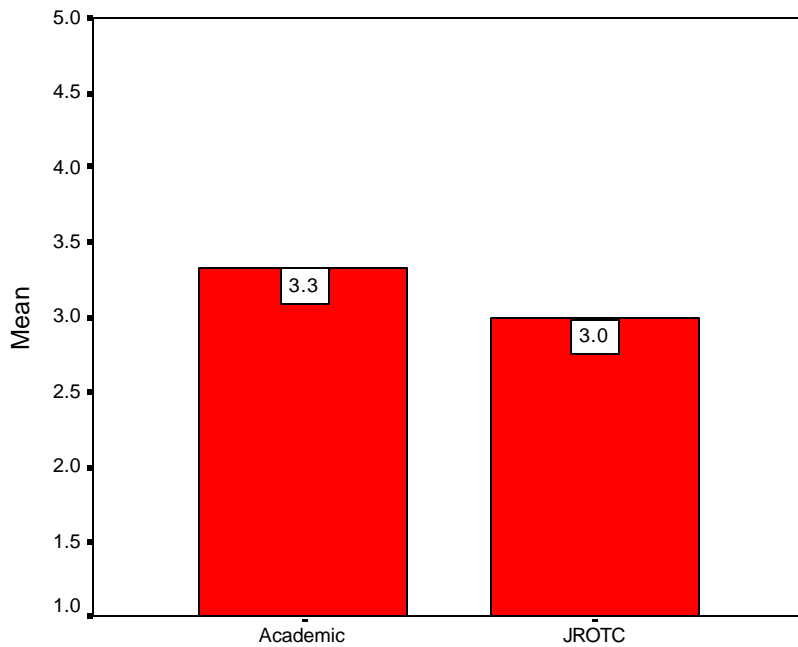
Figure 8. JROTC Questionnaire – Question 8



There are a proportionately higher percentage of special education students participating in JROTC compared to the non-JROTC students.

Academic and JROTC perceptions differed in whether there are a proportionately higher percentage of special education students participating in JROTC compared to the non-JROTC students. Academic (2.0) disagreed, while JROTC (3.7) agreed with the statement.

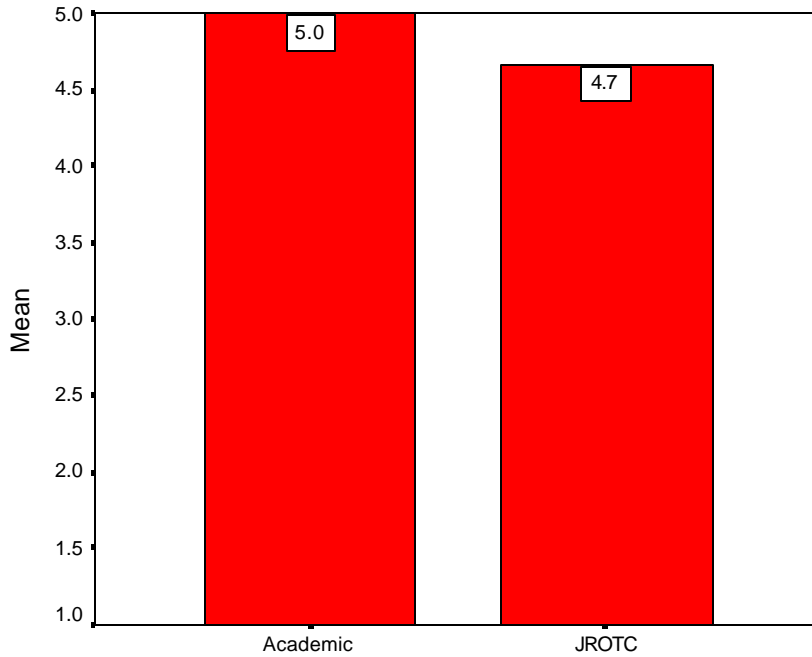
Figure 9. JROTC Questionnaire – Question 9



At our school, the JROTC program does not have problems attracting students to the program.

JROTC (3.0) had no opinion about the statement that the program had no problem attracting students to participate in JROTC. Academic (3.3) agreed, but just slightly.

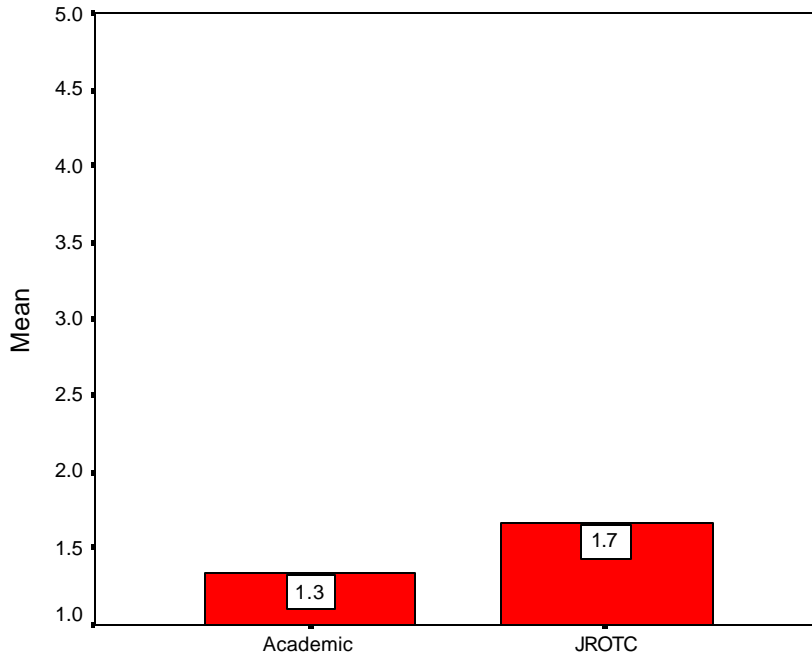
Figure 10. JROTC Questionnaire – Question 10



The JROTC program is an asset to our school in ways that cannot be measured.

Both groups of administrators strongly agreed with the statement that the JROTC program is an asset to their school in ways that cannot be measured. Academic (5.0) strongly agreed and JROTC (4.7) was slightly less.

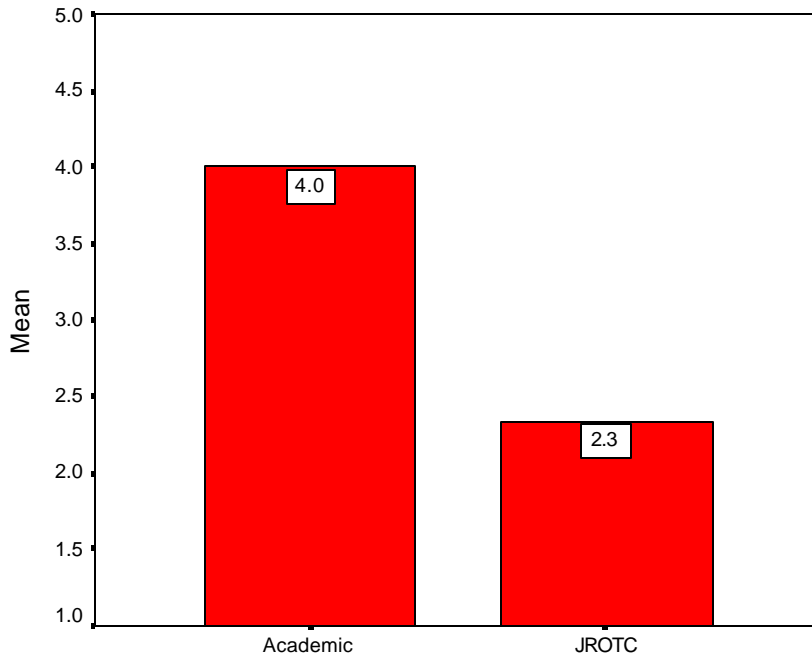
Figure 11. JROTC Questionnaire – Question 11



JROTC students are more likely to drop out of school before graduating when compared to the non-JROTC students.

Both Academic and JROTC disagreed that JROTC students are more likely to drop out of school before graduating when compared to the non-JROTC students. Academic (1.3) had a stronger disagreement with the statement than did the JROTC (1.7).

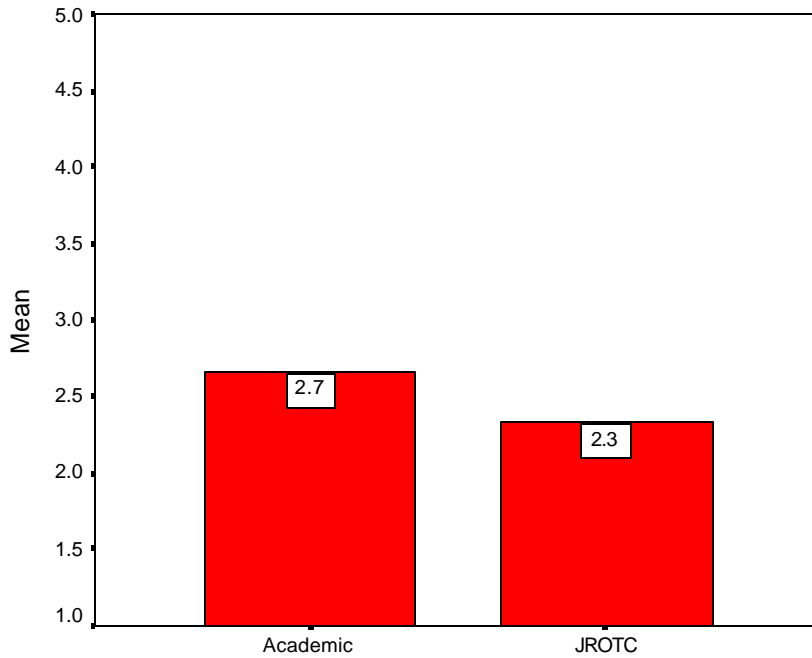
Figure 12. JROTC Questionnaire – Question 12



The faculty of our high school believes the JROTC program is highly rated by the students.

Academic perceptions differ from JROTC when considering whether the faculty of their high schools believes the JROTC program is highly rated by the students. Academic (4.0) agrees with the statement, while JROTC (2.3) disagrees.

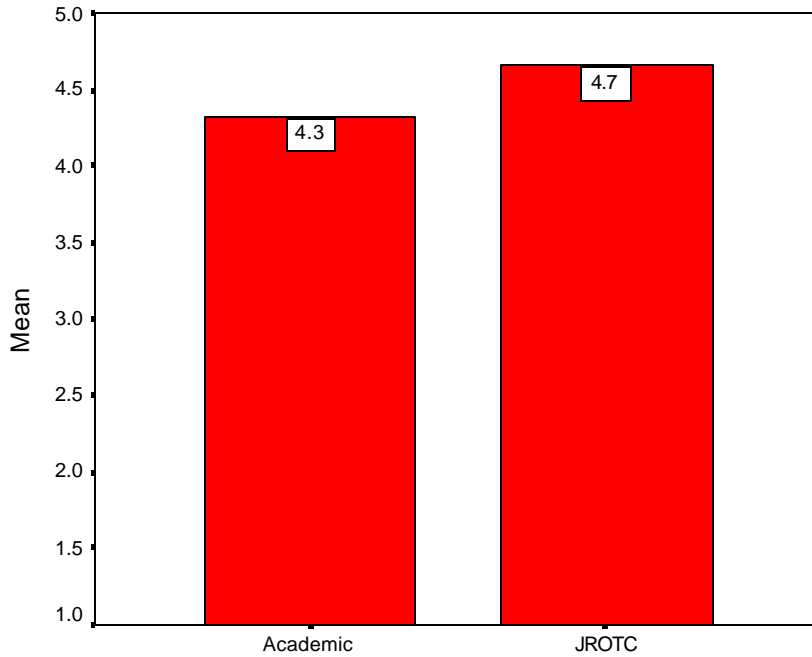
Figure 13. JROTC Questionnaire – Question 13



Students participate in JROTC because they want a military career after completing high school.

Both Academic (2.7) and JROTC (2.3) disagree with the statement that students participate in JROTC because they want a military career after completing high school.

Figure 14. JROTC Questionnaire – Question 14

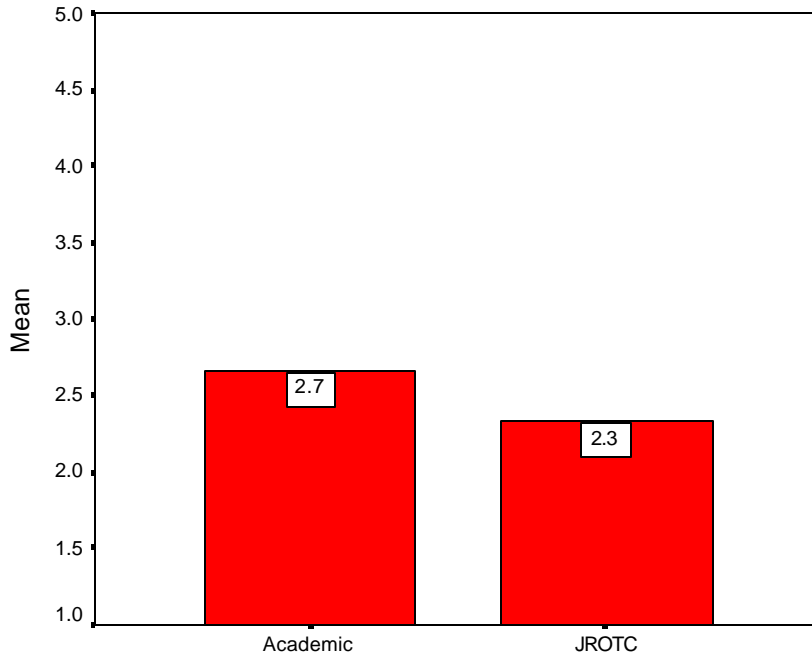


Recruitment for the JROTC program should begin before the students enter high school.

Both Academic and JROTC agreed that Recruitment for the JROTC program should begin before the students enter high school. The JROTC group (4.7) had a mean more in agreement than did the Academic (4.3) about the recruitment beginning prior to high school.



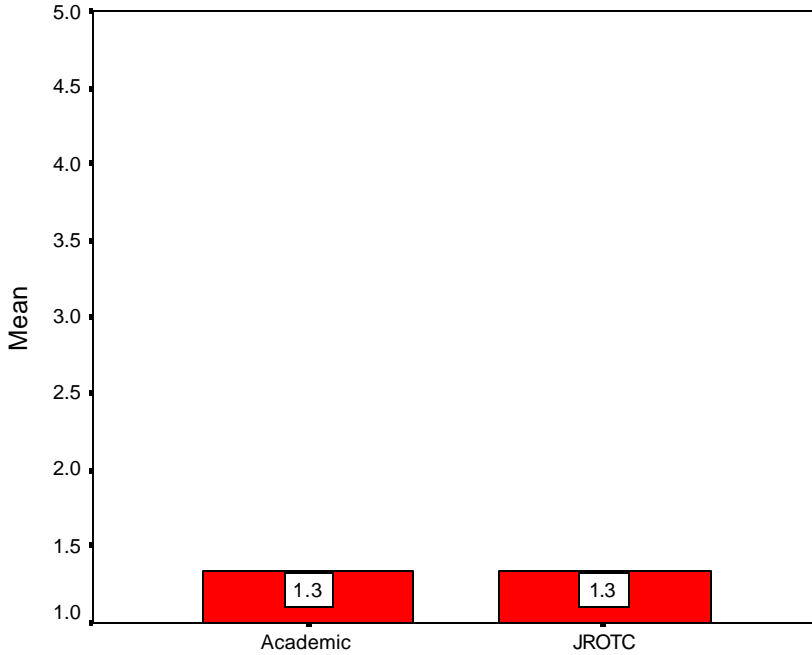
Figure 15. JROTC Questionnaire – Question 15



The transition rate of JROTC students to higher education immediately following high school completion is less than that of the non-JROTC students.

Both groups disagreed that the transition rate of JROTC students to higher education immediately following high school completion is less than that of the non-JROTC students. Academic (2.7) perceptions were close to no opinion, while JROTC (2.3) perceptions were more in disagreement.

