A STUDY OF ACADEMIC ADVISEMENT SATISFACTION OF OKLAHOMA AVIATION UNDERGRADUATE STUDENTS AT FOUR SOUTHWESTERN STATE UNIVERSITIES

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TABLE OF CONTENTS

Chapter	Page
I. IN	TRODUCTION 1
	Statement of the Problem3Purpose of the Study3Population4Research Objectives4Research Objective Number One4Research Objective Number Two4Research Objective Number Three4Research Objective Number Four5Research Objective Number Four5Scope5Limitations6Definitions6
II. RE	EVIEW OF LITERATURE
	Introduction8Description of Academic Advisement for Aviation Students9History of Aviation Academic Advisement11History of Higher Education Academic Advisement13Description of Institutional Academic Advising Practices17Description of Faculty versus Advisement Center Advisors20Legal Implications of Academic Advisement21Future Directions of Aviation Academic Advisement23Summary26
III. MI	ETHODOLOGY
	Introduction29Population29Statement of Problem30Purpose30Research Objectives30Research Objective Number One30

Chapter

-

Page

Research Objective Number Two
Research Objective Number Three
Research Objective Number Four
Research Objective Number Five
Instrumentation
Data Collection
Analysis of Data
Summary
•
IV. FINDINGS
Introduction
Population
Statement of Problem
Purpose
Findings
Research Objectives
Research Objective Number One
Survey Question Number One
Survey Question Number Two
Survey Question Number Eight
Survey Question Number Nine
Survey Question Number Ten
Survey Question Number Eleven
Survey Question Number Twelve
Survey Question Number Thirteen
Research Objective Number Two
Survey Question Number Three-A
Survey Question Number Three-D
Survey Question Number Three-E
Survey Question Number Three-F
Survey Question Number Three-G
Research Objective Number Three
Survey Question Number Three-B
Survey Question Number Three-C
Survey Question Number Three-J
Research Objective Number Four
Survey Question Number Three-H
Survey Question Number Three-I
Survey Question Number Three-K
Survey Question Number Four
Research Objective Number Five
Survey Question Number Five

Survey Question Number Six	64
Survey Question Number Seven	65
Survey Question Number Fourteen	65
Summary	66
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	68
Introduction	68
Population	68
Statement of Problem	68
Research Objectives	69
Research Objective Number One	69
Research Objective Number Two	69
Research Objective Number Three	69
Research Objective Number Four	69
Research Objective Number Five	70
Summary	71
Findings	71
Research Objective Number One	71
Research Objective Number Two	72
Research Objective Number Three	73
Research Objective Number Four	73
Research Objective Number Five	73
Conclusions	74
Recommendations	74
BIBLIOGRAPHY	78
APPENDIXES.	86
APPENDIX A – INSTITUTIONAL REVIEW BOARD APPROVAL FORM	87
APPENDIX B – COVER LETTER AND SURVEY	89
APPENDIX C – EXAMPLES OF WRITTEN RESPONSES ON THE SURVEY	93

¥ 1

•

LIST OF TABLES

Table	Page
I. (Crookston Comparison of Academic Advisement Philosophy 15
II.	Advisor
III. (Classification
IV.	Age
V.]	In-State or Out-of-State
VI.	Enrollment Status
VII. (GPA
VIII. I	Parent's Aviation Degree
IX. O	Gender
X. 1	Major Requirements
XI. I	Pre-Requisite Requirements
XII. (Curriculum
XIII. (Office Hours
XIV. (Campus Resources
XV. I	Plan Career
XVI. I	Knowledgeable Aviation Careers
XVI. II	nfluenced Aviation Career
XVIII. C	Confident in Advisor

Table	Page
XIX.	Recommend Advisor
XX.	Overall Good Job61
XXI.	Advisor Grade

CHAPTER I

INTRODUCTION

The following study was conducted to describe the academic advisement satisfaction of Oklahoma aviation students at Oklahoma State University-Stillwater (OSU), Oklahoma State University-Tulsa (OSU-Tulsa), the University of Oklahoma (OU), and Southeastern Oklahoma State University (SOSU).

What is the academic advisement satisfaction level of aviation students at these institutions? This is an important question given that numerous studies indicate that appropriate academic advisement is directly related to student recruitment, retention and graduation rates (Glennen, Farren & Vowell, 1996; Jaffe & Huba, 1990; Rickinson, 1998).

The Oklahoma State Regents for Higher Education recently charged the Oklahoma Higher Education Task Force on Student Retention to investigate ways to improve student retention and graduation rates. "Making academic advisement mandatory" was one of the task force's sixteen recommendations (Task Force, 2002). Joe Mayer, Chairman of the state regents, said, "... another recommendation called for more faculty to advise students and increase student interaction outside the classroom ..." (Allen, 2002).

Academic advisement has also been shown to be an essential element in the success of college undergraduate students (Frost, 1991). In a study by Anderson (1995),

"... the importance of continually reassessing the advisement needs of students to insure adequate career and personal counseling and support ... " was addressed.

Proper academic advisement is also connected to parental hopes for their college students. A fall 2000 National Association of Student Personnel Administrators (NASPA) study by Turrentine lists the following parental priorities: "quality education, job preparation, maturity/independence, fun/enjoyment, graduation, friendship/networks, and academic success." Each of these goals are aviation academic advisement targets as well.

Aviation is the largest employer in Oklahoma when Tinker Air Force Base and the American Airlines maintenance site in Tulsa are combined. Together they provide 143,000 jobs and generate over twelve billion dollars annually. Mr. Bill Miller, Director of the Oklahoma Aeronautics and Space Commission, states that, "Aviation is growing at five times the rate of the Oklahoma economy . . . Oklahoma is an aviation state." Miller also states, "Oklahoma's piece of the federal aviation pie will triple or quadruple in the next five years" (Turk, 1999).

Other Oklahoma aviation demographics include: "413 aviation facilities, 147 public use airports, 173 private use airports; 9,956 active pilots, 3,135 based aircraft; and 3,717 registered aircraft." Oklahoma City is home to the Southwest Airlines reservation center and the Mike Monroney Aeronautical Center of the Federal Aviation Administration (Kutz, 1998).

Educationally, The Oklahoma Aviation Alliance includes high schools, technology centers, community, regional and comprehensive universities, and Tinker Air

Force Base to meet the aviation and aerospace goals of students statewide (Oklahoma City, 1998).

The identification of the academic advisement satisfaction of aviation students will provide research data for aviation programs statewide. This data can then be considered in formulating future academic advisement policies to better serve the needs of aviation students. The enhancement of aviation higher education program offerings will benefit aviation undergraduate students, and Oklahoma's largest employer, the aviation industry.

Statement of the Problem

Are aviation students at OSU Stillwater and Tulsa, OU, and SOSU satisfied with their undergraduate academic advisement?

Purpose of the Study

The purpose of this study was to describe the academic advisement satisfaction of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. Study data may be considered in formulating future academic advisement to enhance aviation program quality.

Population

The population of this study consisted of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. All aviation students enrolled during the spring 2002 semester whether full-time or part-time were given the opportunity to participate in this study.

Research Objectives

In order to conduct this research the following research questions were identified.

Research Objective Number One

What are the demographic characteristics of the aviation students at OSU Stillwater and Tulsa, OU, and SOSU pertaining to their academic advisement delivery, classification, age, in-state or out-of-state residency, enrollment status, GPA, parents aviation degree holding status, and gender?

Research Objective Number Two

Are aviation students satisfied with academic advisement?

Research Objective Number Three

Are aviation students satisfied with academic advisement concerning aviation career advisement?

Are aviation students satisfied with academic advisement concerning the student's personal confidence in advisors?

Research Objective Number Five

What are the aviation student's written open responses with respect to academic advisement satisfaction?

Assumptions

The investigator for this study made the following assumptions:

- Aviation students at OSU Stillwater and Tulsa, and SOSU completed the survey during spring 2002 class meetings. OU aviation students completed the survey during their spring 2002 aviation orientation.
- 2. Students voluntarily expressed their satisfaction level concerning academic advisement openly and honestly.

Scope

During the spring 2002 semester, aviation students at OSU Stillwater and Tulsa, OU, and SOSU were given the opportunity to complete the survey concerning their satisfaction with academic advisement. This study was limited to the aviation students at OSU Stillwater and Tulsa, OU, and SOSU, but the data gathered could be applicable to aviation undergraduate students nationwide.

Definitions

The following definitions are used for clarity in this study:

<u>Academic Advisement</u> – Is a developmental process which assists students in the clarification of their life/career goals and in the development of educational plans for the realization of these goals. It is a decision-making process by which students realize their maximum educational potential through communication and information exchanges with an advisor; it is ongoing, multifaceted, and the responsibility of both student and the advisor (ACT, 2000).