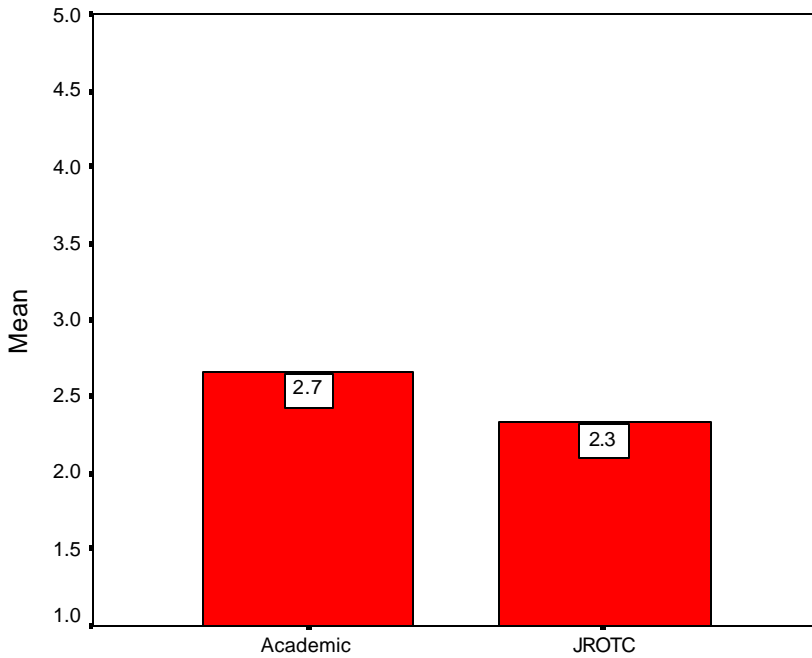
Figure 16. JROTC Questionnaire – Question 16



JROTC is not a cost-effective program in helping students go to college.

Both groups strongly disagreed (1.3) with the statement that JROTC is not a cost-effective program in helping students go to college. Since the statement is negative in manner, both groups do perceive that the JROTC program in their schools is cost-effective in helping students go to college.

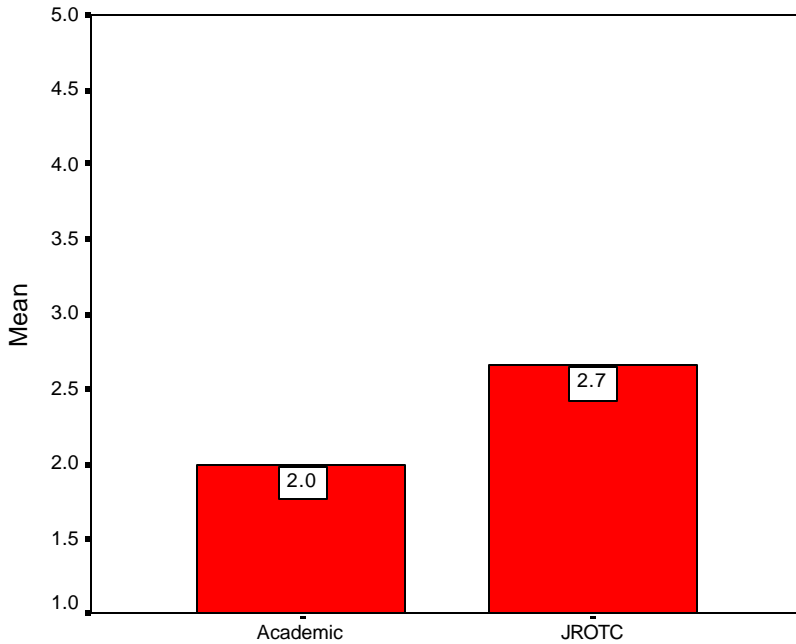
Figure 17. JROTC Questionnaire – Question 17



Students participate in JROTC because they believe they will receive financial assistance for college when participating in the college ROTC, and JROTC helps them achieve their goal of going to college.

Both groups disagree that students participate in JROTC because they believe there will be some sort of financial reward when they enroll in college and that the financial assistance will help them in that goal. Academic (2.7) was close to the 3.0 no opinion perception. JROTC (2.3) had a more negative perception of the statement.

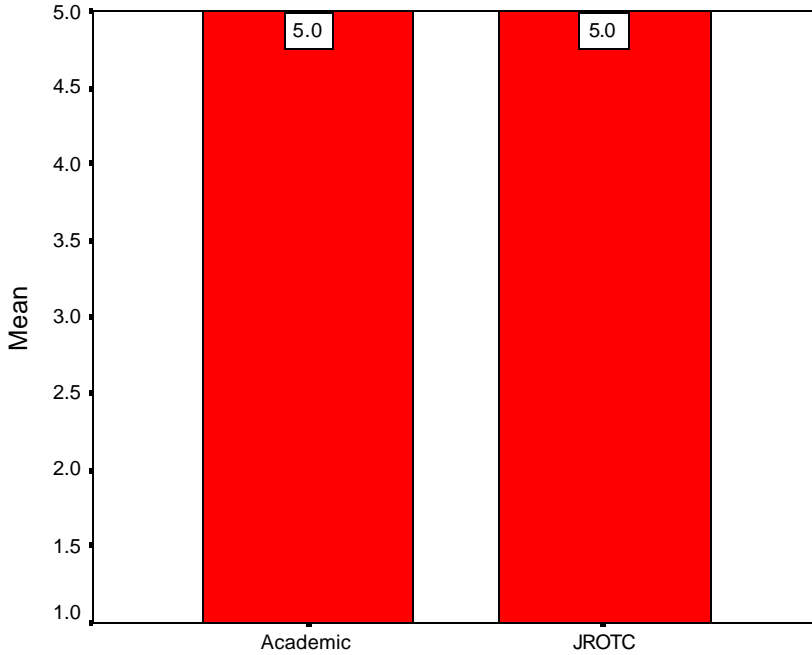
Figure 18. JROTC Questionnaire – Question 18



JROTC students do not have better attendance records than do the non-JROTC students at our high school.

Academic (2.0) were more in disagreement than were the JROTC (2.7) with the statement that JROTC students do not have better attendance records than do the non-JROTC students at their high school. This question is a negative statement about the attendance record of JROTC students. The administrators' perception is that JROTC students have better attendance records than do the non-JROTC students.

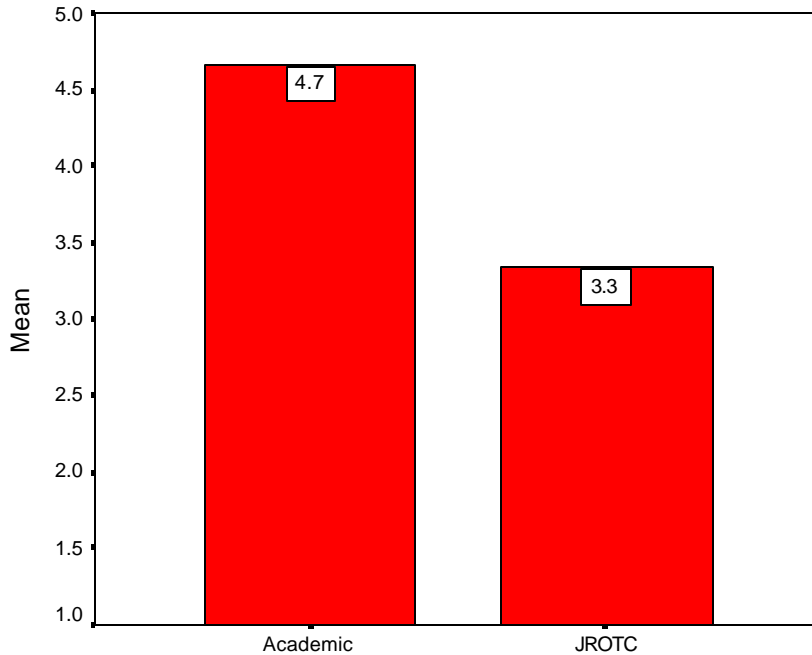
Figure 19. JROTC Questionnaire – Question 19



The JROTC program provides an opportunity for students that would not otherwise become actively involved in school activities.

Both Academic (5.0) and JROTC (5.0) strongly agree that their JROTC programs provide opportunities for the JROTC students who would not otherwise become actively involved in school activities.

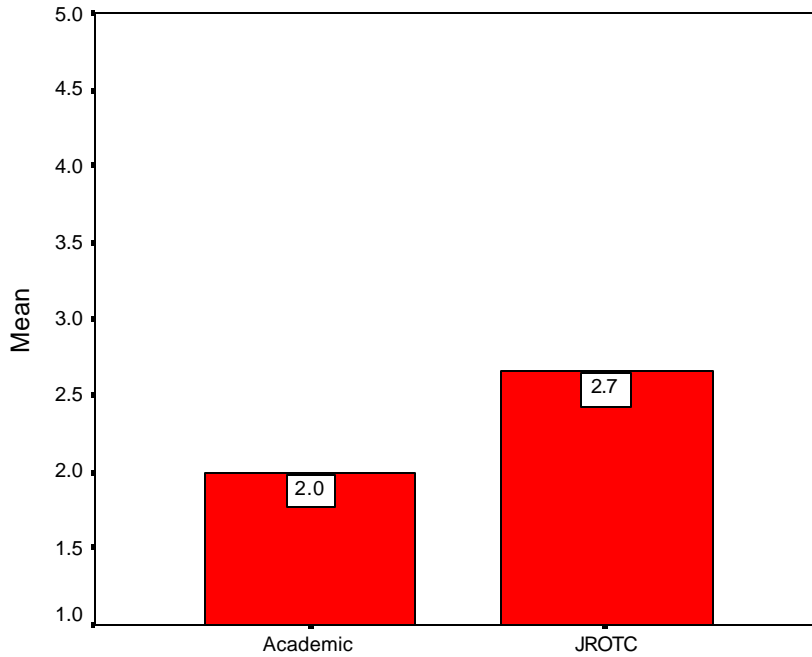
Figure 20. JROTC Questionnaire – Question 20



JROTC is a cost-effective program in reducing the dropout rates at our high school.

Academic (4.7) perception was strongly in agreement with the cost-effectiveness of their JROTC programs in reducing the dropout rates at their respective school. JROTC (3.3) was in agreement but with a mean only 0.3 above no opinion (3.0).

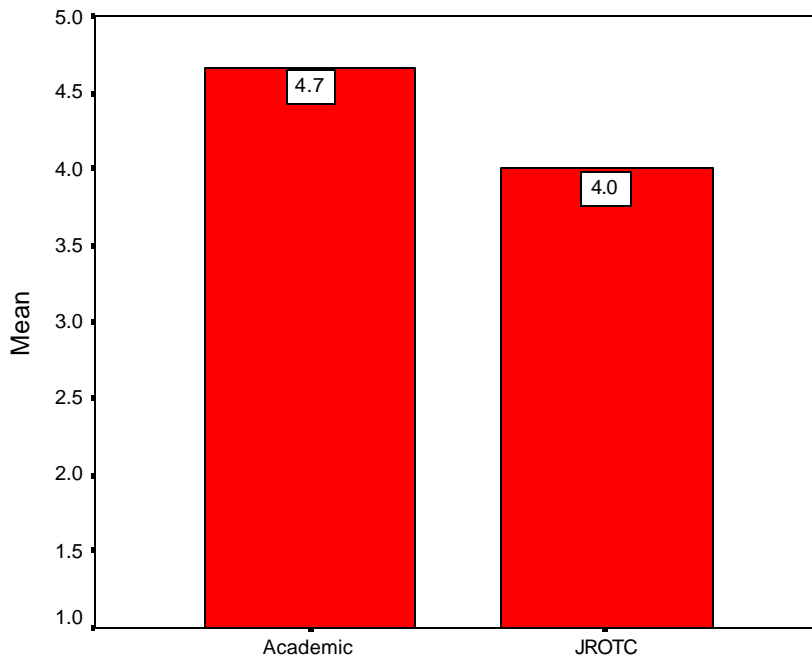
Figure 21. JROTC Questionnaire – Question 21



We have problems retaining students beyond their freshman year in our JROTC.

Both Academic and JROTC disagreed that their school was having problems retaining students in the JROTC program beyond the first year. The Academic (2.0) perception was in stronger disagreement than was the JROTC (2.7), which was close to the 3.0 no opinion position.

Figure 22. JROTC Questionnaire – Question 22

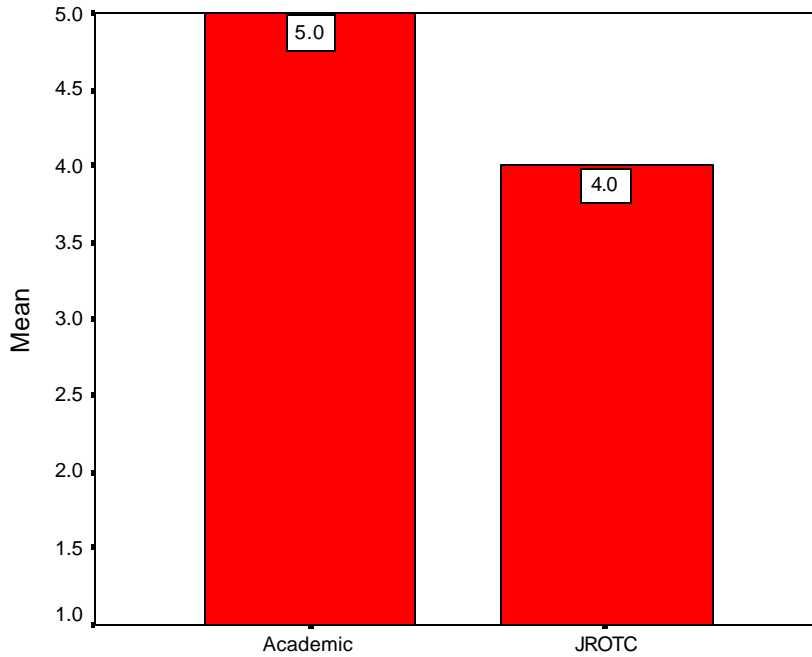


JROTC students, in general, exhibit more self-esteem when compared to the non-JROTC students.

Both Academic (4.7) and JROTC (4.0) agreed that JROTC students exhibit more self-esteem than do the non-JROTC students at their respective school. The Academic perception was stronger than the JROTC.



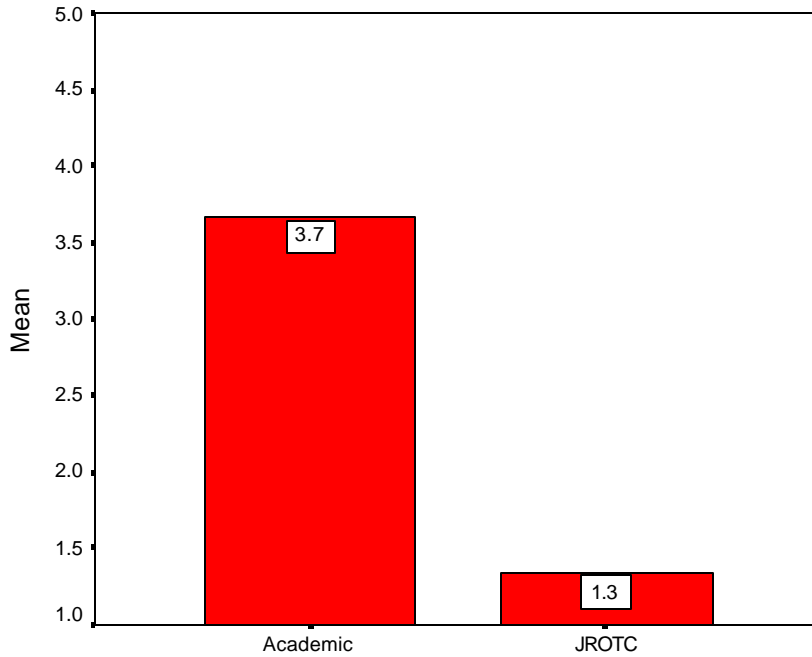
Figure 23. JROTC Questionnaire – Question 23



The JROTC program receives the full support of our school administration.

The Academic administrators (5.0) strongly agreed that the JROTC program received the full support of the school administration. The JROTC administrators (4.0) agreed with the statement but not as strongly as the Academic.

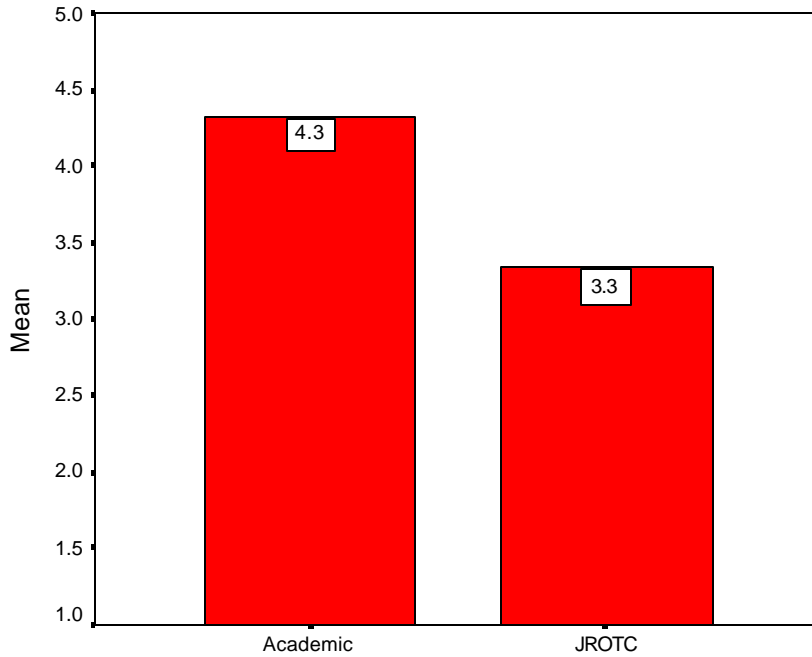
Figure 24. JROTC Questionnaire – Question 24



JROTC students like wearing their Army Green Uniform (Class A).