<u>Academic Advisement Center Advisor</u> – A professional academic advisor retained by the university to academically advise students.

<u>Aviation Faculty Advisor</u> – An aviation instructor within the OSU Stillwater and Tulsa, OU and SOSU system that also provides academic advisement services to aviation students.

<u>Listserv</u> - An e-mail program that allows multiple computer users to connect onto a single system, creating an on-line discussion (Robertson, 1998).

<u>Satisfaction</u> – The act of satisfying; fully supplying or gratifying wants or wishes; fulfillment of conditions or desires. A response, such as information that fully meets doubts, objections, or demands (Barnhart, 1988). software program (Nie, Bent, & Hull 1997).

CHAPTER II

REVIEW OF LITERATURE

Introduction

Research literature was abundant for general academic advisement satisfaction at the university level (Burke, 1981; Dautch, 1972; McAnulty, O'Connor & Sklave, 1987; Jaffe & Huba, 1990; Dunker & Belcastro, 1993; Miville & Sedlacek, 1995; Steinhaus, 1999) but non-existent for academic advisement satisfaction of Oklahoma aviation students at Oklahoma State University (OSU), Oklahoma State University-Tulsa (OSU-Tulsa), the University of Oklahoma (OU), and Southeastern Oklahoma State University (SOSU). The investigator found no data specifically focused on aviation student academic advisement satisfaction.

Two international electronic ListServ research sources focused on academic advisement in higher education produced zero responses. The first was the ACADV Network (Academic Advisor Network) ListServ with a membership of over 3,200 higher education academic advisors worldwide. "It is the world's only electronic communications system exclusively for Academic Advising in Higher Education" (Johnson, 2001).

The second source was ENGSCIADV ListServ mailing list with 108 Engineering and Science Advisors worldwide (Arreola, 2002). Neither academic advisement group produced aviation academic advisement satisfaction research data for this baseline study.

This chapter is a summary of the literature reviewed for this study. The following areas were emphasized: (1) description of academic advisement for aviation students at OSU Stillwater and Tulsa, OU, and SOSU (2) history of aviation academic advisement (3) history of higher education academic advisement (4) description of institutional academic advising practices (5) description of faculty versus advisement center advisors (6) legal implications of academic advisement (7) future directions of academic advisement (8) summary.

Description of Academic Advisement for Aviation Students

Today, aviation related careers requiring college degrees and aviation academic advisement at OSU Stillwater and Tulsa include: Professional Pilot, Aviation Management, Technical Services Management, and FAA Airway Science. OSU also offers a master's degree in Natural and Applied Sciences with an emphasis on Aviation and Space Sciences, and a Doctorate of Education in Applied Educational Studies (Aviation, 2002). OSU Stillwater aviation undergraduate and graduate students are academically advised by aviation faculty advisors, located on the main campus. OSU-Tulsa aviation education undergraduate and graduate students are academically advised by both an aviation faculty member and an advisor in advisement center, located on the OSU-Tulsa campus.

Undergraduate aviation degrees at SOSU include: Professional Pilot and Aviation Management specializing in Business, Maintenance, Safety or Security. SOSU also offers a Master's of Science in Aerospace Administration (Masters, 2000).

In August 2001 SOSU opened an Academic Advising Center, located on the main campus, and staffed by advisement center advisors. Freshmen aviation students currently have the option of advisement through the Advisement Center or through aviation faculty. The Academic Advising Center staff also advises all undecided, transfer, and new SOSU freshman students. Aviation sophomores, juniors, seniors and graduate students are academically advised by SOSU aviation faculty members, located at Eaker Field Airport (Conway, 2002).

OU offers the following aviation undergraduate degrees: Aviation Management and Professional Pilot. OU aviation students, sophomore through senior, are academically advised by the College of Continuing Education, Department of Aviation Recruitment and Advisement Coordinator. The coordinator position was initiated November 6, 2001 and is located on-site at the OU, Max Westheimer Airport (Schaumburg, 2002a). OU freshman declaring aviation as their major, are advised through the University College Enrollment Center, located on the main campus, until they complete 24 hours of college credit and "possess a combined retention grade point average of 2.0" (Schaumburg, 2002b). Academic advisement is under the office of the Senior Vice-President and Provost and administered through the Provost's Advisory Committee on Academic Advising (PACAA, 2002).

The four aviation programs participating in this study utilize a student recruitment mailing packet which includes: a letter of introduction from the program administrator,

enrollment information, out-of-state tuition waiver criteria, academic advisement degree sheets, program costs, scholarship information, and general information program flyers. The OU aviation program also provides a compact disc entitled "Aviation Take Flight" that includes information mentioned above and a "Free First Lesson!" (Oklahoma, 2001).

History of Aviation Academic Advisement

Historically, Orville and Wilbur Wright, circa 1903 could be called the first modern-day aviation academic advisors as they taught and informed those interested in their new engine-powered, heavier-than-air flying machines (Caidin, 1988). In 1910, The Wright Company School of Aviation stated that for \$250 in tuition a student could "... learn to fly in 2-3 hr. of actual practice and become competent pilots in 8-10 days following first flight." Students could also learn "... the principles of flight and construction of flying machines." During this aviation time period, other manufacturers of early aircraft also developed courses to teach students how to fly, maintain, and build aircraft (Rodriquez, 1997). Early aviation academic advisement was hands-on (Fiorino, 2001).

World War I, brought an increase in aviation research, manufacturing, and aviation education. Civilian trainers conducted military training initially, but aviation military training was quickly developed. In the 1920s and 1930s aviation experienced a "Golden Age" with the rapid development of airplane design and large-scale airline operations.

In 1921-22 Purdue University "offered four elective courses in aeronautical engineering," and "in 1930 became the first U.S. university to offer college credit for

flight training." Purdue was also the first college to own an airport in 1934. Amelia Earhart, female aviation pioneer, held a staff position as "Counselor on Careers for Women" during this time period until her death in 1937. Faculty members provided academic advisement. World War II contributed to the development of a full four-year degree program of aeronautical engineering at Purdue, with first degrees bestowed in 1943. The aerospace engineering program has also produced 22 American astronauts (History, 2002).

Another early aviation educational program was founded in 1926, and today is know as the Embry-Riddle Aeronautical University with an annual student enrollment of 24,000 students worldwide. Just as other higher education aviation programs began, in the beginning, academic advisement was conducted solely by the pilots that also served as aviation faculty members. Embry-Riddle has trained aviation majors during the 1920s and 1930s, WWII, the Korean War through a contract with the U.S. Air Force, and today calls itself the "world's premier aviation and aerospace university" (Embry-Riddle, 2002).

An article from Associated Press (1999), states that "World War II began and ended with the airplane." It continues,

In December 1941, Japanese warplanes attacking Pearl Harbor shook the United States out of its isolationism. Four years later, a Boeing B-29 SuperFortress called the Enola Gay dropped an atomic bomb on Hiroshima. In between, the United States produces nearly 300,000 military aircraft, including the first practical helicopters.

World War II, aerospace engineers also made great advances in aircraft design, which led to jet propulsion and improved rocket engines (Caidin, 1988).

The aviation industry had evolved from the Wright Brothers' learn to fly advisement process, to the higher education university level which prepares students through both aviation faculty advisement, and advisors in advisement centers.

History of Higher Education Academic Advisement

Academic advisement in the first true universities of the eleventh century in Italy, France, and England concentrated on the spiritual development of the students, and prepared them for the clergy (Gordon, 1998). By the thirteenth century the University of Paris " . . . awarded degrees in civil law and canon law, medicine, theology and the liberal arts" (Mathews, Platt, 1998). Universities of today still prepare students for religious arts service, but the majority of students are seeking secular educations. However, the modern university system is easily recognized from its beginnings of almost a millennium ago. Over the last 900 years, the university has adapted to meet society's educational focuses, and has embraced a myriad of institutional missions that traditionally placed academic advisement as a low priority (Carstensen, 1979).

In 1852, for example, Cardinal John Henry Newman described the function of the ideal university as a separation of the pursuit of truth from mankind's "necessary cares." Academic advisement was spiritually based and focused.

Over time, academic advisement has been addressed in a variety of methods. In early day, American universities' academic advisement was performed by the college Presidents, and later by faculty members. John Hopkins University founded the first faculty advisors program in 1876, to meet the growing student population's need to understand the evolving complexity of the curriculum. The first coordinator of faculty advisors was named in 1899, signifying the recognition and growing importance of academic counseling (Cowley, 1949).