The Academic and JROTC administrators have opposing perceptions as to the JROTC students liking wearing their Army Green uniforms. Academic (3.7) agreed with the statement and JROTC (1.3) strongly disagreed.

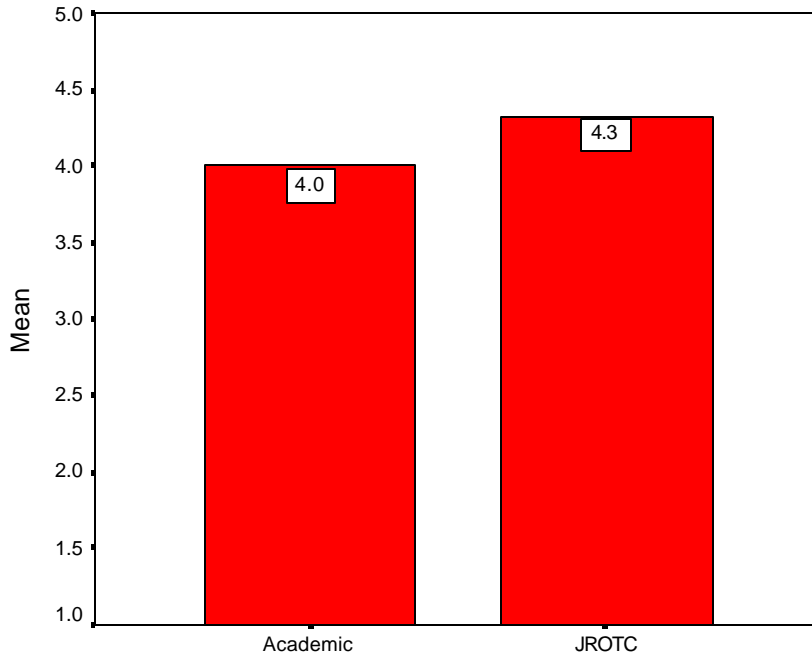
Figure 25. JROTC Questionnaire – Question 25



JROTC students have fewer school suspensions than do non-JROTC students.

Both Academic and JROTC agreed that JROTC students have fewer school suspensions than do the non-JROTC students. The Academic (4.3) perception was stronger than the JROTC (3.3)

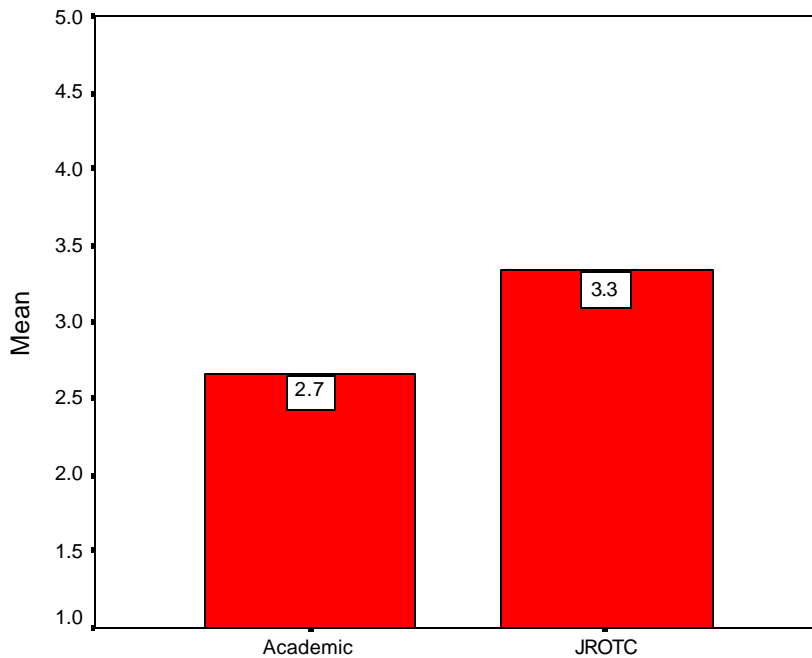
Figure 26. JROTC Questionnaire – Question 26



Our present method of recruiting students does not attract the higher academic achieving students (upper 1/3 of the student population).

Both Academic and JROTC agree that their present method of recruiting students to the JROTC program does not attract the higher academic achieving students. The JROTC (4.3) mean score indicates a stronger belief in the statement than does the Academic (4.0).

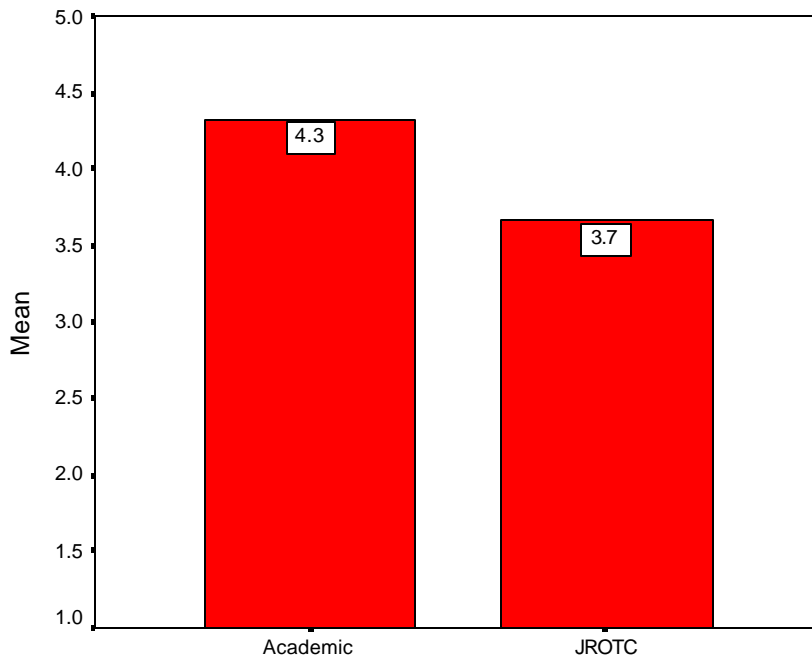
Figure 27. JROTC Questionnaire – Question 27



JROTC students are invited to participate in the JROTC program because they are considered to be behavioral problems.

Academic and JROTC groups are taking different perception positions as to inviting students who are considered behavior problems to participate in the JROTC program. Academic (2.7) disagreed, while JROTC (3.3) agreed. Both mean values were close to the no opinion 3.0.

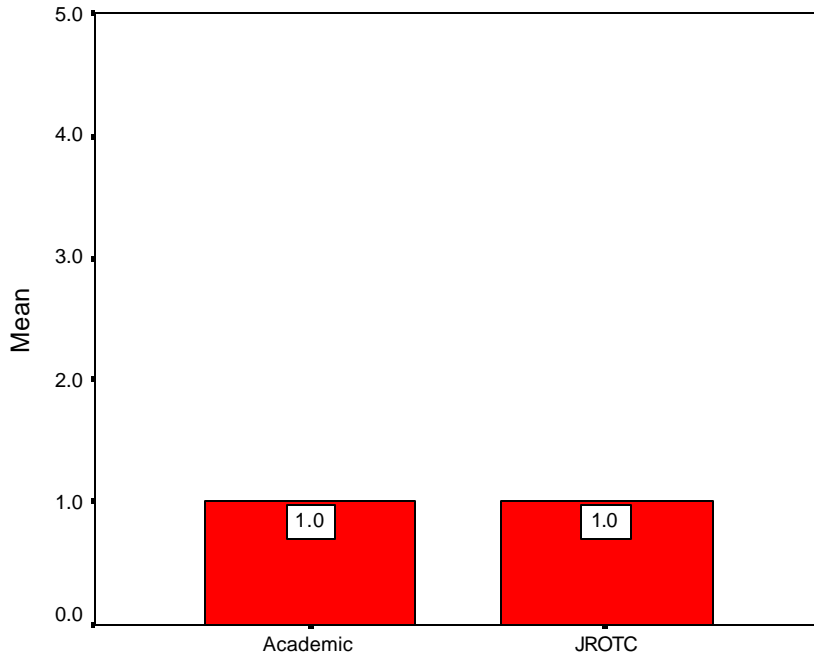
Figure 28. JROTC Questionnaire – Question 28



Students should receive academic (Health) credit for their JROTC classes.

The Academic (4.3) agreed somewhat strongly that students should receive academic Health credit for their JROTC classes. JROTC (3.7) also agreed with the statement but not as strongly as the Academic.

Figure 29. JROTC Questionnaire – Question 29



JROTC instructors are not effective mentors to their students.

Both Academic (1.0) and JROTC (1.0) strongly disagreed with the statement that JROTC instructors are not effective mentors to their students.

## Goals of the JROTC Program

Question 30 asked the administrators to rank their perception of the goals of their JROTC program, beginning with 1 as the highest ranked goal and 10 as the lowest valued or least important goal. There were 10 goal characteristics to choose from. Table 4 illustrates the rankings given by the administrators with the Academic and JROTC groups shown separately. The order of the rankings is the same as listed on question 30.

Table 4

### Ranking the Goals for the JROTC Program

Goal Characteristic	Ranking Points Given by the Administrators			
	Principals		JROTC	
	Points	Rank	Points	Rank
Academic Achievement	$10+6+1 = 17$	#7	$4+2+2 = 8$	#2
Military History Awareness	$7+8+1 = 16$	#6	$9+7+7 = 23$	#9
Citizenship	$2+1+1 = 4$	#1	$5+2+5 = 12$	#5
Discipline	$9+7+1 = 17$	#7	$7+2+8 = 17$	#7
Transition to College	$8+9+5 = 22$	#9	$6+4+6 = 16$	#6
Military Bearing, Physical Fitness and Drill	$5+5+5 = 15$	#5	$8+3+9 = 20$	#8
Completion of High School Degree	$4+2+1 = 7$	#3	$1+1+1 = 3$	#1
Recruiting for Military Service after High School	$6+10+10 = 26$	#10	$10+8+10 = 28$	#10
Developing Leadership Traits and Characteristics	$1+1+4 = 6$	#2	$3+3+3 = 9$	#4
Building Self-Esteem	$3+3+1 = 7$	#3	$2+2+4 = 8$	#2



The rank assigned by each administrator, three in each group, is indicated next to the goal characteristic, and then the values are added to determine the rank score for the group. The lowest total is the highest rank.

Principals ranked Citizenship (total score of 4) as their perception of the primary goal of their JROTC program. JROTC senior Army instructors ranked Completion of High School Degree (total score of 3) as their perception of the primary goal for the program. Table 5 arranges the goals by importance as ranked by the principals. First the Goal characteristic is listed and then the total of the values assigned by the Principals. Completion of High School Degree and Building Self-Esteem both had a total score of 7 and were assigned the rank of 3. Academic Achievement and Discipline both had a total score of 17 and were given the rank of 7.

Table 5

Goal of the JROTC as Ranked by Principals

Rank	Goal Characteristic	Total Score
1.	Citizenship	4
2.	Developing Leadership Traits and Characteristics	6
3.	Completion of High School Degree	7
3.	Building Self-Esteem	7
5.	Military Bearing, Physical Fitness and Drill	15
6.	Military History Awareness	16
7.	Discipline	17
7.	Academic Achievement	17
9.	Transition to College	22
10.	Recruiting for Military Service after High School	26

Table 6 arranges the rankings of the Goal characteristics by the senior Army instructors. Building Self-Esteem and Academic Achievement both had a total value of 8 and were given the rank of 2.

Table 6

Goal of the JROTC as Ranked by Senior Army Instructors

Rank	Goal Characteristic	Total Score
1.	Completion of High School Degree	3
2.	Academic Achievement	8
2.	Building Self-Esteem	8
4.	Developing Leadership Traits and Characteristics	9
5.	Citizenship	12
6.	Transition to College	16
7.	Discipline	17
8.	Military Bearing, Physical Fitness and Drill	20
9.	Military History Awareness	23
10.	Recruiting for Military Service after High School	28

As previously stated, in some cases individual administrators gave the same rank to more than one goal. This was a misunderstanding of the instructions. It was not possible to ask the administrators to correct their rankings because the surveys did not identify the individual. Therefore, the ranking scores were applied as the administrators indicated on their surveys.

Principals and senior Army instructors both ranked Recruiting for Military Service after High School tenth and the least important goal of the JROTC program at their high schools.

Completion of High School Degree was ranked third and Transition to College was ranked ninth by the principals. Citizenship was ranked fifth and Transition to College was ranked sixth by the senior Army instructors.

### *Analysis of Interviews*

The analyses of the JROTC Study Data Requirements and JROTC Questionnaires were given to all of the administrators prior to the semi-structured interviews. Each administrator was asked to review the data and survey analysis and make notes as to whether the results confirmed or changed their original perceptions indicated in the 30-question survey they had completed previously. They were to retain the notes and analysis results for reference during their interviews if needed.

Appointments were made with each administrator for a specific time and date at the convenient of the administrator. The interviews lasted between 30 minutes and one hour. The interviews were taped and the interviewees were given the transcriptions for verification of accuracy and corrections, if necessary, prior to the final interview analyses written here. There were no corrections. One investigator, the writer of this paper, did all interviews and data collection for this research study.

There were eight questions asked of each administrator (Interview Protocol, Appendix C). The interviewer read the question and the interviewee answered in an open-ended fashion. Some administrators' answers were short and some were long. The interview discussion of each administrator's answer was compared to the others for consistencies, or not, of perceptions and their reaction to each question. In a few instances, the data analysis given to the administrator's prior to the interview prompted a change in perception, but mostly it did not. Other useful

information, as was expected in the semi-structured interview format, was gathered during the interviews.

Each interview question was analyzed for the predominate perceptions discussed by the administrators in responding to each question. Each administrator was code identified as Academic 01 through 03 for the principals group and JROTC 04 through 06 for the senior Army instructors group.

The short answer to each of the eight questions has been organized in Table 7. Some answers are abbreviated for form (for example, SE for self-esteem) and the abbreviations are identified at the end of Table 7 on page 90. For ease in reading this paper each interview question is repeated before the analysis discussion.

#### Interview Question 1:

Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

The short answers to question one listed in Table 7 indicate that one of the principals had different perceptions to two of the questions after receiving the data analysis. The principal corrected his/her answer to question 24 about students wearing their Army Green uniforms. In the survey, the answer was marked in agreement. Now the administrator stated that, in retrospect, students in fact did not like wearing their green uniforms. This change would have altered the mean derived for question 24 for the Academic group resulting in a mean change from 3.7 to 3.3, closer to No Opinion or neutral. The other change was on question eight where the principal had marked Disagree, he/she now wanted to Agree with the statement that a proportionately larger number of special education students were participating in JROTC at his/her school. Other than

the exceptions noted all of the principals were firm in staying with their original perception of the questions.

Interview Question 2:

Are the analyses of dropout and transition rates what you expected?

There was some disagreement with this question. One principal answered yes to the question and offered an additional explanation that his/her school had a high percentage of at-risk students in the JROTC program. Even with this situation, he/she noted that it was gratifying to see the comparative dropout rates about the same because it was thought the JROTC rate would be much higher.

Another principal expressed surprise that the JROTC dropout rate was not much higher due to the large number of at-risk students in their JROTC program. The principal stated “I was expecting a little higher percentage for the JROTC dropout rate (Appendix E, p. 146).”

One of the senior Army instructors questioned the validity of the data. The instructor expressed his/her thoughts in the interview:

I’m not convinced I believe in the statistics and I’ll tell you why for a couple of reasons. For one, I’m not sure how well dropouts from JROTC are really tracked. That is some thing each instructor had to dig into and dig out; although, we have always proclaimed that we have a lower dropout rate then the general student population.

The transition rate – 84% for the cohort general population, I believe is high. The reason I feel this way is that in North Carolina we are required to do a role up at the end of the year to say where everyone is going. If a student comes into the guidance office and says, “yea, I think I’m going to college,” that student is marked down as going to college, even though he/she may never set foot in college. I therefore think those statistics are in question. They are accurate as far as the school so determines. But, they are not required to go beyond what the student states. To really be accurate, a follow-up needs to be done to find out what the student really did the first year out of high school – college or not. I suspect the real figure (transition rate) would be closer to 50%.

The senior Army instructor thought that how the school counselors counted the student, as a dropout or transitioning student was questionable. The explanation was twofold. The first

was that the JROTC instructor believed that the senior Army instructors were much closer to their students and would more likely know what each student's intentions were when that student left school. The second had to do with the report required by the Army Cadet Command yearly on dropouts, which produced an accurate count for the JROTC group. The instructor believed that the academic counselors, who likewise produced a yearly report, were not as accurate in determining if a student actually dropped out, or transferred to another school, or got a GED and dropped out.

Concerning the transition data, the senior Army instructor believed that the non-JROTC transitioning student number was skewed upward because the student intentions were not confirmed and the actual rate should be closer to the 50 % found in the JROTC students.

The senior Army instructor contended that the academic counselors determined their transitioning number by intent only and that there was not a follow through to determine if the students actually went to college. As an explanation the instructor proposed as an example the student who was undecided as to what he or she would be doing after high school. Rather than say they were going to go to work at Burger King at minimum wage, they say they were going to college. The JROTC instructor was confident that the JROTC transitioning student count was more accurate because of the contact between the senior Army instructor and the students. The mentoring four-year relationship between the instructor and the student was a form of bonding and that the mentoring relationship fostered the follow-up both by the instructor and the student.

#### Interview Question 3:

The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricula program?

All of the principals answered in the affirmative as did two of the JROTC instructors. One JROTC instructor answered that he/she had never given the question much thought before. As such, he/she had no idea whether the amount was or was not appropriate. Several of the principals mentioned that the JROTC was not considered an extra-curricular program but a part of their regular curriculum since the student received credit for their JROTC classes.

Table 7

Composite Answers to Interview Protocol

Question	Academic 01	Academic 02	Academic 03	JROTC 01	JROTC 02	JROTC 03
1.	No	No	Yes	No	No	No
2.	Yes	Yes	Yes/No	? Data	Yes	Yes
3.	Yes	Yes	Yes	No Idea	Yes	Yes
4.	Yes	Yes	Yes	Yes	Yes	Yes
5.	CS, DP	AP, PR, RP	SE, CS, LD	DP, LD, CS	SE, BH, CS	IN, CH
6.	No	No	No	No	No	No
7.	Academics	Academics	Academics	Academics	Attrition	Attrition
8.	MV, OS	OS	OS, GT	GT	GT, MS	GT

Abbreviation Description:

AP: Appearance	BH: Behavior	
CH: Character	CS: Community Service	DP: Discipline
GT: Go Together	IN: Integrity	LD: Leadership
MS: Mission Statement	MV: Maintain Values	OS: Overall Scope
PR: Pride	RP: Respect	SE: Self-esteem

Interview Question 4:

With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

All the administrators answered yes.

Interview Question 5:

Question 10 of the survey pertained to intangible values of the JROTC program. The Likert-type scale indicated that both Academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

All of the administrators discussed their positive perceptions of their JROTC programs. Intangible values specifically mentioned were community service, integrity, character building, discipline, leadership, respect for the teachers and others, pride in their school and country, citizenship, appearance, and improved behavior. Principals made note that these values carried forward even when the student withdrew from the JROTC.

Interview Question 6:

If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

None of the administrators had specific knowledge of how their JROTC programs began, what the costs were, or what, if any, problems were encountered. One principal mentioned that in the startup years the school made the JROTC mandatory for freshman and sophomores in order to meet the enrollment requirements. That program had begun before World War II.

Interview Question 7:

The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Freshman 143, Sophomore 102, Junior 67, and Senior 29 = 341). The perception in question 21 of the survey was that the schools do not have a problem retaining students in the



JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

There were two perceptions consistent among the administrators in the answers to question 7. The first problem the administrators discussed in maintaining the JROTC enrollment came from academic requirements whereby students have to declare an educational track soon after entering high school. The most academically challenging educational track is for those planning on going to college, the college prep track. The least academically challenging is the vocational track, which is for those students that plan to enter the work force after high school. After the first or second years in high school students realize that to get into college they need the more difficult classes. They need the math, science, English, foreign language and history, and the advanced placement (AP) classes to booster their grade point averages and to meet the admission requirements of most colleges. JROTC is an elective class and most college prep students find that between band, drama, art and AP classes, JROTC is a difficult fit into their schedules. Therefore, after the first or second year some college prep students leave the JROTC program. One academic administrator explained that these students who left the JROTC program maintained the values and attributes they had learned.

The second item the administrators discussed was what they referred to as attrition. One JROTC administrator said that attrition was expected and, for the most part, needed. Students lose interest for a number of reasons. They get a car, a girl friend, or a job and the interest in JROTC is no longer there. Another JROTC instructor said that the program in his/her school had a cap on JROTC enrollment and that the instructor culled students who did not show what was called the proper interest and potential required for leadership. This same instructor said that any student was welcome into the program for one or two years. It was the third year that he had to make a decision on whether the individual was worthy of continuing because that third year's

credit would make the student eligible for advanced placement, rank, and pay grade should the student join the service.

Interview Question 8:

In stating the goal of your JROTC program Academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

The principals strongly indicated in their perception that the primary goal of the JROTC program was Citizenship. They indicated that their view of the program was broader than that of the JROTC instructors and referred to this view as the overall scope. Another comment was that Citizenship is a value that stays with the student long after they leave high school and that the JROTC students seem to have a better understanding of their Citizenship responsibilities.

The JROTC instructors maintained their belief that their primary goal was to get their students through high school. That goal they considered the first step in Citizenship. Another comment was that the two characteristics, Citizenship and Completion of High School, go together. The Completion of High School degree is part of Citizenship and the two can not be separated.

One instructor stated that the principals and faculty were briefed on the JROTC department several times a year and Citizenship is what the Senior Army Instructor tells them is their goal and mission. Completion of High School degree is the first step towards that goal.

Finally, the JROTC instructors indicated they are closer to their students and because so many are at-risk students the instructors have to concentrate on getting the students through high school. One principal said he could cite specific examples of students who would have never finish high school if not for the JROTC program and mentorship of the instructors.

At the conclusion of the interview the administrators were asked if they wanted to make any additional comments about the JROTC program in their school

The first interviewed said that our instructors and faculty do not look at the JROTC program as a separate program but as part of our curriculum. The faculty comments on how better behaved the JROTC students are and how better students they are after they enter the program.

Another commented on how every branch of the military service has a waiting list of high schools for JROTC programs. As such the high schools must value the program or they would not want one.

One principal commented that he had a lot of respect for the leadership of the JROTC program in his school and that the JROTC program was part of the curriculum and a part of his team.

Another principal stated that the JROTC instructors had turned around a number of students and that the principal could not imagine what their school would be like without their JROTC program.

A JROTC instructor commented that the program could use more support from administration and that the program was not recognized for the asset that it could be for transitioning students.

### *Research Questions and Hypotheses*

In Chapter 1, four research questions were proposed for this study to investigate. The above analysis of the collected data provided the bases for the research questions and hypotheses tests that follow.

Research question 1: Do JROTC students have a different dropout rate than the non-JROTC student in the high schools selected for this study?

The data analysis from the JROTC Study Data Requirements determined that using the 2002 senior cohort dropout frequency number and the total enrollment of the cohort, the JROTC student group had a 22.1 % dropout rate which was slightly more than the non-JROTC student group, which had a 21.2 % dropout rate. Therefore, there was a difference in the dropout rates between the two groups.

Hypothesis 1: There is no difference in dropout rates based on students that participate in JROTC and students that do not participate in JROTC at the high schools participating in the study.

Null Hypothesis 1 is rejected because there is a difference in the dropout rates of JROTC and non-JROTC students at the high schools participating in this study.

Research question 2: Is there a difference in the attendance rate of JROTC students' transitioning to post secondary schools when compared the non-JROTC students at the high schools involved in this study?

The data analysis determined that JROTC students were transitioning to college at a 52.4 % rate and that non-JROTC students were transitioning at an 84.4 % rate. There was a difference in the transitioning rate and non-JROTC students were attending post-secondary schools following graduation at a higher rate than the JROTC students.

Hypothesis 2: There is no difference in the transition rate of JROTC students and the transition rate of non-JROTC students at the high schools participating in this study.

Null Hypothesis 2 is rejected because there is a difference in the transition-to-college rates of JROTC and non-JROTC participating students at the high schools participating in this study.

Research question 3: What are the costs associated with the operation of JROTC programs in the high schools selected for this study, and how much of the total cost is borne by the host high school versus the Army?

The analysis of the data determined that the average cost to the two schools reporting their program costs was \$72,785 and a per-student average of \$731. Included in these costs were the instructors' payroll, overhead, and other costs such as books and materials. The instructors are paid by the host school system and are reimbursed by the Army at a predetermined amount called "cost-shared reimbursement" (J. Carpenter, personal correspondence, November 7, 2003). Under this scenario the Army pays about 50 % of each instructor's payroll cost to the school. Individual instructors can negotiate a higher salary and for the amount above the Army predetermined amount the school is not reimbursed. At the two schools reporting their payroll costs for 2002, the payroll averaged about \$27,000 per instructor. How the instructors are paid and how the cost is distributed among the host school system, the Army, and the individual's retirement pay will be further explained in Chapter 5.

Hypothesis 3: There is no difference in the costs of operating the JROTC programs at the high schools participating in this study.

Null Hypothesis 3 is rejected because there are differences in the JROTC program operating costs of school 1 and School 2.

Hypothesis 4: There is no difference in the per-student JROTC costs at the high schools participating in this study.

Null Hypothesis 4 is rejected because school 1 and school 2 had difference per-student JROTC program costs.

Hypothesis 5: There is no difference in the portion of cost shared by the host high school and the Army Cadet Command at each high school participating in this study.

Null Hypothesis 5 is rejected because the Army calculates different payroll costs for each individual JROTC instructor based on their entitlement calculations. The entitlement calculations, based on rank, length of service and zip code location, are different for each instructor (J. Carpenter, personal correspondence, November 7, 2003).

Research Question 4: Concerning the costs versus benefits associated with the operation of JROTC, how do the high school administrators, high school principals and the JROTC senior Army instructors evaluate the value and cost-effectiveness of their JROTC programs?

Both principals and senior Army instructors stated that their JROTC programs are of considerable value to the schools and communities where they are located. One principal referred to how much money their school system was putting into retention programs for at-risk students and went on to state that the JROTC was very cost-effective at addressing the at-risk students who are involved in their JROTC. Both the principals and the senior Army instructors stated that they believed their JROTC programs to be cost-effective in reducing the dropout rates and increasing the transition rate of students in the JROTC program.

Hypothesis 6: There are no differences in the perceptions of the JROTC senior Army instructors and principals concerning the cost effectiveness of JROTC at the high schools in the study.

Null Hypothesis 6 is rejected because there were differences in the perceptions of the administrators participating in this study. Not only were there differences among the administrators, but there were differences in perceptions between the two groups of administrators.

Hypothesis 7: There are no differences in the perceptions of the senior Army instructors and the high school principals concerning the cost effectiveness of JROTC impacting dropout rates at the high schools participating in this study.

Null Hypothesis 7 was retained because there were no differences in the perceptions

of the administrators concerning the cost effectiveness of JROTC impacting dropout rates at the high schools participating in this study. Both principals and senior Army instructors perceived their JROTC programs to be cost-effective.

Hypothesis 8: There are no differences in the perceptions of high school principals and senior Army instructors concerning the cost effectiveness of JROTC impacting the transition-to-college rates of JROTC and non-JROTC students.

Null Hypothesis 8 was retained because there were no differences in the perceptions of the principals and senior Army instructors concerning the cost effectiveness of JROTC impacting transition-to-college rates at the high schools participating in this study.

#### *Summary*

There were three instruments used in the collection of data from the three high schools and six administrative participants. Both quantitative and qualitative methodologies were used in the data collection. Both the schools and participants were purposefully selected for this study.

The analysis of the data collected on student demographics was taken from the JROTC Study Data Requirements distributed to the schools for the purpose of recording the required archival data for this study. The data collected provided information on the costs of operating the JROTC programs, dropout statistics for JROTC and non-JROTC students, transitioning-to-college statistics for JROTC and non-JROTC students, and student demographics for the three schools.

Only two of the three schools reported their JROTC program costs and for those schools the average JROTC per-student cost was \$731 for the 2002 school year. School 1 had a per-student cost of \$605 and School 2 had a per-student cost of \$798.

Using the 2002 senior JROTC cohort dropout total from the three schools and the total 2002 senior JROTC cohort enrollment at the three schools determined that the JROTC group had

a dropout rate of 22.1 %. One school had an abnormally high dropout rate of 55.6 %, which increased the dropout rate results for the sample population. The same mathematical procedure for the non-JROTC group determined a 21.2 % dropout rate. The non-JROTC dropout rate for the one school was 33.4 %.

The analysis indicated that 84.4 % of the non-JROTC group were intending to transitioning-to-college. The JROTC group had 52.4 % that were intending to transition-to-college.

The student demographics determined that 9.7 % of students enrolled in the three schools were participating in JROTC. The number of students participating in JROTC reduced each school year from freshman to senior years.

The first 29 questions of the JROTC Questionnaire investigated the perceptions of principals and JROTC senior Army instructors towards the values and cost-effectiveness of their JROTC programs using a Likert-type scale. The mean values for the 29 perception questions were determined using SPSS analytical procedures. Although for many questions the perceptions of the administrators were similar, some differences in perceptions were determined between the Academic and JROTC administrators.

The 30th question of the JROTC Questionnaire asked the administrators to rank of the goals of the JROTC program. Ten goal characteristics were listed. Each administrator assigned a rank from 1 to 10 to each goal with 1 being the highest or most important goal and 10 the lowest. Principals ranked Citizenship the highest or primary goal of the JROTC program. Senior Army instructors ranked Completion of High School as their primary goal.

The third instrument used in this research was the Interview Protocol containing eight questions. Prior to each interview, the administrators were given the analysis of the JROTC



Questionnaire and the JROTC Study Data Requirements statistics for their interpolation. The interviews were conducted in a semi-structured manner. This allowed the interviewees an opportunity to explain their answers and allowed for exploration into the reasons why and for reason an interviewee had answered a question. There was a consistency to their answers for the most part. There were exceptions and perception differences were explained. The reduction in students in the JROTC program from year to year had two explanations. The first was for academic reasons and the second was attrition.

After ranking Citizenship as the primary goal, principals explained that they were looking at the overall scope of the program. The JROTC senior Army instructors ranked Completion of High School as their primary goal. Both groups of administrators indicated that they felt that Citizenship and Completion of High School were basically the same and that the one went with the other. Yet, principals ranked Completion of High School third, and the Senior Army Instructors ranked Citizenship fifth. In general, principals perceived a higher value for their JROTC programs than did the senior Army instructors.

The four research questions that were at the center of this research were answered and the eight null hypotheses proposed in Chapter 3 were either retained or rejected based on the data analysis. Hypotheses one through six were rejected and hypotheses seven and eight were retained.

## CHAPTER 5

### CONCLUSIONS, INFERENCES, AND RECOMMENDATIONS

#### *Conclusions*

The data analysis determined that principals and senior Army instructors have generally the same positive perceptions of their JROTC programs. The administrators stated that their JROTC programs enhance their students' education and their schools in general, and that the program costs are within the cost-benefit ratio desired.

This research investigated four questions relating to the JROTC programs in the three selected high schools. How much does it cost to operate a JROTC program? Does the JROTC program impact the dropout rate? Does the JROTC program impact the transition-to-college rate? And, how do principals and senior Army instructors perceive the cost-effectiveness and value of JROTC in their high schools?

The average JROTC program cost in the two schools reporting was \$72,785 or \$731 per-JROTC student. All the principals stated that the monetary outlay for the program added value to their schools and that their JROTC programs were worth the expenditures. Two of the three senior Army instructors stated in their interviews the same. The third senior Army instructor stated that he had not really thought about the cost question and abstained from answering. One principal discussed the funding for other types of intervention programs without the positive results obtained by the JROTC program. The principal stated:

We put a lot of money into high-risk programs with less benefit than we get from JROTC. JROTC is also subsidized.

In two of the three high schools in this study, the JROTC student dropout rates for the 2002 student graduating cohort were 0.0 % and 12.5 %. The corresponding dropout rates for the

non-JROTC students were 23.8 % and 15.0 %. In both of these schools, the JROTC group had a lower dropout rate than the non-JROTC group.

The third school had a JROTC student dropout rate of 55.6 % and a non-JROTC dropout rate of 33.2 %. When compared to the other two schools, these rates seem high, and for this school the non-JROTC group had the lower dropout rate. The administrator is aware of their dropout problem and is putting money into intervention programs for their disproportionately high number of at-risk students. The principal seemed satisfied that the JROTC program is cost-effective at reducing the dropout rate, because it has a higher proportion of at-risk and special education students in the program when compared to the non-JROTC student population.

The JROTC Questionnaire surveyed the administrators in the pretest part of the inquiry into the perceptions of the administrators. The mean analysis of each of questions 1-29 were displayed in bar graph form in chapter 4. Table 8 on page 108 provides the mean answer for each question separated by the two groups “Academic” for the principals and “JROTC” for the senior Army instructors. As the questioned are discussed, Table 8 can be easily referenced.

Question 11 of the JROTC Questionnaire asked if JROTC students are more likely to drop out of school before graduating when compared to the non-JROTC students. Principals and senior Army instructors disagreed that JROTC students are more likely to drop out of school before graduating when compared to the non-JROTC students. Principals, with a mean score of 1.3, had a stronger disagreement with the statement than did the senior Army instructor’s (1.7). Principals had a stronger opinion that JROTC impacted JROTC students in reducing the dropout rate than did the senior Army instructors.