In 1889, President Lowell of Harvard University appointed a board of freshman advisors to help develop the "manhood" of their charges. Many early/private, and religious-based colleges stated their mission was to "save student souls," and guide private lives (Rudolph, 1962). Academic advisement was centered upon spiritual and philosophical goals.

In 1972, O'Bannon presented "An Academic Advising Model" which has been used for over 30 years. "O'Bannon's article is one of the most cited works in the literature of the profession" (Schein, 1994). The O'Bannon Model contains: (1) Exploration of Life Goals. (2) Exploration of Vocational Goals.(3) Exploration of Program Choice. (4) Exploration of Course Choice. (5) Exploration of Scheduling Options (O'Bannon, 1972).

O'Bannon presented advising as a process in which advisor and advisee enter a dynamic relationship respectful of the student's concerns. Ideally, the advisor serves as teacher and guide in an interactive partnership aimed at enhancing the student's self-awareness and fulfillment. (Burton & Wellington, 1998)

Crookston (1972) offered the following "Comparison of Academic Advisement Philosophy" as shown in Table I, to describe the two most debated philosophies of academic advisement. Prescriptive and Developmental Philosophies of academic advisement are still debated today.

Developmental academic advisement is looked upon as the ideal, suggesting that the advisor talk with students concerning family and friend problems to offer encouragement, and to help the student sort-out conflicting values, beliefs and attitudes.

TABLE I

In terms of Prescriptive Developmental Abilities Focus on limitations Focus on potentialities Motivation Students are lazy, need prodding Students are active, striving Rewards Grades, credit, income Achievement, mastery, acceptance, status, recognition, fulfillment Maturity Immature, irresponsible: must be Growing, maturing, responsible, closely supervised and carefully capable of self-direction checked Initiative Advisor takes initiative on fulfilling Either or both may take initiative requirements; rest up to student Control By advisor Negotiated Responsibility By advisor to advise Negotiated By student to act Learning output Primarily in student Shared Evaluation By advisor to student Collaborative Based on status, strategies, Based on nature of task, Relationship games, low trust competencies, situation, high trust

CROOKSTON COMPARISON OF ACADEMIC ADVISEMENT PHILOSOPHY

On the other hand, the Prescriptive academic advisement approach could be identified as the reality of most advisement deliveries. Prescriptive advisement "... is more didactic, and the advisor, as the authority, assumes primary responsibility for the advise prescribed ..." (Fielstein, Scoles & Webb, 1992). Examples of Prescriptive approaches, which are pure academic advisement focused, are: "... providing information regarding course selection, explaining registration procedures, and making sure students enroll in appropriate courses."

Twenty-two years later, Pardee (1994) wrote, "We Profess Developmental Advising, But Do We Practice It?" Her answer was no. She went on to state that "Support grows from the recognition that developmental advising is a critical factor in student satisfaction, academic performance, and retention."

The 1960s and 1970s in the United States saw increased higher education enrollment and inclusion of a more diverse student population (Cross, 1974). To meet the needs of this new student population, in 1977 the first national conference on academic advising in higher education was held at the University of Vermont, and the National Academic Advising Association (NACADA) was founded (Gordon, 1998). NACADA's mission is "To promote the advancement of academic advising through the greater dissemination of resources and research pertinent to this educational endeavor." Currently, NACADA membership is over 4,700 and holds annual regional, and national conferences. Membership is open to college and university professional academic advisors, faculty, and administrators. A semi-annual refereed NACADA Journal publishes research articles on academic advisement, and seeks to "... enrich the knowledge, skills, and the professional development of persons involved in academic advising in higher education . . . " (NACADA, 1998). A National Clearinghouse for Academic advising is also maintained through Ohio State University. NACADA is currently the largest academic advisement association in the United States and is based through Kansas State University (NACADA, 2002).

Each institution included in this study, OSU Stillwater and Tulsa, OU, and SOSU are members of the NACADA organization. Oklahoma is part of NACADA's South Central Region #7 which also includes: Arkansas, Kansas, Louisiana, Missouri, and

Texas. The state organization is the Oklahoma Academic Advising Association (OACADA) comprised of 300 academic advisors statewide. OACADA holds state conferences, produces a newsletter, and provides funds for scholarships (Wikle, 2002).

Gordon (1993) sees the advisement process as having come full-circle. College Presidents and other "top-level administrators are recognizing the importance of appointing administrators to develop advisement programs."

Description of Institutional Academic Advising Practices

To have a better understanding of the variety of institutional advising practices utilized in American higher education, this study looked at data gathered from the fifth American College Testing (ACT) national survey on advising practices. The ACT study was conducted analyzing the academic advising practices of two-year public and private, and four-year public and private institutions. The seven organizational models examined were:

- Faculty only: All students are assigned to an instructional faculty member for advising. There is no advising office on the campus.
- 2. Supplementary: All students are assigned to an instructional faculty member for advising. There is an advising office that provides general academic information and referral for students, but all advising transactions must be approved by the student's faculty advisor.
- 3. Split: There is an advising office that advises a specific group(s) of students (e.g., those that are undecided about a major, under prepared,

etc.). All other students are assigned to academic units or faculty for advising.

- Dual: Each student has two advisors. A member of the instructional faculty advises the student on matters related to the major. An advisor in an advising office advises the student on general requirements, procedures, and policies.
- 5. Total Intake: Staff in an administrative unit are responsible for advising all students for a specific period of time or until specific requirements have been met. After meeting those requirements, students are assigned to a member of the instructional faculty for advising.
- 6. Satellite: Each school, college, or division within the institution has established its own approach to advising.
- Self-Contained: Advising for all students from point of enrollment to point of departure is done by staff in a centralized advising unit (Habley, 1997).

Three themes emerged from the Habley study. The first theme could be called "Shared Responsibility" as it seems "... that campuses are moving toward models that blend the best attributes of the 'Faculty Only' model with the positive aspects of more centralized models." Secondly, "Diversity" was noted in that almost all models were found in all institutions regardless of size. Diversity is also found in, "policy statements, coordination practices, and program evaluations." Finally, "Institutional Practices" revelations signify the secondary status, and low priority of the academic advisement process:

Nearly four institutions in ten do not have policy statements on advising, almost half of the institutions do not conduct evaluation of the advising program, and almost one in four institutions have not identified an individual to coordinate the advising program. (Habley, 1997).

Gordon (1994) examined the "Development Advising Model" noted preciously in this study, which focuses on the student as an individual, their concerns, needs, and aspirations. The "Developmental Advising Model" approach is considered by many in the advisement field as the ideal advising method. Gordon listed ten reasons for why its ideal is not being developed fully by advisors and institutions:

- 1. Advisors do not have the time to become involved in the type of advising that requires frequent contact with one student; advising loads are too high for personal contact.
- 2. Advisors do not have the background or expertise to handle the type of personal relationship that developmental advising requires.
- 3. Students perceive that advising involves only scheduling and registration, equating advising with high school "guidance."
- 4. Many administrators neither understand nor support advising and do not make funds available to implement developmentally oriented programs.
- 5. Advisors lack training to help them acquire developmental advising expertise, nor is there a great outcry for such training.
- 6. Institutions do not require contacts with one advisor over time, so advisors cannot force student to have advising sessions.
- Autonomous units handle advising, making a common advising philosophy and approach difficult to implement.

- Most campuses barely integrate student services (e.g., admissions, career services, and counseling) with academic services.
- Most advisors have little training in dealing with the needs of diverse or high-risk student populations.
- We have neither time nor support for evaluating advising or even for determining student desire for developmental advising if, it was available.

Description of Faculty versus Advisement Center Advisors

OSU Stillwater and Tulsa aviation students are advised by aviation faculty from the beginning of their college careers if they enter college with aviation as their designated major. Undecided OSU students are advised through the College of Arts & Sciences, staffed by advisement center advisors.

Freshman aviation students at SOSU are currently academically advised by both the Academic Advising Center, and aviation faculty, with sophomores through seniors transferred exclusively to aviation faculty advisement. OU freshman aviation students are academically advised through the University College Enrollment Center. To gain admission into the OU Aviation Program the student must first "... earn a minimum of 24 hours of college credit ..." and "... possess a combined retention grade point average of 2.0..." (Broadway, 1999).

Students from all four aviation programs in this study who declare aviation later in their college career, the freshmen undecided student for example, have experienced both advisement center advisors, and upon entry into their aviation program, aviation

faculty advisement. This study will shed more light on student satisfaction with academic advisement.

In 1990, Jaffe and Huba studied the use of and satisfaction with faculty and advisement center advisor systems at the University of Iowa, College of Engineering.

At the University of Arkansas at Little Rock academic advisement is seen as, "... inextricably intertwined with student retention ..." (Hoeft, 1994). Academic advisement responsibilities are shared by faculty and advisement center advisors, and an undergraduate advisement record form is used for record keeping and for evaluation of advisors.

Finally, in a study by Habley (1994), the question of which process of academic advisement best served the student was discussed to the point that a call for a "cease-fire" was issued between those responsible for academic advisement, both advisement center advisors and faculty advisors. The debate over academic advisement by faculty or advisement center advisors, or a combination of the two continues.

Legal Implications of Academic Advisement

Bazluke (1990) described academic advisors and administrators as "evaluators of students on college campuses" and as possible defendants of defamation litigation. The author sited four elements of student defamation claims: "(1) a false and harmful statement of fact concerning another, (2) an unprivileged communication to a third party, (3) some degree of fault on the part of the person making the statement, and (4) injury to the reputation of the person defamed." These four areas must be carefully observed by academic advisors whether faculty or advisement center established. This monograph

was published by the National Association of College and University Attorneys and contains good advise for those in the advisement arena.

Academic advisors unsure of institutional legal coverage are referred to the National Board for Certified Counselors and Affiliates (NBCC) by NACADA to investigate the need for and availability of liability insurance (Flaherty, 2002). Academic advisors are also directed to check with their institution of employment for legal coverage details. The NBCC Web site provides information in the following areas: Professional Liability Coverage, Understanding Professional Liability Insurance, Understanding the Legal Process, and an option to receive a quote and apply for coverage online (NBCC, 2002).

In a book by John Collis (1990) the author discusses Dizick v. Umpqua Community College in which the Oregon Court of Appeals held that,

... effective counseling depends upon free and open communication between the counselor and the counselee. Such communication would be chilled if the college counselor faced potential liability for every statement from which an adverse inference might be drawn.

Collis also mentions two additional cases with academic advisement components. The first was a 1957 case in which a student sued Columbia University because its catalog promised he would learn wisdom and truth. Institutional catalogs are the tools of academic advisors. Another case sited was Tanner vs. Board of Trustees of the University of Illinois in which a doctoral student was denied a degree because of changes in university required exams and development of the dissertation committee. The court ruled that, "... the University may not act maliciously by arbitrarily and capriciously refusing to award a degree to a student who fulfills its degree requirements." The effective communication of degree requirements are the backbone of proper academic advisement.

We live in a litigious society, and the legal implications of academic advising has continued to develop over the years. In an article by Jeffrey A. Showell (1998), the following advisement issues were discussed: defamation, negligence, privacy, disabilities, Civil rights, duty to report crimes, and privilege. The article suggests that advisors know their rights as protected under the First Amendment of the U.S. Constitution, have an understanding of the Family Educational and Privacy Rights Act of 1998 (FERPA) also known as the Buckley Amendment, the Americans with Disabilities Act of 1990 (A.D.A.), and section 504 of the Rehabilitation Act of 1973. Showell also notes that those holding advisement positions in state institutions, "... can be held personally liable."

Academic advisors should understand the legalities related to academic advisement, and be informed of their institutions position and provision of related legal coverage. With this knowledge they will better serve their students and university, and reduce the occurrence of personal and institutional litigation.

Future Directions of Aviation Academic Advisement

Aviation majors of tomorrow may not be advised exclusively by human academic advisors. The future direction of academic advisement could combine the human element and the electronic/computer process. One aviation example of this new combination effort, is from the aviation faculty at San Jose State University. When faced with the problem of several faculty members retirement leaving the remaining six faculty members with 400 students to advise, their answer was to develop an Academic Counseling Expert system. Sixty-five aviation students used the computer-based system in the spring of 1996, and saved aviation faculty advisors over 30 hours each of aviation academic advisement time (Patankar, 1998).

With the advance of technology, computers are affecting the academic advisement process. In 1994, Tukey described a PC-based spreadsheet and Macintosh hypertext software that calculated the semester and cumulative grade point averages. Moreover, in the spring of 1995, Pennsylvania State University continued its development of Open Access to Student Information Systems (OASIS) which offers additional student feedback, such as: "current (actual), projected semester, and projected cumulative grade-point deficiencies (the differences between a current cumulative average and a higher C average, and semester standing)." Other options include messages related to academic progress, e-mail summary, target grade-point average prediction, interpretation of placement test scores and the advisor assignment module that gives the student their specific advisors name and department. OASIS is being combined with Comprehensive Academic Advising and Information System (CAAIS) which has four key components. They are: University Publications containing full text of official academic information, Student Access to Academic Records, Interactive Advising modules the "electronic advisor" which answers common advising inquiries ("How do I choose a major?"), and finally the Advisor Services module which provides advisee information for the advisors "advisor advisee notes, and E-mail correspondence with students" (Leonard, 1996).

At OSU, Senior Academic Counselor Susan Weir (Spring, 2000) has developed a ListServ to serve her psychology advisees. The Internet has become a tool that academic advisors utilize to distribute valuable information to students.

The future of academic advisement and information technology was also studied by Kramer and Childs (1996), and published in a monograph series introducing current technologies being used in the advising profession.

Will computers replace human academic advisors? Leonard states in his 1996 study that he thinks not. However, electronic academic advisement does have a few advantages over human advisement. One of the advantages is convenience, you can access them anytime, no need for an appointment, and no waiting in line. Accuracy is another area in which computer advisement can be strong, and real-time updates of system-wide information is an option. Computer advisement can also offer anonymity when a student does not want to work face-to-face with a human advisor, and computers treat all students consistently regarding rules of the institution. Based on current trends, the future of aviation academic advisement will most likely become a combination of human and computer-based advisement.

The future of higher education academic advisement could also look to the business world for "tips" on customer (student) satisfaction. Vavra (1997) states "Satisfied customers testify that an organization is quality oriented." Myers (1999), points-out that in "... today's markets, a company (an aviation program for example) must be sure it knows exactly what it takes to keep its customers (aviation students) satisfied and loyal (retained and graduated)."

Summary

As higher education has evolved, the role of academic advisement has also been transformed. The academic advisement of aviation students is relatively a new endeavor undertaken over the last 81 years. But, the quality of the aviation major's educational experience is affected by the institutional policies of academic advisement. Whether by traditional aviation faculty, advisors in advisement centers or both, the method that best serves the aviation student should always be examined to ensure the best opportunity for students' success.

Lowenstein and Grites (1993), have suggested that academic advisors utilize, "a system of ethical principles." They name four fundamental ethical ideals: (1) utility, (2) justice, (3) respect for persons, and (4) fidelity. They continue with eight ethical principles for academic advising:

- 1. Seek the best possible education for the advisee.
- 2. Treat students equitable: don't play favorites or create special privileges.
- 3. Enhance the advisee's ability to make decisions.
- 4. Advocate for the advisee with other offices.
- 5. Tell the advisee the truth about college policies and procedures, and tell others (e.g., faculty, staff, and administrators) the truth as well, but respect the confidentiality of interactions with the advisee.
- 6. Support the institution's educational philosophy and its policies.
- 7. Maintain the credibility of the advising program.
- 8. Accord colleagues appropriate professional courtesy and respect.

McAnulty, O'Connor, and Sklare's 1987 study, had the following seven recommendations for improving academic advisement:

- Systematic and periodic in-service training programs for academic advisors should be developed and implemented.
- 2. Academic advisors should be given references enabling them to provide accurate information on major requirements and general education requirements.
- Academic advisors should be furnished with materials about career opportunities and graduate and professional school programs related to their academic discipline.
- 4. A fair, clearly articulated system of academic advisor evaluation must be established with input from all parties.
- 5. A periodic evaluation of academic advising effectiveness should be conducted and the results made available to the advisor being rated.
- 6. The university should encourage both students and advisors to integrate academic advising into the overall instructional process.
- A reward system should be developed for those faculty and staff who demonstrate excellence in academic advising services.

Virginia Gordon (1994), past President of the National Academic Advisors Association, and Assistant Dean Emeritus of University College at Ohio State University states that, "Until administrators are convinced that developmental advising – or advising itself – is at the heart of the institutional enterprise, little progress will be made."
Margaret C. King (1993), also a former President of the National Academic Advising Association, stated that "The Challenge of the 90s" to improving academic advising services to students was "of accomplishing more with fewer staff and fewer resources." In light of the recent Oklahoma higher educational funding short-falls her statement holds particular relevance today.