Taken individually, two of the three schools’ JROTC programs had lower dropout rates than was the case for their non-JROTC student population. The third school’s dropout rate for

the JROTC was higher than the non-JROTC. A larger sample size of high schools in a quantitative research study could determine if a statistically significant difference exists between the JROTC and non-JROTC student dropout rates, providing that the dropout count method would be standardized across all the schools.

All of the senior Army instructors and principals stated that their JROTC programs are not presently attracting the higher academic achieving students. As indicated in the interviews, part of this is attributed to the academic track decisions that students in the college prep track have to make, whereby the student does not have room on his/her class schedule for the JROTC elective classes. Another reason found in the interviews with senior Army instructors was that they indicated that the students do not seem to be aware of the financial and admissions help that the Armed Services and JROTC senior Army instructors can provide.

Another reason could be the lack of support from school systems and administrations as one senior Army instructor alluded. Only one of the three schools appears to be growing in the number of students participating in their JROTC program and that school is adding another Army instructor because of the increasing JROTC student base.

School performance and academic ability are factors that reinforce dropout decisions (Alexander et al., 2001). If the students who are in the highest academic track (college prep) are not participating in JROTC, then JROTC is placed at a disadvantage for not having the academic diversity afforded the non-JROTC students population. School administrators need to reassess how JROTC is promoted to the general student population. As found by Perusse (1997), certain identifiers seem to be used to identify those students who are encouraged to participate in JROTC.

Table 8

## JROTC Questionnaire - Mean Analysis

Question	Type of Question	Academic	JROTC
1.	Value of Program	5.0	5.0
2.	Value of Program	3.7	4.3
3.	Enrollment and Maintenance	3.3	3.7
4.	Value of program	2.7	4.3
5.	Enrollment and Maintenance	3.3	1.7
6.	Dropout	3.7	3.3
7.	Enrollment and Maintenance	2.7	3.0
8.	Enrollment and Maintenance	2.0	3.7
9.	Enrollment and Maintenance	3.3	3.0
10.	Value of Program	5.0	4.7
11.	Dropout	1.3	1.7
12.	Value of program	4.0	2.3
13.	Transition to College	2.7	2.3
14.	Enrollment and Maintenance	4.3	4.7
15.	Transition to College	2.7	2.3
16.	Cost Effectiveness	1.3	1.3
17.	Transition to College	2.7	2.3
18.	Dropout	2.0	2.7
19.	Value of Program	5.0	5.0
20.	Cost Effectiveness	4.7	3.3
21.	Enrollment and Maintenance	2.0	2.7
22.	Value of Program	4.7	4.0
23.	Enrollment and Maintenance	5.0	4.0
24.	Enrollment and Maintenance	3.7	1.3
25.	Dropout	4.3	3.3
26.	Enrollment and Maintenance	4.0	4.3
27.	Enrollment and Maintenance	2.7	3.3
28.	Enrollment and Maintenance	4.3	3.7
29.	Value of Program	1.0	1.0

The JROTC Questionnaire indicated that the principals and senior Army instructors believed that JROTC students showed greater leadership and self-esteem when compared to their non-JROTC students (question 2 and question 22). This is further conformation to Bachman's (1994) study that indicated that the Army JROTC program develops leadership behavior and self-esteem better than what is offered in the standard high school. School administrators should be asking themselves, if we do not begin the process of developing future leaders in our school systems, where will they come from and who will train them? JROTC should not be just a program for at-risk and lower academic achieving students.

The data analysis on transition-to-college indicates that the non-JROTC students are going to college at a much higher rate than the JROTC students (84.4 % versus 52.4 %). On the mean score analysis of question-30 of the JROTC Questionnaire, principals ranked the transition-to-college goal for the JROTC program ninth. Some instructors challenged the data reported by the schools for the transitioning non-JROTC students because it measured only the intent of students to transition without follow-up to determine if those students actually attended college. For the transitioning student rate to be accurate, follow-up verification is needed for all the students, both JROTC and non-JROTC.

Senior Army instructors ranked transition-to-college sixth out of the 10 goals. They ranked completion of high school as their number one goal. In their interviews, the principals of the three schools in this study cited individual cases where the JROTC instructors were able to intervene positively for at-risk students and keep the student in school. If JROTC instructors are able to provide the same mentoring to college prep students who could have participated in JROTC, the transitioning rate of JROTC students will go up. This characteristic was found by Epstein (1992) where teacher-student relationships in the form of mentoring was used to foster a

positive influence and a major factor in a student's decision to further their education by attending college. Principals and senior Army instructors strongly agreed that the senior Army instructors are good mentors and therefore should be considered as an asset for transitioning students.

It was unclear whether the administrators fully understood what students were or were not transitioning. On question 15 of the JROTC Questionnaire the administrators were asked if they perceived the transition rate of JROTC students to higher education immediately following high school completion to be less than that of the non-JROTC students. They disagreed with the statement meaning that they thought that JROTC students were transitioning at a higher rate. The mean answer for principals was 2.7 and 2.3 for senior Army instructors. They did not correct their perception of this question in their interviews. Principals were close to having no opinion and the senior Army instructors were more firm in their perception. This concludes that the principals and the senior Army instructors do not place transitioning-to-college as an important goal of the JROTC program. Because an important aspect of Citizenship is an educated and informed citizen, the administrators should reconsider how transitioning should be valued and promoted to the general student population and to the JROTC students.

Principals and senior Army instructors stated their JROTC programs are cost effective in reducing the dropout rate and increasing the transitioning rate in their schools. Question 20 of the JROTC Questionnaire asked if the administrators thought the JROTC program was cost effective in reducing the dropout rate. The principals' with a mean score of 4.7 were strongly in agreement. The senior Army instructors, with a mean score of 3.3, were in agreement but only slightly above having no opinion. When considering the cost effectiveness of JROTC in reducing the dropout rate, it can be concluded that principals have a higher opinion of their JROTC programs than do the senior Army instructors.

### *Inferences*

This research focused on three purposefully-selected high schools, two in North Carolina and one in Tennessee, and the purposefully selected three principals and three JROTC senior Army instructors at those schools. As such, the findings of this research are only indicative of that population. The results of the research imply the following:

1. The dropout statistics favor JROTC impacting and reducing dropouts among the JROTC students when the higher proportion of at-risk and special education students participating in JROTC is considered.
2. The JROTC programs have a problem attracting and retaining the higher academically achieving students enrolled in the college prep track.
3. The stronger the administrative support for the JROTC program, the stronger the program.
4. The main focus of the JROTC senior Army instructors is to have their students graduate from high school.
5. To have their JROTC students' transition-to-college is not a priority for the JROTC instructors or the administration at the schools in this study.
6. The administrators were unsure of themselves in understanding the monetary costs of operating their JROTC programs.
7. The schools are not using the JROTC program as a resource for college scholarships and transition to higher education counseling.
8. JROTC students do not like their uniforms, especially the Army Green.
9. In general, the principals have a higher opinion of their JROTC programs than do their senior Army instructors.



10. JROTC offers an opportunity for students, which would not generally do so otherwise, to become more actively involved in school activities and community service.
11. All students could benefit from the leadership, self-esteem, and citizenship taught in the JROTC program.

#### *Recommendations to Improve Practice*

The purpose of this research was to determine the perceptions of school administrators at three purposely-selected high schools regarding the value and cost effectiveness of student participation in JROTC and to compare the dropout and transition-to-college rates of JROTC and non-JROTC students in these same schools.

It was my intent to determine if JROTC was perceived to impacted dropout and transition rates, one way or the other, in a cost-effective manner and how the administrators perceived the value and the cost effectiveness of their programs. The following recommendations are based on the findings and implications of this study.

1. Principals and senior Army instructors should develop a strategy for attracting the higher academic achieving students to JROTC. The strategy should include all administrators knowing the higher education scholarship and admission benefits that college bound students could possibly receive from JROTC participation.
2. School systems and administrators need to better understand how JROTC benefits their students and community. At this time, JROTC is an under used asset for these schools and communities.

3. Curriculum designers and administrators need to develop class schedules and curriculums that do not penalize a student's success in any educational track for participating in JROTC.
4. School systems need to develop better means of tracking both dropout and transitioning to college students after they leave their schools and methods of recording the data for analysis in order to provide counseling to improve students' decisions.
5. Army Cadet Command should institute further research concerning the cadet uniforms to verify, or not, the implications found in this study in order to provide a uniform that the students would enjoy and take pride in wearing each day.
6. Principals, faculty and senior Army instructors need to be of one mind in determining the goals for their students participating in JROTC. School systems or the administrators need to develop a tracking system to determine their degree of success in meeting those goals and improving their goal projections.

#### *Recommendations for Further Research*

Based upon determining JROTC program costs, dropout and transitioning rates, and the perceptions of administrators towards their JROTC programs, I have developed the following recommendations for future research:

1. A quantitative investigation into determining whether or not a statistically significant difference exists in dropout rates between those students who participate in JROTC and those students whom do not.
2. School systems should investigate whether the data they are collecting on students' transitioning to college are accurate or not. If the data is not correct, new

procedures should be put in place to better track between student intention and attendance following graduation from high school.

3. The implication from this research is that students do not like wearing their cadet uniforms, which are similar to those worn by the regular Army. An investigation should be implemented to verify the attitudes of students towards their uniforms and towards different types of uniforms.
4. This research should be duplicated in different types of schools with larger populations and a more diversified student base. As stated in this paper, the final JROTC cohort of the selected schools might have been too small for significance and a larger sample might eliminate this doubt, verify, or repute these findings.

#### *Summary*

This research discovered some inconsistencies in the perceptions of principals and senior Army instructors towards their high school JROTC programs. Both types of administrators had positive perceptions of their JROTC programs, but principals perceived a higher value than did their JROTC senior Army instructors. The study indicated that JROTC students had lower dropout rates when compared to the non-JROTC students in two of the three schools but higher in the third school. JROTC students had lower transition rates when compared to the non-JROTC students in all three of the schools studied. An average JROTC per-student cost of \$731 was determined for the operation of the JROTC program in two of three high schools for the 2002 school year.

There were indications that two problems exist concerning how students are recruited into the JROTC programs at the schools in this study. The first was the lack of higher academic

achieving students (upper 1/3 of the class) participating in JROTC and the second was the student dislike for the Army green uniform.

Recommendations for future research were addressed at validating the findings of this study, determining if a statistical significant difference exists in dropouts between JROTC and non-JROTC students, and research for improving and standardizing the methods of data collection for dropout and transition to college students.

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JROTC Questionnaire

This questionnaire contains 30 statements about the Junior Reserve Officers Training Corps (JROTC) program in your high school and should take 10 - 15 minutes to complete. There are no right or wrong answers as this questionnaire only proposes to gauge your perceptions of the value of the JROTC program at your high school using a Likert-type scale. Some of the statements ask for your opinion of the JROTC program while others ask your beliefs concerning the students who are participating in JROTC, compared with the students who are not participating in JROTC (non-JROTC). The last question asks you to rank what you believe the goals of the JROTC are in your school.

Please answer each of the following statements with the answer that best describes your perception or belief concerning the statement. There are five possible answers (Likert-type scale) to each statement. The scale is – (1) STRONGLY AGREE, (2) AGREE, (3) NO OPINION, (4) DISAGREE, and (5) STRONGLY DISAGREE.

Do not sign or identify yourself on the pages and mail the questionnaire in the self addressed envelope provided that does not identify the individual or your school.

---

1) The JROTC program is an asset to our school.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

2) JROTC students exhibit more leadership abilities when compared to the non-JROTC students in our high school.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

3) JROTC students would wear their BDU or other designated uniform daily if allowed.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

4) The JROTC students are more active in extra curricular activities than the non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

5) The student wearing of uniforms is an effective recruitment tool.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

6) JROTC students are less likely to receive failing grades compared to the non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

7) JROTC students are more likely to come from lower socioeconomic family backgrounds.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

8) There is a proportionately higher percentage of special education students participating in JROTC compared to the non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

9) At our school, the JROTC program does not have problems attracting students to the program.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

10) The JROTC program is an asset to our school in ways that cannot be measured.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

11) JROTC students are more likely to drop out of school before graduating compared to the non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

12) The faculty of our high school believes the JROTC program is highly rated by the students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

13) Students participate in JROTC because they want a military career after completing high school.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

14) Recruitment for the JROTC program should begin before the students enter high school.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

15) The transition rate of JROTC students to higher education immediately following high school completion is less than that of the non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

16) JROTC is not a cost-effective program in helping students go to college.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

17) Students participate in JROTC because they believe they will receive financial assistance for college when participating in the college ROTC, and JROTC helps them achieve their goal of going to college.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

18) JROTC students do not have better attendance records than do the non-JROTC students at our high school.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

19) The JROTC program provides an opportunity for students that would not otherwise become actively involved in school activities.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

20) The JROTC is a cost effective program in reducing the dropout rates at our high school.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

21) We have problems retaining students beyond their freshman year in our JROTC.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

22) JROTC students, in general, exhibit more self-esteem when compared to the non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

23) The JROTC program receives the full support of our school administration.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

24) JROTC students like wearing their Army Green Uniform (Class A).

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

25) JROTC students have fewer school suspensions than do non-JROTC students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

26) Our present method of recruiting students does not attract the higher academic achieving students (upper 1/3 of the student population).

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

27) JROTC students are invited to participate in the program because they are considered to be behavioral problems.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

28) Students should receive academic (Health) credit for their JROTC classes.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

29) JROTC instructors are not effective mentors to their students.

(Strongly Agree)\_\_\_ (Agree)\_\_\_ (No Opinion)\_\_\_ (Disagree)\_\_\_ (Strongly Disagree)\_\_\_

30) Please rank the following statements (on a scale of 1-10 with 1 being the highest and 10 being the lowest) concerning the goals of your JROTC program. Enter your ranking inside the parenthesis – example ( 3 ).

- ( ) Academic achievement
- ( ) Military history awareness
- ( ) Citizenship
- ( ) Discipline
- ( ) Transition to College
- ( ) Military Bearing, Physical Fitness and Drill
- ( ) Completion of High School Degree
- ( ) Recruiting for military service after high school
- ( ) Developing Leadership Traits and Characteristics
- ( ) Building Self-esteem

Enter any additional goals not listed above or comments:

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## Appendix B

### Interview Protocol

This interview is organized in a semi-structured manner. You will have ample opportunity to explain your responses in an open-ended fashion. You do not have to answer any question that makes you uncomfortable or that you feel is not applicable to your school.

- Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.
- Question 2: Are the analyses of dropout and transition rates what you expected?
- Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricula program?
- Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?
- Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert type scale indicated that both Academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.
- Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?
- Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. – 143, So. – 102, Jr. – 67, Sr. – 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.
- Question 8: In stating the goal of your JROTC program Academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

Please make any additional comments about your JROTC program at this time.

## Appendix C

### JROTC Study Data Requirements

JROTC Program Costs for School Year:

Payroll Costs: Senior Army Instructor	\$ _____
Enlisted Army Instructor	\$ _____
Program Costs: Indirect Overhead Applied	\$ _____
Books and Other Materials	\$ _____
First Year Startup Costs: Application Costs	\$ _____
Internal Costs	\$ _____

Dropout Statistics:

	JROTC	Non-JROTC
2002 Graduating Seniors (Number)	_____	_____
1998-2002 Dropouts (Number)	_____	_____

Transition-to-College Statistics:

	JROTC	Non-JROTC
2002 Graduating Seniors to College	_____	_____

Student Demographics For 2002 School Year:

	Freshman	Sophomore	Junior	Senior	Total
JROTC:	_____	_____	_____	_____	_____
Non-JROTC:	_____	_____	_____	_____	_____
Student Total:	_____	_____	_____	_____	_____
Gender Percentage:	Female _____%		Male _____%		
Race by Percentage:	Caucasian _____%		Black _____%		
	Hispanic _____%		Native American _____%		Other _____%
Free or Reduced Meals	_____%		Students Special Education _____		

JROTC Survey and Data Analysis Report

This report is the second part of the three-part process of your participation in the JROTC dissertation study in which you have agreed to participate.

The 30-question survey you previously completed centered on six basic concerns:

Your perceptions as to the value of your JROTC program;

Your perceptions of your school's dropout rates;

Your perceptions of problems in maintaining the enrollment and success of your JROTC program;

Your perceptions of the transition rate of students to higher education after graduation;

Your perception of the cost effectiveness of your JROTC program; and

Your ranking of the goals of your JROTC program.

The answers to the 30 questions were analyzed using a Likert-type scale applying values of 5.0 to 1.0 based on Strongly Agree as 5.0, Agree as 4.0, No Opinion as 3.0, Disagree as 2.0, and Strongly Disagree as 1.0. Values with a mean above 3.0 indicate a positive perception of the question or statement. A higher value (towards 5.0) indicates a stronger agreement with the question or statement. A value below 3.0 indicates a negative perception towards the question or statement.

Student demographics using the student cohort for school year 2002 (1998-2002) were collected to determine the JROTC program costs for your schools, Dropout Statistics, Transition-to-College Statistics, students in Freshman-to-Senior year numbers, and Gender and Race



percentages. These data were analyzed using frequency rates and percentages concerning the total indicators.

Please read the following analyses of the survey and data collection to determine if any of the analyses change your original perceptions. Any changes in your perceptions will be discussed in the third and final part of your participation during an interview that will be scheduled at your convenience in November.

### Survey Results

The Likert-type scale scores shown below represent the mean scores for all participating schools combined, not just for any individual school. The surveys were color coded with principals receiving white surveys and the senior Army instructors receiving yellow surveys. This allowed the surveys to be separated into two groups to see if there were differences in perceptions between academic administrators and the JROTC administrators.

The average (mean) perceptions for the two groups are reported separately as Academic (principals) and JROTC (senior Army instructors). The number in the front of a line represents the corresponding question number in the original survey document. The Likert-type scale goes from 5.0 (for Strongly Agree) to 1.0 (for Strongly Disagree). Each numeric value (example: 3.7) represents the mean score for the group. Please take note of values where Academic perceptions are on one side of 3.0 (neutral) and JROTC perceptions are on the other side of neutral. Please also note any places where there are large differences, even if both perceptions lean the same way.

Then review the data on Dropouts and Transition-to-College. Do these frequency

percentages surprise or confirm your original perceptions? Please use this report for notes on your thoughts so that we can discuss them later in the interview.

### Survey Analysis

Questions on the Value of the JROTC program to your school:	<u>Mean Score</u>
1) The JROTC program is an asset to our school.	Academic 5.0 - JROTC 5.0
2) JROTC students exhibit more leadership abilities.	Academic 3.7 - JROTC 4.3
4) JROTC students are more active in extra curricular activities than the non-JROTC students.	Academic 2.7 - JROTC 4.3
10) The JROTC program is an asset to our school in ways that cannot be measured.	Academic 5.0 - JROTC 4.7
12) The faculty of our school believes the JROTC program is highly rated by the students.	Academic 4.0 - JROTC 2.3
19) The JROTC program provides an opportunity for students that would not otherwise become actively involved in school activities.	Academic 5.0 - JROTC 5.0
22) JROTC students, in general, exhibit more self-esteem when compared to the non-JROTC students.	Academic 4.7 - JROTC 4.0
29) JROTC instructors are not effective mentors to their students.	Academic 1.0 - JROTC 1.0

Questions on Dropouts:

- 6) JROTC students are less likely to receive failing grades compared to the non-JROTC students. Academic 3.7 - JROTC 3.3
- 11) JROTC students are more likely to dropout of school before graduating compared to the non-JROTC. Academic 1.3 - JROTC 1.7
- 18) JROTC students do not have better attendance records than the non-JROTC Students. Academic 2.0 - JROTC 2.7
- 25) JROTC students have fewer school suspensions than do the non-JROTC Students. Academic 4.3 - JROTC 3.3

Questions on school problems in enrollment and maintenance of the JROTC program:

- 3) JROTC students would wear their BDU or other designated uniform daily if allowed. Academic 3.3 - JROTC 3.7
- 5) Student wearing of uniforms is an effective recruitment tool for the JROTC program. Academic 3.3 - JROTC 1.7
- 7) JROTC students are more likely to come from lower socioeconomic family backgrounds. Academic 2.7 - JROTC 3.0
- 8) There are a proportionately higher percentage of special education students in JROTC. Academic 2.0 - JROTC 3.7
- 9) At our school, JROTC does not have problems attracting students to the program. Academic 3.3 - JROTC 3.0
- 14) Recruitment for JROTC should begin before entering high school. Academic 4.3 - JROTC 4.7

21) We have problems retaining students in JROTC beyond their freshman year.

Academic 2.0 - JROTC 2.7

23) The JROTC program receives the full support of our school administration.

Academic 5.0 - JROTC 4.0

24) JROTC students like wearing their Army Green uniforms.

Academic 3.7 - JROTC 1.3

26) Our present method of recruiting students to the JROTC does not attract the higher academic achieving students to the program.

Academic 4.0 - JROTC 4.3

27) Students are invited to participate in JROTC because they are considered behavioral problems.

Academic 2.7 - JROTC 3.3

28) Students should receive academic health credit for JROTC classes.

Academic 4.3 - JROTC 3.7

#### Questions on Transition to College:

13) Students participate in JROTC because they want a military career after completing high school.

Academic 2.7 - JROTC 2.3

15) The transition rate of JROTC students to higher education immediately following high school completion is less than that of non-JROTC students.

Academic 2.7 - JROTC 2.3

17) JROTC students participate in JROTC because they believe they will receive financial assistance for college when participating in college ROTC and JROTC helps them achieve that goal.

Academic 2.7 - JROTC 2.3

Questions as to the cost effectiveness of the JROTC program:

16) JROTC is not a cost-effective program in helping students go to college.

Academic 1.3 - JROTC 1.3

20) JROTC is a cost-effective program in reducing the dropout rate at our high school.

Academic 4.7 - JROTC 3.3

Participant Rankings of the Goals of the JROTC Program.

The ranking is based on the lowest average number being the primary goal perceived by the group. Where the rank has two numbers (example: #2-3), this means two Goals had the same average rank by the group.

	<u>Academic</u>	<u>ROTC</u>
Academic Achievement	7	2-3
Military History Awareness	6	9
Citizenship	1	5
Discipline	8	7
Transition to College	9	6
Military Bearing, Physical Fitness and Drill	5	8
Completion of High School Degree	3-4	1
Recruiting for Military Service after High School	10	10
Developing Leadership Traits and Characteristics	2	4
Building Self-Esteem	3-4	2-3

## Data Sheet Archival Data Collected and Summarized from Participating Schools

<u>JROTC Program Costs</u>	<u>School 1</u>	<u>School 2</u>	<u>School 3</u>	<u>Totals</u>
Payroll Costs	\$72,078	\$50,955	N/A	\$134,301
Overhead	4,768	6,000	N/A	10,768
Other	<u>N/A</u>	<u>500</u>	<u>N/A</u>	<u>500</u>
Totals	\$76,846	\$57,455	N/A	\$145,569

Per student JROTC cost for School 1 and 2 (\$145,569 / 199 students): \$ 731

<u>Dropout Statistics</u>	<u>School 1</u>	<u>School 2</u>	<u>School 3</u>	<u>Totals</u>
	JROTC			
2002 Graduating Seniors:	12	4	7	23
1998-2002 Dropouts:	<u>0</u>	<u>5</u>	<u>1</u>	<u>6</u>
2002 JROTC Cohort	12	9	8	29
	Non-JROTC			
2002 Graduating Seniors:	189	137	424	750
1998-2002 Dropouts:	<u>59</u>	<u>68</u>	<u>75</u>	<u>202</u>
2002 Non-JROTC Cohort	248	205	499	952

<u>Transition-to-College Statistics</u>	<u>School 1</u>	<u>School 2</u>	<u>School 3</u>	<u>Totals</u>
JROTC	6	2	3	11
Non-JROTC	<u>145</u>	<u>110</u>	<u>378</u>	<u>633</u>
Total Transitioning	151	112	381	744

<u>Student Demographics</u>	<u>School 1</u>	<u>School 2</u>	<u>School 3</u>	<u>Totals</u>
	JROTC Students			
Freshman	61	30	52	143
Sophomore	35	17	50	102
Junior	19	16	32	67
Senior	<u>12</u>	<u>9</u>	<u>8</u>	<u>29</u>
Total JROTC	127	72	142	341
	Non-JROTC Students			
Freshman	186	191	531	908
Sophomore	195	150	424	769
Junior	204	135	433	772
Senior	<u>167</u>	<u>131</u>	<u>434</u>	<u>732</u>
Total Non-JROTC	752	607	1,812	3,181
Total Students Enrolled	879	679	1,953	3,522

## Appendix E

### Transcription of Interviews

Interview #1

Page 1 of 5

School 1 – Academic (Principal)

Date and Time of Interview: October 30, 2003 at 8:45am

Interviewer: (Gives participant a copy of the 8-question Interview Protocol)

Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

Principal: No. I feel comfortable with the answers I gave. I gave considerable attention prior to answering those questions. With our program here, I answered to best of my knowledge.

Interviewer: There are a few instances where principals and senior Army instructors gave opposite perceptions or at odds.

Principal: I noticed that, but most of the time we felt the same.

Interviewer: Okay. Let's go on to the second question.

Question 2: Are the analyses of dropout and transition rates what you expected?

Principal: I guess - probably so.

Interviewer: Naturally, this study is of only a few schools and the data results only indicative of what happens in these few schools.

Principal: Well our dropout rate school wide is pretty small.

Interviewer: Over all the JROTC and the non-JROTC rate were about the same.

Principal: Well that is an indication on the plus side for JROTC.

Interviewer: Good. Let's go on to the next question.

Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricular program?

Principal: Oh, yes! With all the benefits we receive, it is worth a whole lot more to us. We get so much mileage out of the program that the amount is appropriate.

Interviewer: Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

Principal: Very much so.

Interviewer: There was a difference where the JROTC was more positive in the dropout rate, but in transition it was less. Is there an explanation for that?

Principal: I don't know – we have such a percentage of our students, approximately 200 out of 900 taking JROTC, that I don't think that the number of the students surveyed might be too small. I know a lot of our JROTC students join the military and don't go on to college right out of high school. That might be the avenue they are selecting, but I don't know how that affects the one's going to college. They go on to college after the military. Up here in our area, the ability of families to pay for education is limited somewhat and they see the this (military service) as an avenue to pay for college.

Interviewer: Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert type scale indicated that both Academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

Principal: Every time we need something done in our entire community (we are a community-based school) – we have so many requests from our community for our JROTC participation. They participate in all the civics events, military funerals, and all our sporting events. They just participated in our Beta Club convention that we just had yesterday. They participated in every facet of that. They clean up our stadium after ball games. They are really a service organization. We need something and want it done correctly; we call on the JROTC. So, the intangible benefits to us – a lot of community respect for our program and our school. Kids want to be a part of it, the parents want to be a part of it – it just reflects a positive for our high school.



Interviewer: Do you think possibly that these young boys and girls – if they were not in JROTC, they would not be exposed to community service.

Principal: Very much! They would not to the extent that they are. We have a program now that requires every incoming freshman to complete 30-hours of community service prior to graduation. The ROTC students get it within a couple weeks. They get it behind them. So – just the amount of participation throughout our county – the Raider teams and all the things they participate in. They are going caving tomorrow. All these intangible things, the confidence course that these kids participate in and go through. They would not have the opportunity if they were not in the JROTC program.

Interviewer: My daughter is a ninth-grade English teacher at another high school in the area and seems to have a tremendous problem with respect. Not just for her, but the school, authority and anything in general. Do you feel as though the JROTC helps in that area?

Principal: I could name you six or eight cases where students had 8-10 discipline referrals in one year. The year they joined the JROTC program that was reduced down to one or two. And, the JROTC instructor wants to know when one or two of his students are involved in some disciplinary action. Amazing, and it doesn't happen again. We have – in one particular case where a JROTC student was suspended from school as a freshman several times. He joined the ROTC, he joined the track team and did a tremendous turnaround. He came from a low socioeconomic status family. It was a cooperative effort between the JROTC and the school. Respect and discipline is a big part of the program.

Interviewer: Did the young man join because he was invited to join?

Principal: No, he just decided to join on his own.

Interviewer: Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

Principal: This is only the fifth year of operation for this high school. Previously there were three high schools in this county. One had a JROTC program for over 20 years. I do not know the ins and outs of that program, but when we consolidated the three schools into this one we were fortunate to expand that program as ours. I know for sure that prior to the consolidation only one school had the program and many students that wanted participate were not able to do so. Now that we have only one high school in this county we feel good that we are able to offer it in our

curriculum. So, since it all started twenty years ago I don't know how it originated.

Interviewer: Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. 143, So. 102, Jr. 67, Sr. 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

Principal: I think a lot of it has to do with the educational track the students have to choose from now. There is the college prep, college test prep and so on. State requirements are such that as student progresses through from the 9<sup>th</sup> grade on and working with the counselors they decide which one of these tracks and what they see they have to have. State requires now that a student has to have two years of foreign language. You have to have so many additional math classes. As they get through the required courses they only have maybe one elective their freshman year. So as they get through these required courses and think of their major for college they are required additional course before they can get into their choice of university. In order to get all these courses on their transcript, they have to make choices – math, a foreign language or JROTC. At the freshman level they don't see that track. We tell them but they don't really want it. Then later on they need it when they want to go to UNC or NC State. Unless they plan on a military career or to take ROTC in college they seem to drop out of the program.

Interviewer: That is a good explanation. I hadn't thought of that.

Question 8: In stating the goal of your JROTC program, Academic administrators indicated that citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

Principal: I think of Citizenship. Yes, they (JROTC instructors) see their goal as that. But, the part that stands out to me is the strength in Citizenship and how they (students) behave themselves. And, how they respond and represent themselves and how they represent the school and the program. I think Citizenship entails so many things – respect and this and that. I see this (Citizenship) a big part of their program. I know their goal is getting them (students) through high school and they are successful at that. I can appreciate what they are saying about getting them through high school and that is their major goal. I never once have heard them say that they want to help the kids make a military career. They leave that door open for the student. They check on their grades – it's just like an athletic program – they check to see how their kids are performing. The Citizenship jumps out at me

because of the way the kids are when they go into the program and when they come out.

Interviewer: What happens when a student is unable to continue in the JROTC program because of academic or other conflicts? If they spend one, two or three years in the program, are they able to maintain the same values?

Principal: Yes. I can name so many fine examples of that.

Interviewer: Please make any additional comments about your JROTC program at this time.

Principal: Well, our program is growing. We are adding another instructor next term. Our instructors and faculty do not look at the JROTC program as a separate program but as a part of our curriculum. Although it has its own identity, the faculty comments on how better behaved the JROTC students are and how better students after they enter the program. I have never heard a comment about how easy the JROTC classes were. They are as challenging as other parts of our curriculum.

School 1 – JROTC (Senior Army Instructor)

Date and Time of Interview: October 30, 2003 at 9:35 am.

Interviewer: Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

JROTC: I don't think I would change any. There were a few answers where academic and JROTC administrators gave different perceptions. And, I think some of that was just a matter of perspectives and some a matter of semantics. The JROTC were looking at the question in terms of all the things that JROTC does. Where Principals were looking at the question in terms of football, baseball and JROTC as similar and the semantics are different.

Interviewer: Question 2: Are the analyses of dropout and transition rates what you expected?

JROTC: I think – that in looking at those I'm not convinced I believe in the statistics and I'll tell you why for a couple of reasons. For one, I'm not sure how well dropouts from JROTC are really tracked. That is something each instructor had to dig into and dig out; although, we have always proclaimed that we have a lower dropout rate than the general student population.

The transition rate – 84% for the cohort general population, I believe is high. The reason I feel this way is that in North Carolina we are required to do a role up at the end of the year to say where everyone is going. If a student comes into the guidance office and says “yea, I think I'm going to college.” That student (Non-JROTC) is marked down as going to college, even though he/she may never set foot in college. I therefore think those statistics are in question. They are accurate as far as the school so determines. But, they are not required to go beyond what the student states. To really be accurate, a follow-up needs to be done to find out what the student really did the first year out of high school – college or not. I suspect the real figure (transition rate) would be closer to 50%.

I feel that, at least in my case, the JROTC numbers are more accurate. I went down the list student by student and I know where they went, because we keep fairly good tabs on them. And then we are able to say, this one went to college, this one didn't and went to work. The counselors don't keep track like we do.

Interviewer: Do you think the percentage might change because of the kids that went into the military?

JROTC: Certainly it would raise it some. There are those that into the military and then go to college four years later. We have the same problem as the guidance office. We really don't know four years down the road what the kids do. So, it depends whom you want to count and how you want to count.

Interviewer: Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricular program?

JROTC: You know I had never thought about that. I had never thought of doing a cost per student analysis. I don't know if it is low or high. I have no idea.

Interviewer: Your principal was pleased that the number was that low.

JROTC: Well, if he so am I.

Interviewer: Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

JROTC: Yes.

Interviewer: Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert-type scale indicated that both academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

JROTC: I think the first one you have to look at is the discipline in the school. Kids need to get used to the idea of why there is a need and are willing to do so. They need to understand why there is a need for order and structure. Therefore, I think that is an intangible.

The leadership things that they learn are an intangible. My experience has been that the kids that come out of the program that interview for scholarships interview very well. It is not something you can put your finger on, but they can get up in front of a group and express their feelings.

We do a lot of community service. But, that is not necessarily in the school. We do over 5,000 hours a year. Our goal in this – I have always said this – if a kid comes out of our program understanding the need for community service, why there is a need for this and the willingness to do this then we are successful. Is this an intangible – I guess so.