The importance of academic advisement for aviation students at OSU Stillwater and Tulsa, OU, and SOSU, cannot be underestimated. Analysis of aviation program quality (Lindseth, 1996) is necessary for enhancement of services to occur. This study will contribute to aviation program quality by providing research data describing aviation academic advisement satisfaction of this student population.

CHAPTER III

METHODOLOGY

Introduction

Chapter III explains the methodology of the study to describe the academic advisement satisfaction of Oklahoma aviation students at Oklahoma State University-Stillwater (OSU), Oklahoma State University-Tulsa (OSU-Tulsa), the University of Oklahoma (OU), and Southeastern Oklahoma State University (SOSU). It also explains the population, purpose of the study, research objectives, instrumentation, data collection, and analysis of data.

Population

The population of this study consisted of aviation education undergraduate students at OSU Stillwater and Tulsa, OU, and SOSU. All aviation students enrolled during the spring 2002 semester whether full-time or part-time were given the opportunity to participate in this study. Are aviation students at OSU Stillwater and Tulsa, OU, and SOSU satisfied with their undergraduate academic advisement?

Purpose

The purpose of this study is to describe the academic advisement satisfaction of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. Study data may be considered in formulating future academic advisement to enhance aviation program quality.

Research Objectives

In order to conduct this research the following research questions were identified.

Research Objective Number One

What are the demographic characteristics of the aviation students at OSU Stillwater and Tulsa, OU, and SOSU pertaining to their academic advisement delivery, classification, age, in-state or out-of-state residency, enrollment status, GPA, parents aviation degree holding status, and gender?

Research Objective Number Two

Are aviation students satisfied with academic advisement?

Research Objective Number Three

Are aviation students satisfied with academic advisement concerning aviation career advisement?

Research Objective Number Four

Are aviation students satisfied with academic advisement concerning the student's personal confidence in advisors?

Research Objective Number Five

What are the aviation student's written open responses with respect to academic advisement satisfaction?

Instrumentation

The survey instrument used in this baseline study contained 24 questions, and was approved by the Oklahoma State University Institutional Review Board, Appendix A. The survey contained eight demographic questions, and to describe satisfaction with academic advisement, 12 multiple-choice, and four open-response questions. The survey instrument and student cover letter are included in Appendix B.

To insure construct validity of the survey a pilot test was conducted with academic advisement experts October 2001 before its administration to aviation students spring 2002, at OSU Stillwater and Tulsa, OU, and SOSU. Those experts included: the Director of Student Support Services Advisement at Oklahoma State UniversityOklahoma City, Director of Student Support Services Advisement at Southeastern Oklahoma State University, and the Director of the University of Oklahoma Scholars Advisement Program. Revisions based upon reviewers comments were made before administration to the study population.

To address Research Objective One- *Demographics of Aviation Students*, the following questions were included:

Question 1. Are you academically advised by:

Aviation faculty advisor

Advisor in advisement center

Both

Question 2. What is your classification:

Freshman

Sophomore

Junior

Senior

Question 8. Which category best describes your age:

25, or under

26, or over

Question 9. Are you an in-state or out-of-state student:

In-state

Out-of-state

Question 10. Enrollment status:

Full-time

Part-time

Question 11. Approximate cumulative grade point average (GPA):

Question 12. Do either of your parents hold an aviation degree:

Yes

No

Question 13. Gender:

Male

Female

To address Research Objective Two - Aviation Student Satisfaction with Academic Advisement, the following questions were included and asked the student to indicate one response that best reflected their opinion:

Strongly Agree, Agree, Disagree, Strongly Disagree, Don't Know/No Opinion

Question 3-A: My advisor explains major requirements.

Question 3-D: My advisor explains pre-requisite course requirements.

Question 3-E: My advisor solicits my input in planning my curriculum.

Question 3-F: My advisor's office hours are adequate for academic advisement.

Question 3-G: My advisor is knowledgeable of campus resources.

To address Research Objective Three - Aviation Student Satisfaction with

Academic Advisement Concerning Career Advisement, the following questions were

included and asked the student to indicate one response that best reflected their opinion:

Strongly Agree, Agree, Disagree, Strongly Disagree, Don't Know/No Opinion

Question 3-B: My advisor helps me plan my career in aviation.

Question 3-C: My advisor is very knowledgeable about aviation careers.

Question 3-J: My advisor influenced my decision to pursue aviation as a career.

To address Research Objective Four - Aviation Student Satisfaction with Academic Advisement Concerning Student Personal Confidence in Advisors, the following questions were included and asked the student to indicate one response that best reflected their opinion:

Strongly Agree, Agree, Disagree, Strongly Disagree, Don't Know/No Opinion Question 3-H: I am confident in my advisor's ability.

Question 3-I: I would recommend my advisor to other aviation students.

Question 3-K: Overall, my advisor is doing a good job.

Question 4: If you had to give your advisor a grade, what would it be?

A B C D F

To address Research Objective Five - Aviation Student Written Open Responses with Respect to Academic Advisement Satisfaction, the following questions were included:

Question 5: What has been most satisfying about working with your advisor? Question 6: What has been least satisfying?

Question 7: How could your academic advising experience have been improved? Question 14: If you have any other comments you would like to share, please do so in the space below.

Data Collection

The survey, which also contained a student cover letter, was mailed January 2, 2002 utilizing the United States Postal Service by the investigator to the aviation faculty

co-investigator at OSU for distribution to aviation faculty members on the Stillwater and Tulsa campuses. Aviation faculty members administered the survey to aviation students during class meetings on both campuses and returned them to the aviation faculty coinvestigator. The investigator retrieved the surveys from the co-investigator at the Stillwater campus on February 8, 2002.

The investigator personally delivered surveys January 7, 2002 to the OU aviation program director. The aviation program director administered the survey to aviation undergraduate students during the spring aviation orientation meeting held on January 14, 2002. The investigator personally retrieved the surveys from the program director at the OU Westheimer Airport complex on January 16, 2002.

The investigator personally delivered the survey instrument to the aviation program director at SOSU January 8, 2002. The director distributed the survey to aviation faculty for administration to aviation undergraduate students during class meetings. Aviation faculty members returned the surveys to the program director and the investigator personally retrieved the surveys from the program director at the SOSU Eaker Field aerospace complex on January 22, 2002.

Undergraduate aviation students at each of the four participating aviation programs were given time to complete the survey, and participation was voluntary.

Analysis of Data

The investigator began analysis of the data sought in this study, as soon as completed surveys from the four participating aviation programs were secured. To analyze Research Objective One, frequency and percentages were utilized. To analyze Research Objective Two, frequency and percentages were utilized, as well as Chi square analysis. To analyze Research Objective Three, frequency and percentages were utilized, as well as Chi square analysis. To analyze Research Objective Four, frequency and percentages were utilized, as well as Chi square analysis. To analyze Research Objective Five, the frequencies of written open responses were recorded. Data from each student survey were coded and entered into the Statistical Package for the Social Sciences software. The Chi square, non-parametric test of significance was appropriate for the nominal data in its form of frequency counts, and in comparing the expected outcomes to the observed outcomes to see if they were significantly different. The confidence level of this data was set at the .05 level of significance (alpha) (Key, 1997) (Gay, 2000).

Summary

This chapter presented a description of the study population, statement of the problem, study purpose, research objectives, instrumentation, data collection and analysis of data procedures.

36

CHAPTER IV

FINDINGS

Introduction

Chapter IV presents the research findings of this study to describe the academic advisement satisfaction of Oklahoma aviation students at Oklahoma State University-Stillwater (OSU), Oklahoma State University-Tulsa (OSU-Tulsa), the University of Oklahoma (OU), and Southeastern Oklahoma State University (SOSU). Results of the study are presented by research objectives.

Population

The population of this study consisted of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. All aviation students enrolled during the spring 2002 semester whether full-time or part-time were given the opportunity to participate in this study.

Statement of Problem

Are aviation students at OSU Stillwater and Tulsa, OU, and SOSU satisfied with their undergraduate academic advisement?

Purpose

The purpose of this study was to describe the academic advisement satisfaction of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. Study data may be considered in formulating future academic advisement to enhance aviation program quality.

Findings

The population of this study are based on the data gathered through the survey of 510 aviation students at OSU Stillwater & Tulsa, OU, and SOSU during the spring 2002 semester. Of the 510 aviation students given the opportunity to participate, 268 or 52.5% completed and returned surveys. Rates of return based on total aviation program participation were: SOSU 36.2%, OSU 33.2%, OU 18.3% and OSU-Tulsa 12.3%. Rates of return based on individual aviation program participation were: OSU-Tulsa 66.0%, SOSU 55.6%, OU 49.0%, and OSU 48.5%. Surveys were mailed by the investigator to the aviation faculty co-investigator for distribution at OSU Stillwater and Tulsa, and picked-up after administration by the investigator to OU and SOSU, and picked-up after administration by the investigator to OU and SOSU, and picked-up after administration by the surveys were administered by aviation faculty during class meetings, and for OU students the aviation program director conducted the survey administration during the spring 2002 orientation.