Interviewer: Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

JROTC: This program started in 1968. I do know a good deal about it. It started at the height of Vietnam, which is interesting. There were some problems early on with enrollment and were on probation for a few years. Their answer to that was to make JROTC mandatory for all freshmen. That solved the enrollment problem and established the program. The guy that I followed really got the program going. He was here 20 years. He is the one that should get credit for getting the program where it is today. This was in a smaller high school and it had an orientation in recruiting the upper third of each class.

When I got here several years ago, I had every class valedictorian, many on the football team and most of the cheerleaders. Basically the upper crust of the school academically. That was the state at the end when three high schools were combined into one. We knew when we transitioned to this bigger county school we would not be able to continue as it was. And part of that is the pressure that kids have to take the AP courses, take the honor courses to be considered for scholarships to college. If they take the AP they get a lot of extra credit. To take my course they really have to want to do it. To be class valedictorian the AP classes are a must. This hurts our program (JROTC) to a certain degree.

Interviewer: Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. 143, So. 102, Jr. 67, Sr. 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

JROTC: The biggest problem is keeping the kids that want to go to college and want to compete for the big-dollar scholarships. We can't offer enough to them to keep them.

Interviewer: Question 8: In stating the goal of your JROTC program academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

JROTC: I don't know if you can uncouple these two. I think graduation and Citizenship go hand in hand. I don't know why an administrator would say that Citizenship is more important than graduation. Our perception of our main goal is to get these kids through high school. While we put a lot of emphasis on Citizenship, it is part of how we get them through. They see the need as part of the community. This

also develops the desire and drive to continue. I was surprised that administrators said what they did.

Interviewer: Please make any additional comments about your JROTC program at this time.

JROTC: Let me look at what I have highlighted. Our answers to the question on the students liking wearing their BDU, we agreed. But, in another place where we were asked if students like wearing their Army Green uniform. We disagreed, with the academic administrators agreeing, and we JROTC administrators disagreed. That is a tremendous misconception on the academic side. The students would much rather wear the BDU uniform. I suppose that is because they are not dealing with the kids everyday.

Another question dealt with students receiving academic health credit for their JROTC classes. The academic felt pretty strongly about that in agreeing. Our question is how does that affect the standard course of study. Are we to be bound by the standard course of study? That would be a whole new addition.

Interviewer: Part of the reason for that question is the Tennessee schools where health credit is given in some schools.

JROTC: Do they have a standard course of study that has to be taught?

Interviewer: Perhaps there is – but there seems to some disagreement on this. Some schools give credit while some do not.

JROTC: I don't know of any school that does in our state, but I could be wrong. I have never pushed this issue for that reason.

I know when I was in high school JROTC I received health and PE credit for JROTC.

That about it – I'm glad that I don't come away from this study feeling that I have to change what I am doing in this program. This study has reinforced what I am doing.

School 2 – JROTC (Senior Army Instructor)

Date and Time of Interview: November 4, 2003 at 9:55 am.

Interviewer: Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

JROTC: No. I believe that the JROTC instructors were pretty much on target. The answers concurred mostly with what I thought. So, my perceptions have not changed.

Interviewer: Question 2: Are the analyses of dropout and transition rates what you expected?

JROTC: Actually, they are. But, as I thought this question over, I think there may be a difference in the way the data is collected between the way the school collects the transition data and the way we (JROTC) collect ours. The Army is very interested in transition data. So, we have a report that we do in October for the previous year's graduates. And so we know which students went to college. They come back and see us and tell us. Therefore, we have a very accurate set of data as to which student goes to college or the military or enters the work force.

On the other hand, the school only records the intent to go to college. If the student tells them they plan to go to college, they mark it down as so. A lot of kids don't want to say they are going to work for Burger King so they say they are going to college. Whether they actually do or not. The numbers get skewed somewhat. I expect the actual numbers are closer to what we have. About 50 %.

Interviewer: How about the dropout percentages? I was somewhat surprised that the JROTC percentage was much less than the non-JROTC. What do you think about that outcome?

JROTC: We make a concerted effort to keep our kids in school. One of our main objectives now is to have the JROTC kids graduate from high school. I believe one of your questions addressed this. You asked what we thought our job was. The program has evolved over the years. Fifteen years ago our job was to get the kids ready to go into the senior (ROTC) program. Now it has evolved into mainly teaching kids citizenship and leadership training. All of it is directed towards getting that kid through high school. If the kid doesn't complete high school, it is a career killer.

Interviewer: Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricular program?



JROTC: Well, we consider it appropriate. But, we don't consider ourselves "extra-curricular" because they (students) do earn credit such as for social studies and other things that are state mandated. I was surprised at the number because I never have thought about what it costs. I'm sure Math teachers haven't either. You have to realize that only about 30 percent of our students do extra-curricular things and it is the same 30 percent doing everything. Another 30 percent or so would like to but they have a job or don't have transportation. The final third are just trying to find their way or just aren't interested.

Interviewer: Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

JROTC: I certainly do. We can this happen. We take a lot of ninth grade kids that are at risk or disenfranchised may be a better way to put it. They aren't playing sports. They aren't in the band. Or whatever! If they get involved with JROTC, we can see the difference and get compliments from the parents and teachers about the impact the program has had. It's not us individually, but the kids themselves and the program in total.

Interviewer: Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert-type scale indicated that both academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

JROTC: Well, just the self-esteem building alone is remarkable. We see kids come into the program and the process from freshman to senior is something to see. We are with the kids every day and can see the change. We are influencing their behavior and they're thought processes.

Also, we tell the kids that when you join the program you are a JROTC cadet whether you like it or not. What you do is a reflection on the program. When you are tardy, the principal will say to me that one of your cadets was tardy today. Now, every student in this school takes English. When a non-JROTC student is tardy, the principal doesn't go up to the English teacher and say one of your students was tardy. The expectation for the cadets is higher and they live up to it. That doesn't show up in grades or anywhere else. Except in or out of school suspensions. When they get into JROTC that changes. There are so many self-induced pressures – to get promotions or awards that they won't get if they don't perform. By the time they are sophomores and juniors, they're behaviors have changed.

Our school has a requirement to do 40-hours of community service. The benefit to the student is that JROTC provides a lot of opportunities to fulfill that

requirement - Color Guard, ushering at games, helping with parking at events and crowd control. Things like that.

The Army has a requirement that we do a major service project.

Interviewer: Can you explain what this entails?

JROTC: We are just working on this year's project. I can tell you what we did last year. Our state has mandated that every morning we say the pledge of allegiance. As we started to enforce that mandate, we found out that not every classroom had a flag. The JROTC program took it upon ourselves to put a flag in every classroom. We're talking about hundred classrooms. It ended up 103 classrooms. The kids coordinated with one of the local representatives and businesses and over several months' contributions to a non-profit organization put a flag in every classroom. This year we are going to raise money for the Ronald McDonald House. These projects involve every student to some degree. And, some 20-30 other kids join in the projects.

Interviewer: Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

JROTC: I couldn't answer that at all. Our program is 39 years old. It started in 1935. It is one of the longest continuing program in the JROTC. In the beginning they made it mandatory for every male student to take JROTC.

Interviewer: Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. – 143, So. – 102, Jr. – 67, Sr. – 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

JROTC: That is an interesting question. I think it is the dichotomy in terms of what you are looking for. Actually, we don't want every student to stay in JROTC. It is kind of like what is done in the Army. Up or out. Get promoted to get out. We have a structure we want to maintain. About 50-percent of our student we want to be freshman. Then a smaller percentage to be sophomores. Very small percentages are juniors and seniors. If I have 12 senior cadets I'm happy.

Another reason is that interests change. As the kids enter the third or fourth year they begin to think about other things. Some are thinking about the National Guard or entering the military or a ROTC scholarship to college. Some are thinking about one of the service academies. These kids have found a niche that

they enjoy. Or, they really like the adventuresome aspects of ROTC. We are the only class that you can take, at least in our high school, where you can go and do field test skills, one-rope bridges, repelling, or adventuresome type stuff that no other class can do. We have a core of kids that love these things.

We also, cull the number of kids. JROTC has certain advantages for the kids that want to join the service. If a student takes three credits of JROTC, they get advance placement in the Reserve, Guard or active duty. So, once a student has taken two credits and we see he or she is not really interested or motivated, then I may say to the student – look your not going tom take the third year. Because once he takes that third credit I have very little control over him selling himself to one of the services saying – well this instructor and this school taught me and I now I want my advance rank and pay. Therefore, I have the military at heart and I don't want a kid going and selling him or herself as being qualified. So we cull a certain number of students every year.

We also have a policy that we will take any kid for at least one year. This can be one of the worst behavior problems or disruptive kid and I have no problem taking that kid in the program. As long as the kid maintains a passing grade we will work with them. But if a kid doesn't want to do the community service or go the extra mile so to speak, then I don't care to give them that third year.

The last point I want to make is that we are restricted here by the numbers of students we can have in then program. That number is 150 students. So the numbers shown in the analysis really fit for us.

Some kids get a job, girl friend or car and don't have the interest anymore. But, the things we have taught them, problem solving, team building, respect and such still stay with them. Many keep visiting us – becoming a lifelong friend so to speak.

Interviewer: Question 8: In stating the goal of your JROTC program academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

JROTC: I think we are almost culprits in that. The faculty and administrators are going strictly by what we tell them. We brief the faculty each year (each department does this) and we stress our mission statement. Our mission statement is to motivate young people to be better citizens. That is up on our placard and it sticks with them.

But, in the operational side we ask how do we make them better citizens. One of the first things the kid has to do is graduate high school. Or, there're not going to

be as employable as they could be. They are not going to be a better taxpayer or involved citizen. I gage our success by the kids we graduate.

Interviewer: Please make any additional comments about your JROTC program at this time.

JROTC: Let's say that every branch of service has a waiting list for JROTC programs. There presently is a cap on the number of JROTC programs due to funding. High schools must value the program or they wouldn't want one. The Army has about 500 schools waiting for a program if congress would allow them one. To me this says high school administrators recognize the value of JROTC for whatever reason. Every time a school drops a program there is another school waiting to pick it up – no question at all. Our administration knows the value of our program. I just hope we don't get into a number crunching situation were they have to look at programs to cut.

Interviewer: Could you explain how instructors are paid?

JROTC: Sure. Military entitlements are based on your pay grade, rank and entitlements for housing and food and whatever cost of living allowance for living in a higher cost-of-living area. The Army calculates your pay as if you were on active duty and where you are located. After that they subtract your military retirement pay. The remaining figure is what you are entitled to be paid as a JROTC instructor. This is non-negotiable for the school. The school system pays the instructor and the Army obligates themselves to pay 50 % of that back to the school system. In this area the school systems have no trouble-hiring people, that would be your pay.

If you are in an inner city or rural area where it is difficult to find someone, Mississippi for example where I taught earlier, you could negotiate a stipend above the standard amount. Additional stipends can come from coaching a rifle or drill team. Or, you can say that you are a good instructor and that you should be paid more. It is really up to the instructor and the school system at that point. The Army however, will only pay 50 % based on their pay schedule.

School 2 – Academic (Principal)

Date and Time of Interview: November 5, 2003 at 9:55 am.

Interviewer: Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

Principal: I have been involved with our JROTC program here for some time and believe I have a pretty good idea and perception of what is going on with our program. So I satisfied with my answers.

Interviewer: Question 2: Are the analyses of dropout and transition rates what you expected?

Principal: Pretty much. I was surprised that some of the JROTC folks have a somewhat lower perception of the value of the program. I was surprised at that but I'm sure they look at the program differently that we do.

Interviewer: My position is neutral on these issues, and I noticed that the transition rate of the JROTC students is less than that of the non-JROTC students. Do you have an explanation for this?

Principal: Again I was not surprised at that because the JROTC program has taken some students that are at pretty high risk. They have had good success at helping them through high school, but the next step is probably not for them. They are either going to go into the service or into the job market.

Interviewer: Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricula program?

Principal: Absolutely. We have cheerleaders who pay \$800 to participate. So I think it very much in line and might be a little low.

Interviewer: Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

Principal: Absolutely. I see students come in as eight graders and they get engaged in the JROTC program. Some have a lot of problems transitioning to the high school program. And this gives them some structure that allows them to get over the hump. We have a lot of students that come in from alternative programs that get engaged with the JROTC program. It helps them make their grades.

Interviewer: Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert-type scale indicated that both academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

Principal: Well seeing the kids in uniform is a real value because you can tell the difference in the students the days they are in uniform. They take a real pride in that. Their appearance - they comb their hair and do things that they don't otherwise do. Seeing them about the campus gives us an idea what it all about. Seeing them in our veterans programs gives them a different dimension. All those things that allows them to be participatory provides the other students a view of them and puts them in higher esteem.

Interviewer: Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

Principal: Well we have had some tough issues here. The program started out as a strong program. It deteriorated and then a major incident about destroyed the program. We brought in new instructors who were strong and they rebuilt the program. The program is just now recovered from all that. It is reaching a pretty good strength now.

Interviewer: Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. 143, So. 102, Jr. 67, Sr. 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

Principal: There probably is a little problem. I guess it could be the way we look at it. When they come in early on in the program they have the up front interest. As they are going through and start earning their rank and see that it requires things, those that are not able to earn rank lose interest. Some students become transitory as they move from school to school they leave they program. The ones that stay engaged all four years stay pretty strong. The ones that lose interest, don't make rank, drop by the wayside.

Interviewer: Question 8: In stating the goal of your JROTC program academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

Principal: I'm sure the folks in the JROTC program will tell you that this is a means to an end for a high school diploma. When we (principals) look at it, we see the overall aspects first. And then look at what it does impact. Or, how does this impact our whole school? And we see the area of Citizenship. The JROTC will look at an individual that appears to be having a tough time. And they say how are we going to get this student through to a high school diploma? The JROTC program promotes the idea of respect. Respect for the flag, respect for your teachers because they are your teachers and respect is an important part of the process.

Interviewer: Please make any additional comments about your JROTC program at this time.

Principal: I have a lot of respect for the leadership of the program. The individuals have different personalities, but very effect in regards to the students. I have never had a day where I didn't think their first priority was this school. There have been times in the past where JROTC operated outside of the school or thought of their selves as apart. I think that is the key – the leadership. If you are going to have students buy into the program and have success, then you have to have leaders who know what the military brings and can translate that to these young students. So that they can understand what they are getting into and what they have an opportunity for. The JROTC is part of our curriculum and part of our team.

## School 3 – Academic (Principal)

Date and Time of Interview: November 6, 2003 at 9:00 am.

Interviewer: Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

Principal: There is a question (from the survey) that I am probably incorrect on. The question about the students liking wearing their JROTC BDU uniforms. My perception was that the kids like their uniforms because it identifies them with the group. But, this was a guess on my part. Evidently the instructors had a better perception. Although I do think the kids like wearing their uniforms.

Interviewer: There were three questions about the uniforms. That was one of the areas that came up in my pilot study. One of the pilot study schools had a Marine JROTC program. There the instructor found no problems with the kids wearing their uniform everyday and many did. The other school had an Army JROTC program. At that school the kids hated their uniforms and the instructor felt that if there were different Army uniforms, more to the kids liking, it would help their program overall. Since this report will go to the Army Cadet Command, I thought it might be interesting for them to see what the Principals and Army Instructors felt on this subject.

Principal: I misread the question on whether the students like wearing their Army Green uniform. I know the difference between the BDU and the Green uniform. I said they do, but in rethinking the question they don't like wearing the Green uniform.

In regards to question 8 about special education students, I answered that there was not a proportionately higher percentage in JROTC. That was incorrect because there are in this school. Those were the two questions that I felt differently about.

Interviewer: Question 2: Are the analyses of dropout and transition rates what you expected?

Principal: I guess I was expecting a little higher percent for the JROTC in the dropout rate.

Interviewer: One of the other schools questioned the data on dropouts and I stated that I could only go by what data was reported. Based on the instructions given to the schools for data collection, I had hoped that any mistakes would be consistent. The same individual questioned the transition rate where JROTC was about 50 % and the non-JROTC about 85 %.



Principal: In our school most of the JROTC students go into the workforce or military, because we don't have the higher academic students in the program. We are trying to attract the higher academic kids. At one point we did have the college prep kids in JROTC, but then the program sort of declined over a few years and those kids didn't go into the program. So the transitioning rate difference didn't surprise me. I didn't think the JROTC would that much lower than the general population.

Interviewer: Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricula program?

Principal: JROTC is not an extra-curricular program. It is part of our curriculum. I believe it is cost effective when you consider the benefits it provides for those students. A lot of the kids in the program are high-risk. We put a lot of money into high-risk programs with less benefit than what we get from JROTC. JROTC is also subsidized quite a bit.

Interviewer: Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

Principal: I do and I believe the statistics show that. It is also my intuitive feeling that it does, because I know the kids and I know what they do. A lot of the kids are at risk for different reasons. Many are potential dropouts as soon as they enter the school and many because of their family situations. JROTC provides a place for them and helps keep them here.

Interviewer: Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert type scale indicated that both academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

Principal: One of the main things I see is how much it raises their self-esteem. It also makes them feel more a part of the school. In our school they are not usually athletes. A few are sometimes, but for the most part JROTC is the activity that they have an identity with. And then they learn all the leadership skills and participate in a lot of school programs. They do a lot for our school. Their self-esteem goes up and they learn how to be a better citizen.

They do a lot of community service – military funerals, special programs like Veterans Day and Memorial Day. They have reached out to our community and

brought in hundreds of veterans for these programs. The Veterans Day program is one of the most popular and recognized programs in our county.

Interviewer: Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

Principal: I'm not sure. I was not here when the program began. I do know we had to wait several years to get it.

Interviewer: Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. 143, So. 102, Jr. 67, Sr. 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

Principal: I don't have an answer for that. When I saw the data I was surprised at the decline. A lot of our kids get really involved with the program. And with the leadership classes they really stick with the program. I guess it happens when they can't get all their academics in.

Interviewer: You mentioned Academics. This has been a common theme in all the schools when students have to make a choice between AP classes, band and other things that the students felt they needed if they were going on to college. As they progress in high school from sophomore and junior years, they felt JROTC became less important at that point. But, the values they had already realized from the program carried forward with them. Is that your perception also?

Principal: Our state requires students to complete a pathway. They have said that JROTC can be a Pathway if they are in Career Prep. And that is the lowest level of preparation. The Career Prep is not for college prep kids. At the higher level a lot slip out of JROTC because of college prep. They can actually do 25% of their high school training in JROTC if they chose it as a vocational pathway.

Interviewer: Question 8: In stating the goal of your JROTC program academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

Principal: One of the things I see most in the students is the Citizenship. The completion of his or her high school degree should be the goal of every student. I was looking for the one thing I picked up from the program and that was Citizenship and Leadership. But the Completion of the High School degree is fine with me.

Interviewer: The way that the rank for each question was determined was by adding the rank scores from each principal and the lowest combined total was the highest ranked goal. The other principals felt as you do. They looked at the overall scope of the program in the school where the JROTC instructors looked specifically at what they felt was the most important thing. And they are getting at-risk students so they are focusing on that and it shows up on the dropout rate.

Interviewer: Please make any additional comments about your JROTC program at this time.

Principal: I can't imagine our school without the JROTC program. Over the years I have been here the program has had highs and lows. A lot of that depended on the instructors. At this point I feel we are on an upswing that will take a few more years. The majority of students in that program benefit immensely from it. A lot of kids come to high school and identify with no one or group or activity. These kids – it's almost like a home. Some of them will stay here till 9 or 10 o'clock at night. And participate in any kind of activity after school. They'll come back on Saturdays. They'll do things around the school they normally wouldn't do, like community service types of things. It's almost like they have been searching for this type of thing and now they have found it. It's been so positive for this school I can't imagine what would happen if it (JROTC) went away.

Interviewer: Is it the four-year relationship that develops between the students and instructors – the mentorship, so to speak. Do you think that is why or part of the reason the students feel they found a home?

Principal: I do. I have noticed over the years that a lot the students that have graduated – if they go to the service or to college, on break or leave, they are back here to see their instructors. That is whom they want to see first to tell them what they have accomplished or what they are doing. I guess they want a pat on the back or recognition. They (the instructors) have turned a lot of kids around. They really have.

School 3 – JROTC (Senior Army Instructor)

Date and Time of Interview: November 6, 2003 at 9:50 am.

Interviewer: Question 1: Now that you have had a chance to study the analysis of the survey and data on demographics from the schools participating in this study, are there any answers from the 30-question survey you completed previously that you would now change? Please explain your present position.

JROTC: No, not really. There were some differences and I believe that the Principals just are not close enough to the students. On the question of whether the students like wearing their Army Green uniforms, I can tell you that the majority of our students despise wearing the uniforms. They like the program but not the uniforms. We have them wear their Green uniforms about once a week – correction – once a month or for events. What we do have them wear is the pull over polo shirts we have had made (black with the JROTC logo) with blue jeans or khaki pants. Those days we get 100% uniform wearing. On days they are to wear the Green uniform I get about 10-12 % that do not wear the uniform. Sometimes it can be 25%.

Interviewer: Do you think that if you had some sort of designated uniform more to the students liking like the black polo shirt and khaki pants that was authorized or designated from Cadet Command that it would be a positive for your program?

JROTC: I think it would be very positive. If we got away from the Army Green uniform and go with the old khaki or some sort of polo shirt. The kids just don't like the Green's – the pants, the shirt and tie. So, it's a real struggle for us.

Interviewer: Question 2: Are the analyses of dropout and transition rates what you expected?

JROTC: Here at this school JROTC has played a vital role in keeps some kids in school. Some of the kids that graduated last year had at some time in their sophomore or junior year had dropped out of school and came back because of JROTC. And, one of those kids is going to the Air Force soon.

Interviewer: Question 3: The cost analysis has found the average cost for the JROTC program from the schools reporting as \$731 per-student. Do you perceive this cost appropriate for an extra-curricular program?

JROTC: I personally think the cost is worth it. For the one kid you save – that kid becomes a taxpayer as a police officer or whatever. Are we better off having him as a taxpayer making \$38-40,000 per year or as a high school dropout making minimum wage? Of course the answer is – sure.

Interviewer: Do you have your kids make goals for after high school in your program?

JROTC: I have our kids as freshmen tell us what their goals are. I ask them where they want to be next year or in 20 years. Then on every essay test I give them I ask – where you are at in your goals? Then I ask them what classes are they taking. What I sometimes find is that a kid may have as his/her goal to go to a four-year college. Then I see that they are not taking the classes they need to make their goal. And then I point out what they need to take. I remind them of the reality of their goal and how to get there.

Also, the teachers here are really good at telling me when one of my JROTC kids is failing. I meet with the kid and go back and review that kid's goals with him/her. For example, I had a kid that wanted to be a registered nurse. But (I said), you're taking classes that won't get you to that goal of getting into nursing school. Here you're taking Child Living 1 and Teen Living 1 and Culinary Arts 2. Where's the Math? Where's the Chemistry – the Science and Biology? Ironically, a lot of kids will say – I didn't know I had to take those classes. It's because in their minds they see the Nurse, but not what they have to do to reach that goal. So, goal-setting is probably one of the best things that JROTC does.

Interviewer: Question 4: With the additional statistical information on costs, dropouts and transition, do you believe your JROTC program is cost-effective in affecting the dropout and transition rates at your school?

JROTC: Yes. If we did not have the JROTC in our county for these at-risk kids, there would be no alternative. We don't have an alternative school. We don't have a vocational department. If it was not for JROTC these kids would dropout. I believe our county has a tremendous asset in our program.

Interviewer: Question 5: Question 10 of the survey pertained to intangible values of the JROTC program. The Likert-type scale indicated that both academic and JROTC administrators strongly agreed with the statement. Please explain some intangible values of the JROTC program in your school.

JROTC: If you go out in halls you will see signs that say "Integrity" and another on the mission of this school and such. If you did a survey of the kids in this school and they were honest most would say that they never have read the signs. Even though they are colored red, they are up and against the wall. The kids just don't see them. We teach these things. For example: the other day a caught a kid lying. So I took his rank away and I asked him what does your cadet creed say. He said, I will not lie, steal or cheat. The penalty for lying is you are no longer a first sergeant. In my opinion, what a valuable character lessons this kid just learned. Character education is a part of this program. It seems that taking responsibility for their actions is something these kids don't seem to learn at home.

Interviewer: Question 6: If you know, how did your school qualify for and initiate your JROTC program? What startup problems were encountered and how were they resolved?

JROTC: I don't know.

Interviewer: Question 7: The total number of students participating in JROTC in the reporting schools appears to go down each year from freshman to the senior year (Fr. 143, So. 102, Jr. 67, Sr. 29 = 341). The perception stated in #21 of the survey was that the schools do not have a problem retaining students in the JROTC. Please explain how this decline occurs while there are no problems retaining students in the program beyond the freshman year.

JROTC: I think that is a normal attrition. As a freshman the kid's eyes are wide open, game for anything. As a sophomore, they may not come back. Some don't want to be challenged on their morals. Or, they come thinking that they want to be soldier. But this program is not about being a soldier. It's about setting those goals in life that you want to accomplish. It's not about play where some thought that what it is. It's like the way some join the Army and after three years they say to themselves, this is not for me and they get out. The same happens in say computer science. After a few classes they find it is not for them and drop the program. So I think the attrition rate is about where it needs to be.

Interviewer: Question 8: In stating the goal of your JROTC program academic administrators indicated that Citizenship was the primary goal while JROTC administrators indicated that Completion of High School Degree was the primary goal. Please explain how (or why) this difference in goal perceptions might occur.

JROTC: I don't know if there is difference in my view. When you teach Citizenship skills, to be involved and do what's best for the community. I think Completion of High School is just part of being a good citizen.

Interviewer: Please make any additional comments about your JROTC program at this time.

JROTC: I feel good about this program. But, if I could make anything different about this program I wish the Board of Education, County Commissioners and others didn't give the program lip service. They say what a great program it is and everything. And then they don't turn around and give to the program. For example, at other schools if you have a rifle team or color guard team or whatever, they pay the instructor a stipend for the extra work. The attitude in this county is that we pay you more than we do the other teachers so we don't care. My attitude is I earned 62 % of that money before I came here. So they are not paying me more than anyone else here. The reality is, the US Army is paying the most.

They just don't put any money into the program. I have to pay to use the activity bus at one dollar per mile. I have yet to talk to another JROTC program that has to pay to use the activity bus. They are extremely kind with their remarks publicly and with pats on the back, but they just don't put the dollars into the program. If they would put more money into the program, how much greater it would be! We could attract more kids. For example, I have JROTC clubs in the middle schools. To bring the middle school kids here you would not believe the hassle I have to go through to get a bus. I have to fill out the paper work and all the things to get the kids up here.

The biggest problem I see is that the kids are not encouraged to take the program. I would greatly appreciate it if they would encourage the upper crust (academic) to take the program. For one reason, we are not taking advantage of all of the opportunities the military offers in scholarship programs.

Since I have been here we have had only one kid that wanted to go to a service academy, the Air Force Academy. They came to me when he was a senior and asked what I could do for him. I had to say nothing. I didn't know the kid from Adam. Someone along the way had to know that he wanted to go to the Air Force Academy. Why didn't they encourage that kid to take a couple of semesters of JROTC? As an honor unit, which we are, I can recommend a student directly to West Point. Why aren't some of the kids steered to me? Appalachian State University (ROTC) asks me every year; do I have any one I would like to recommend for a scholarship? This is my fourth year and they ask every year. No is the answer every year.

I know we have to help the at-risk kids. College scholarship applications are one area we can help with. What leadership are we bringing to our universities? With the competition for admission to universities, I can't believe that a university admissions department wouldn't look upon the JROTC leadership experience favorably.

So those are the two things that are needed. One put some money into this program. I'm not asking for thousands just some money to make things easier. And two look at us for what kind of asset we can be in helping get kids to college and get scholarships.

## Appendix F

### Permission to Proceed Letters

Letter 1 to Army Cadet Command:

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HQ, US Army Cadet Command  
Attn: ATCC-J  
Ft. Monroe, VA 23651

Dear Col. -----,

I am a Doctoral student at East Tennessee State University (ETSU), in Johnson City, Tennessee in the Educational Leadership and Policy Analysis department of the College of Education.

The purpose of this letter is to notify you that the focus of my dissertation proposal is the JROTC programs of eastern Tennessee and western North Carolina.

I met today with Lt. Col.-----, Professor and officer in charge of the ROTC at ETSU. We discussed my proposed study of the JROTC, the possible significance of my research, and how I could best coordinate my research within the educational structure of the planned study. LTC Terry was very helpful and supportive. He has tentatively agreed to serve on my dissertation committee.

I am presently developing my dissertation prospectus, which will be presented, to my dissertation committee in September. After a successful defense of the prospectus, I propose to do a quantitative study of selected high schools that have JROTC programs, using the archival data available at the schools on the graduated class of 2002. ETSU has very strict procedures for dealing with human subjects and I must comply with all federal guidelines as well as those of the university. The study as presently planned, will investigate dropout rates, school attendance, cost effectiveness of the JROTC programs, and matriculation of students at the selected high schools to higher education. I hope to defend the finished dissertation in the spring of 2003.

As a young man, I was a participant in both JROTC and ROTC. The values and leadership training I received then prepared me well and contributed greatly to my twenty-five-year business career. I am also a veteran having served with the 82<sup>nd</sup> Airborne Division. The GI Bill was instrumental in my obtaining my undergraduate degree from the University of Miami.

I hope my dissertation proposal meets with your approval. There are no direct costs involved with the study for the high schools or the Cadet Command. I will be speaking and meetings with various school administrators and with the JROTC cadre of the selected high schools but expect limited time requirements from those individuals. I look forward to your comments and suggestions.

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## Letter 2 to School System's Superintendent

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Dear Dr.-----,

I am a Doctoral student at ETSU in the Educational Leadership and Policy Analysis Department. The purpose of this letter is to introduce myself and to request an appointment to solicit your permission to speak with the principals of ----- High School and ----- High School about participation in my dissertation study. I understand how busy you must be and will only require a few minutes of your time. An alternative would be if you find that the below provides sufficient information on my dissertation, you could email your approval to -----.

My committee chaired by Dr. ----- (423-439-----), and the ETSU Institutional Review Board has accepted my dissertation prospectus to study JROTC programs in North Carolina and Tennessee and authorized the continuance of the research.

Specifically, I will be researching the perceptions of high school principals and their respective JROTC Senior Army Instructors as to the cost effectiveness of JROTC programs impacting student dropout and transition-to-college rates. Little empirical research exists as to how JROTC impacts these rates and at what cost-benefit ratio.

I chose the JROTC as my subject because I participated in both JROTC and ROTC as a young man. I am also a veteran having served in the 82<sup>nd</sup> Airborne Division. Based on my life experiences, I understand the importance of leadership and citizenship training for students as they prepare for whatever life has in store for them.

Thank you for your consideration of my request.

Sincerely,

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### Letter 3 to High School Principals

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Dear Principal -----,

I am a doctoral candidate at East Tennessee State University (ETSU). My dissertation focus is the perception of high school administrators concerning the cost-effectiveness of Junior Reserve Officers Training Programs (JROTC) at secondary schools in effecting student dropout rates and transition to college. The research methodology proposes the selection of six high schools for investigation using quantitative and qualitative procedures. The purpose of this letter is to request an appointment to discuss the dissertation and to ask your permission to include your high school in the study. Below is a brief description of the reason for the study and the methodology.

There are almost three thousand high school JROTC programs costing millions of dollars to operate. Very little research has been done as to how effective these programs are in effecting the dropout rates of students at high schools having JROTC programs. While much has been written about how lifetime earnings are related to educational levels achieved, little research exists as to how JROTC participants' transition to college and at what proportion compared to the non-participating student. This research will answer some of those questions at the six high schools involved in this study.

The quantitative process is to collect archival data from each high school regarding the JROTC program costs and the recent graduation class of 2002 regarding dropout statistics and transition to college. I am told the data is available or can be computer generated without difficulty. The statistical analysis will compare the JROTC students with the non-JROTC students.

The qualitative process will involve the principal and senior Army instructor of each high school in answering a 20-question survey (10-15 minutes), reading the results of the quantitative analysis (20-30 minutes) and participating in a semi-structured interview (30-45 minutes). The study will be conducted beginning in January and finishing in May 2003. Each part (survey, reading and interview) will be scheduled at the convenience of the administrator. The results will be analyzed for comparability and consistencies of perceptions.

The six high schools are purposely selected for their geographical location and for having Army JROTC programs in their schools (see attached list for schools being asked to participate). No school or individual will be identified in the study unless they request to be associated with the study. There are no perceived risks for being involved with the study either individually or for the school. All federal, state and school district guidelines for research of human subjects will be followed. If your school district has a procedure for allowing research to be conducted in your schools please indicate as such.

I should state that I am an Army veteran and as a young student participated in both JROTC and ROTC. That participation shaped my character, ambitions and life's experiences without which I probably would have been a different person today.

## VITA

Personal Data:      Date of Birth: November 3, 1937  
                          Place of Birth: Miami, Florida  
                          Marital Status: Married

Education:            Public Schools, Miami, Florida; 1942-1952  
                          Staunton Military Academy, Staunton, Virginia;  
  High School, 1952-1955  
                          University of Miami, Miami, Florida;  
  Accounting, B. B. A., 1964  
                          Appalachian State University, Boone, North Carolina;  
  Higher Education Administration, M. A., 1996  
                          Appalachian State University, Boone, North Carolina;  
  Higher Education Administration, Ed. S., 1997  
                          East Tennessee State University, Johnson City, Tennessee;  
  Educational Leadership, Ed. D., 2004

Professional Experience:

                          U. S. Army, Fort Bragg, North Carolina, 1957-1960  
                          Comptroller, Larry Marks & Company;  
  Miami, Florida, 1964-1968  
                          Vice President, Yolen, Inc.; Miami, Florida, 1968-1976  
                          President, Yolen, Inc.; Miami, Florida, 1976-1994