Research Objectives

Research Objective Number One

What are the demographic characteristics of the aviation students at OSU Stillwater and Tulsa, OU, and SOSU pertaining to their academic advisement delivery, classification, age, in-state or out-of-state residency, enrollment status, GPA, parents aviation degree holding status, and gender?

To answer Research Objective One survey data were presented in frequency analysis and illustrated in Tables II through IX. Percentages were discussed in the study narrative.

Survey Question Number One

Are you academically advised by? (Table II-Advisor)

The results indicate that of the four aviation programs studied, OSU Stillwater and Tulsa, and SOSU, provide academic advisement primarily through aviation faculty, while OU utilized an advisor in advisement center. Percentages gathered were, OSU 94.3%, OSU-Tulsa 87.0 % and SOSU 68.1%. The majority of OU students 65.3% were advised by an advisor in advisement center. SOSU also had 22.3% advisement indicated in the Both category as their advisement services are currently in a transition stage that will eventually result in freshman being advised exclusively by advisors in an advisement until graduation.

|--|

Category	Frequency							
	OSU	OU	OSU-T	SOSU	Total			
Aviation Faculty Advisor	82	13	27	64	186			
Advisor in Advisement Center	2	32	2	9	45			
Both	3	4	2	21	30			
Totals	87	49	31	94	261			

Overall, 261 aviation students responded to question 1 indicating the following results: Aviation faculty advisor 71.3%, Advisor in advisement center 17.2%, and Both 11.5%.

Survey Question Number Two

What is your classification? (Table III-Classification)

The study provided a mix of aviation student classification data with each program most represented by senior participation. Senior representation was OSU 46.1%, OU 32.7%, OSU-Tulsa 57.6%, and SOSU 29.9%.

Overall, 268 aviation students responded to question 2 indicating the following results: Senior 39.2%, Junior 29.1%, Sophomore 19.0%, and Freshman 12.7%.

TABLE III

Category	Frequency							
	OSU	OU	OSU-T	SOSU	Total			
Freshman	1	9	0	24	34			
Sophomore	13	10	1	27	51			
Junior	34	14	13	17	78			
Senior	41	16	19	29	105			
Total	89	49	33	97	268			

CLASSIFICATION

Survey Question Number Eight

Which category best describes your age? (Table IV-Age)

Results also indicate that the majority of aviation students in this study are under the age of 25 at OSU, OU and SOSU. Their percentages for traditional aged college students were 93.2%, 89.1%, and 89.4%. OSU-Tulsa was evenly divided with 50% under the age of 25, and 50%, 26 years of age and over.

Overall, 263 aviation students responded to question 8 indicating the following results: 25 or under 85.8%, 26 or over 15.2%.

TABLE IV

AGE

Category		Frequency							
	OSU	OU	OSU-T	SOSU	Total				
25, or under	82	41	16	84	223				
26, or over	6	8	16	10	40				
Totals	88	49	32	94	263				

Survey Question Number Nine

Are you an in-state or out-of-state student? (Table V- In-state or Out-of-state)

TABLE V

IN-STATE OR OUT-OF-STATE

Category	Frequency							
	OSU	OU	OSU-T	SOSU	Total			
In-state	57	30	29	23	139			
Advisor in Advisement Center	31	16	3	71	121			
Totals	88	46	32	94	260			

In-state and out-of state student residence status revealed that OSU-Tulsa had a 90.6% in-state student population, OU 65.2%, while OSU was at the 64.8% level. SOSU showed the lowest in-state student residence measure with 24.5%.

Overall, 260 aviation students responded to question 9 indicating the following results: In-state 53.5%, Out-of-state 46.5%.

Survey Question Number Ten

Enrollment status? (Table VI-Enrollment Status)

TABLE VI

Category		Frequency							
		OSU	OU	OSU-T	SOSU	Total			
Full-time	#	88	41	24	90	243			
Part-time		0	5	~8	4	17			
Totals		88	46	32	94	260			

ENROLLMENT STATUS

The largest percent of aviation students in this study indicated full-time enrollment status. OSU indicated 100%, OU 89.1%, OSU-Tulsa 75.0% and SOSU 95.7%. The highest level of part-time enrollment status was OSU-Tulsa with 25.0%.

Overall, 260 aviation students responded to question 10 indicating the following results: Full-time 90.7%, Part-time 6.5%.

Survey Question Number Eleven

Approximate cumulative grade point average (GPA)? (Table VII-GPA)

TABLE VII

Gl	2	A

Category		Frequency							
	OSU	OU	OSU-T	SOSU	Total				
2.0 or lower	0	1	0	0	1				
2.1 - 2.5	6	3	3	12	24				
2.6 - 3.0	27	17	12	29	85				
3.1 - 3.5	34	14	10	35	93				
3.6 - 4.0	19	10	7	15	51				
Totals	86	45	32	91	254				

Analysis of aviation student grade point averages provided the highest number of students in the 3.1-3.5 and 2.6-3.0 ranges. OSU students indicated the 3.1-3.5 GPA range with the highest percentage at 39.6%, SOSU students were next with 38.5%. The highest

percentages for the 2.6-3.0 GPA range were indicated by students at OU 37.8% and OSU-Tulsa 37.5%.

Overall, 254 aviation students responded to question 11 indicating the following results: 3.6-4.0, 20.0%, 3.1-3.5, 36.2%, 2.6-3.0, 33.8%, 2.1-2.5, 10.0%, 2.0 or lower, 0.4%.

Survey Question Number Twelve

Do either of your parents hold an aviation degree? (Table VIII-Parents Aviation Degree)

TABLE VIII

Category	· · · · · · · · · · · · · · · · · · ·	Frequency							
	OSU	OU	OSU-T	SOSU	Total				
Yes	5	4	1	4	14				
No	83	42	31	90	246				
Totals	88	46	32	94	260				

PARENTS AVIATION DEGREE

Demographically, aviation students in this study indicated above the 91.0% level that neither of their parents hold an aviation degree. The highest was OSU-Tulsa with 96.9%, followed by SOSU 95.7%, OSU 94.3% and OU with 91.3%.

Overall, 260 aviation students responded to question 12 indicating the following results: No 94.6%, Yes 5.4%.

Survey Question Number Thirteen

Gender? (Table IX-Gender)

TABLE IX

GENDER

Category		Frequency							
	OSU	OU	OSU-T	SOSU	Total				
Male	75	39	28	88	230				
Female	13	7	4	6	30				
Totals	88	46	32	94	260				

The final demographic category was gender. Males dominate this degree field. SOSU recorded male survey participation at 93.9%, OSU-Tulsa 87.5%, OSU 85.2%, and 84.8% at OU. Female aviation percentages were OU 15.2%, OSU 14.8%, OSU-Tulsa 12.5% and 6.1% at SOSU.

Overall, 260 aviation students responded to question 13 indicating the following results: Male 88.5%, Female 11.5%.

Research Objective Number Two

Are aviation students satisfied with academic advisement?

To answer Research Objective Number Two students responded to questions 3-A, 3-D, 3-E, 3-F, and 3-G by indicating one of the following responses: Strongly Agree, Agree, Disagree, Strongly Disagree, Don't Know/No Opinion. Survey data were presented in frequency analysis and illustrated in Tables X through XIV, with percentages and Chi square test analysis presented in the study narrative.

Survey Question Number Three-A

My advisor explains major requirements (Table X-Major Requirements).

TABLE X

	Frequency & Percent								
Category	OSU		0	U	OS	U-T	SC	SU	Total
	<u>n</u>	Р	<u>n</u>	P	<u>n</u>	Р	<u>n</u>	Р	
Strongly Agree	17	19.3	29	59.2	15	45.5	33	34.4	94
Agree	57	64.8	20	40.8	14	42.4	51	53.1	142
Disagree	8	9.1	0	0.0	2	6.1	4	4.2	14
Strongly Disagree	4	4.5	0	0.0	1	3.0	2	2.1	7
Don't Know/No Opinion	2	2.3	0	0.0	1	3.0	6	6.3	9
Totals	88		49		33		96		266

MAJOR REQUIREMENTS

The research data indicates that for question 3-A students at OU Strongly Agree by 59.2% that they are satisfied with advisor explanation of major requirements. OSU students Agree at the 64.8% level, followed by SOSU with 53.1% and OSU-Tulsa indicating 42.4%.

Overall, 266 aviation students responded to question 3-A indicating the following results: Strongly Agree 35.3%, Agree 53.4%, Disagree 5.3%, Strongly Disagree 2.6%, Don't Know/No Opinion 3.4%.

Survey Question Number Three-D

My advisor explains pre-requisite course requirements (Table XI-Pre-Requisite Requirements).

TABLE XI

	Frequency & Percent								
Category	OSU		0	U	OS	U-T	SC	SU	Total
	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	
Strongly Agree	13	14.6	29	60.4	14	42.4	35	36.5	91
Agree	49	55.1	19	39.6	13	39.4	44	45.8	123
Disagree	22	24.7	0	0.0	4	12.1	8	8.3	34
Strongly Disagree	3	3.4	0	0.0	2	6.1	3	3.1	8
Don't Know/No Opinion	2	· 2.2	2	0.0	2	2.2	6	6.3	12
Totals	89		50		35		96		268

PRE-REQUISITE REQUIREMENTS

Findings show that aviation students are very satisfied with advisor explanation of pre-requisite course requirements in question 3-D with OU students registering the highest percentages of Strongly Agree at 60.4%. OSU students rank highest in the Agree category at 55.1% followed by SOSU 45.8%, OU 39.6% and OSU-Tulsa at 39.4%. This question also registered Disagree percentages of OSU 24.7%, OSU-Tulsa 12.1% and SOSU at 8.3%.

Overall, 268 aviation students responded to question 3-D indicating the following results: Strongly Agree 34.2%, Agree 47.0%, Disagree 12.8%, Strongly Disagreed 3.0%, and Don't Know/No Opinion 3.0%.

Survey Question Number Three-E

My advisor solicits my input in planning my curriculum (Table XII-Curriculum).

The study identifies responses to question 3-E concerning advisor solicitation of student input in planning their curriculum. In the Strongly Agree option OU students reported 55.1%, and in the Agree option OSU students indicated 58.4%, SOSU 52.1%, followed by OU 44.9% and OSU-T 42.4%. The largest Disagree response was from OSU students at 14.6%.

Overall, 266 aviation students responded to question 3-E indicating the following results: Strongly Agree 31.1%, Agree 51.7%, Disagree 7.1%, Strongly Disagree 3.4%, and Don't Know/No Opinion 6.7%.

TABLE XII

CURRICULUM

				Freque	ncy &	Percen	ıt		
Category	OSU		U OU		OSU-T		SOSU		Total
	<u>n</u>	P	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	
Strongly Agree	15	16.9	27	55.1	14	42.4	27	28.1	83
Agree	52	58.4	22	44.9	14	42.4	50	52.1	138
Disagree	13	14.6	0	0.0	1	3.0	5	5.2	19
Strongly Disagree	2	2.2	0	0.0	3	9.1	4	4.2	9
Don't Know/No Opinion	7	7.9	0	0.0	0	0.0	10	10.4	17
Totals	89		49		32		96		266

Survey Question Number Three-F

My advisor's office hours are adequate for academic advisement (Table XIII - Office Hours).

Office hours for academic advisement, question 3-F registered Strongly Agree at 55.1% for OU advisees and 51.5 for OSU-Tulsa students. Strong percentages of satisfaction were shown in the Agree category by OSU students 66.3%, SOSU 57.3% OU 44.9% and OSU-Tulsa with 42.4%.

Overall, 256 aviation students responded to question 3-F indicating the following results: Strongly Agree 35.6%, Agree 56.2%, Disagree 3.4%, Strongly Disagree 0.7%, Don't Know/No Opinion 4.1%.

TABLE XIII

				Freque	ncy &	Percen	t		
Category	OSU		OU		OSU-T		SOSU		Total
	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	
Strongly Agree	17	19.1	27	55.1	17	51.5	34	35.4	95
Agree	59	66.3	22	44.9	14	42.4	55	57.3	150
Disagree	7	7.9	0	0.0	1	3.0	1	1.1	9
Strongly Disagree	1	1.1	0	0.0	0	0.0	1	1.1	2
Don't Know/No Opinion	0	5.6	0	0.0	0	0.0	0	0.0	0
Totals	84		49		32		91		256

OFFICE HOURS

Survey Question Number Three-G

My advisor is knowledgeable of campus resources (Table XIV - Campus Resources).

The final question for Research Objective Two was 3-G concerning the advisor's knowledge of campus resources which also received high satisfaction percentage rankings. OU students marked Strongly Agree responses at the 57.1% rate and at the Agree option OSU received 61.8%, SOSU 46.9%, and OSU-Tulsa 30.3%. The Disagree category was indicated by 12.1% of OSU-Tulsa students, followed by SOSU 6.3%, and OSU 5.6%. This question also received markings for the Don't Know/No Opinion option. OSU received 12.4%, SOSU 11.5% and OSU-Tulsa was the final program at 9.1%.

TABLE XIV

·				Freque	ncy &	Percen	t		
Category	OSU	OSU		OU		OSU-T		SU	Total
	<u>n</u>	<i>P</i>	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u></u>
Strongly Agree	16	18.0	28	57.1	15	45.5	33	34.4	92
Agree	55	61.8	21	42.9	10	30.3	45	46.9	131
Disagree	5	5.6	0	0.0	4	12.1	6	6.3	15
Strongly Disagree	2	2.2	0	0.0	1	3.0	1	1.0	4
Don't Know/No Opinion	11	12.4	0	0.0	3	9.1	11	11.5	25
Totals	89		49		33		96		267

CAMPUS RESOURCES

Overall, 267 aviation students responded to question 3-G indicating the following results: Strongly Agree 34.5%, Agree 49.1%, Disagree 5.6%, Strongly Disagree 1.5%, and Don't Know/No Opinion 9.4%.

The Chi square test comparing expected frequencies with observed frequencies indicated significance with a Chi square value of 141.11 > 16.919 (table value). This test result told the investigator to reject the null hypothesis which proposed that all of the aviation programs in this study were the same regarding satisfaction with academic advisement. The satisfaction of aviation students for Research Objective Two is significant/different when comparing the four aviation programs concerning academic advisement in this study. This calculation had nine degrees of freedom and was measured at the alpha significance level of .05, for a 95% confidence interval.

The rank order of aviation student satisfaction concerning Research Objective Two was: OU 99.9%, SOSU 92.0%, OSU-Tulsa 87.9%, and OSU 83.9%.

Research Objective Number Three

Are aviation students satisfied with academic advisement concerning aviation career advisement?

To answer Research Objective Three students responded to questions 3-B, 3-C, and 3-J by indicating one of the following responses: Strongly Agree, Agree, Disagree, Strongly Disagree, Don't Know/No Opinion. Survey data were presented in frequency analysis and illustrated in Tables XV through XVII, with percentages and Chi square test analysis presented in the study narrative. My advisor helps me plan my career in aviation (Table XV-Plan Career).

TABLE XV

PLAN CAREER

		Frequency & Percent											
Category	OSU		0	U	OS	U-T	SC	SU	Total				
	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р					
Strongly Agree	5	5.6	10	20.8	8	24.2	16	16.6	39				
Agree	33	37.0	28	58.3	8	24.2	42	43.7	111				
Disagree	39	43.8	6	12.5	10	30.3	25	26.0	80				
Strongly Disagree	5	5.6	1	2.0	4	12.1	4	4.1	14				
Don't Know/No Opinion	7	7.8	3	6.2	3	9.0	9	9.3	22				
Totals	89		48		33		96		266				

Study findings pertaining to aviation student satisfaction with advisors helping them plan their career in aviation were mixed. While 37.0% of OSU students Agreed, the same student group Disagreed at 43.8%. OU students registered Agree at 58.3% with only 12.5% Disagreeing. OSU-Tulsa split evenly between Strongly Agree and Agree with 24.2% in each category, and also Disagreed at 30.3%. OSU-Tulsa also indicated 12.1% Strongly Disagree. The aviation students at SOSU Agreed at 43.7% and Disagreed at 26.0%.

Overall, 266 aviation students responded to question 3-B indicating the following results: Strongly Agree 14.7%, Agree 41.7%, Disagree 30.1%, Strongly Disagree 5.3%, Don't Know/No Opinion 8.3%.

Survey Question Number Three-C

My advisor is very knowledgeable about aviation careers (Table XVI-Knowledgeable Aviation Careers).

TABLE XVI

	Frequency & Percent											
Category	OSU		OU		OSU-T		SOSU		Total			
	<u>n</u>	Р	<u>n</u>	Р	'n	Р	<u>n</u>	Р				
Strongly Agree	30	33.7	12	25.0	4	12.1	38	39.5	84			
Agree	49	55.0	25	52.0	16	48.4	45	46.8	135			
Disagree	· 7	7.8	4	8.3	5	15.1	4	4.1	20			
Strongly Disagree	0	0.0	1	2.0	1	3.0	1	1.0	3			
Don't Know/No Opinion	3	3.3	6	12.5	7	21.2	8	8.3	24			
Totals	89		48		33		96		266			

KNOWLEDGEABLE AVIATION CAREERS

In the area of advisors being knowledgeable about aviation careers SOSU advisors scored the highest in the Strongly Agree category with 39.5%, followed by OSU at 33.7%. In this same category OSU-Tulsa received 12.1%. The Agree option was evenly distributed among the four participating aviation programs with percentages ranging from OSU's 55.0% to SOSU's 46.8%. The area of Disagree for OSU-Tulsa recorded 15.1% and for Don't Know/No Opinion 21.2%.

Overall, 266 aviation students responded to question 3-C indicating the following results: Strongly Agree 31.6%, Agree 50.8%, Disagree 7.5%, Strongly Disagree 1.1%, and Don't Know/No Opinion 9.0%.

Survey Question Number Three-J

My advisor influenced my decision to pursue aviation as a career (Table XVII-Influenced Aviation Career).

TABLE XVII

				Freque	ncy &	Percen	t		
Category	OSU		OU		OSU-T		SOSU		Total
	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	
Strongly Agree	7	7.8	11	22.4	2	6.0	5	5.2	25
Agree	10	11.2	9	18.3	3	9.0	24	25.0	46
Disagree	45	50.5	12	24.4	11	33.3	28	29.1	96
Strongly Disagree	15	16.8	6	12.2	11	33.3	22	22.9	54
Don't Know/No Opinion	12	13.4	11	22.4	6	18.1	17	17.7	46
Totals	89		49		33		96		267

INFLUENCED AVIATION CAREER

The final question in Research Objective Three concerning academic advisement focused on the advisors influence on students decision to pursue aviation as a career. OSU students indicated Disagree at 50.8%, followed by OSU-Tulsa with 33.3%, SOSU 29.1% and OU 24.4%. The option of Strongly Disagree was led by OSU-Tulsa with 33.3%, SOSU 22.9%, OSU 16.8%, and OU 12.2%. This question also received Don't Know/No Opinion marks of OU 22.4%, OSU-Tulsa 18.1%, SOSU 17.7%, and OSU 13.4%.

Overall, 267 aviation students responded to question 3-J indicating the following results: Strongly Agree 9.4%, Agree 17.2%, Disagree 36.0%, Strongly Disagree 20.2%, Don't Know/No Opinion 17.2%.

The Chi square test comparing expected frequencies with observed frequencies indicated significance with a Chi square value of 34.58 > 16.919 (table value). This test result told the investigator to reject the null hypothesis which proposed that all of the aviation programs in this study were the same regarding satisfaction with academic advisement. The satisfaction of aviation students for Research Objective Three is significant when comparing the four aviation programs concerning academic advisement pertaining to career advisement in this study. This calculation had nine degrees of freedom and was measured at the alpha significance level of .05, for a 95% confidence interval.

The rank order of aviation student satisfaction concerning Research Objective Three was: OU 76.0%, SOSU 66.9%, OSU 54.6%, and OSU-Tulsa 49.3%.

57

Are aviation students satisfied with academic advisement concerning the student's personal confidence in advisors?

To answer Research Objective Four students responded to questions 3-H, 3-I, and 3-K, by indicating one of the following responses: Strongly Agree, Agree, Disagree, Strongly Disagree, Don't Know/No Opinion. Question 4 responses included: A B C D F. Survey data are presented in frequency analysis and illustrated in Tables XVIII through XXI, with percentages and Chi square test analysis presented in the study narrative.

Survey Question Number Three-H

I am confident in my advisor's ability (Table XVIII-Confident In Advisor).

Academic advisors received high percentages of aviation student satisfaction in both the Strongly Agree and Agree categories for question 3-H, concerning student confidence in their advisor. Aviation students at OU indicated 60.4% Strongly Agree, followed by OSU-Tulsa with 45.4%, and SOSU 40.0%. In the Agree option OSU received 62.9%, SOSU 48.4%, OU 39.5%, and OSU-Tulsa recorded 33.3%.

Overall, 265 aviation students responded to question 3-H indicating the following results: Strongly Agree 38.1%, Agree 49.8%, Disagree 5.7%, Strongly Disagree 1.5%, Don't Know/No Opinion 4.9%.

TABLE XVIII

CONFIDENT IN ADVISOR

	Frequency & Percent										
Category	OSU		OU		OSU-T		SOSU		Total		
	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р			
Strongly Agree	19	21.3	29	60.4	15	45.4	38	40.0	101		
Agree	56	62.9	19	39.5	11	33.3	46	48.4	132		
Disagree	6	6.7	0	0.0	6	18.1	3	3.1	15		
Strongly Disagree	3	3.3	0	0.0	0	0.0	1	1.0	4		
Don't Know/No Opinion	5	5.6	0	0.0	1	3.0	7	7.9	13		
Totals	89		48		33		95		265		

Survey Question Number Three-I

I would recommend my advisor to other aviation students (Table XIX-Recommend Advisor).

More than half of the OU aviation students indicated they would recommend their advisor to other aviation students, question 3-I by marking Strongly Agree 63.2%. This was followed by OSU-Tulsa at 48.4% and SOSU with 37.5%. OSU students indicated Agree with 55.0%, followed by SOSU 47.9%. The option of Disagree was chosen by OSU-Tulsa students at 15.1%, OSU 14.6%, SOSU 4.1% and OU 0.0%.

				Freque	ncy &	Percen	t		
Category	OSU		OU		OSU-T		SOSU		Total
	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	
Strongly Agree	20	22.4	31	63.2	16	48.4	36	37.5	103
Agree	49	55.0	16	32.6	9	27.2	46	47.9	120
Disagree	13	14.6	1	2.0	5	15.1	4	4.1	23
Strongly Disagree	3	3.3	0	0.0	1	3.0	2	2.0	6
Don't Know/No Opinion	4	4.4	1	2.0	2	6.0	8	8.3	15
Totals	89		49		33		96		267

RECOMMEND ADVISOR

Overall, 267 aviation students responded to question 3-I indicating the following results: Strongly Agree 38.6%, Agree 44.9%, Disagree 8.6%, Strongly Disagree 2.2%, Don't Know/No Opinion 5.6%.

Survey Question Number Three-K

Overall, my advisor is doing a good job (Table XX-Overall Good Job).

Findings for question 3-K show advisors as doing an overall good job, indicating aviation student satisfaction with OU students choosing 65.3% in the Strongly Agree category. The Agree option saw 59.5% OSU, 58.3% SOSU, 45.4% OSU-Tulsa, and 34.6% OU. Disagree was indicated by OSU students at 11.2%, and 9.0% by OSU-Tulsa aviation students.

TABLE XX

		Frequency & Percent											
Category	OSU		OU		OSU-T		SOSU		Total				
	<u>n</u>	Р	<u>n</u>	Р	n	Р	<u>n</u>	Р					
Strongly Agree	18	20.2	32	65.3	12	36.3	32	33.3	94				
Agree	53	59.5	17	34.6	15	45.4	56	58.3	141				
Disagree	10	11.2	0	0.0	3	9.0	2	2.0	15				
Strongly Disagree	3	3.3	0	0.0	1	3.0	1	1.0	5				
Don't Know/No Opinion	5	5.6	0	0.0	2	6.0	5	5.2	12				
Totals	89		49		33		96		267				

OVERALL GOOD JOB

Overall, 267 aviation students responded to question 3-K indicating the following results: Strongly Agree 35.2%, Agree 52.8%, Disagree 5.6%, Strongly Disagree 1.9%, Don't Know/No Opinion 4.5%.

Survey Question Number Four

If you had to give your advisor a grade, what would it be? (Circle) (Table XXI-

Advisor Grade) A B C D F

The final question in Research Objective Four asked aviation students to give a grade to their academic advisor. OU students awarded "A" 80.4% of the time, followed by SOSU's 48.3%, OSU-Tulsa 44.8% and OSU 35.7%. The grade of "B" was given to

SOSU advisors 40.6% of the time, followed by OSU's 36.9%, OSU-Tulsa 27.5% and OU 19.5%.

TABLE XXI

·										
					Freque	ncy &	Percen	ıt		
	Category	OSU		0	U	OS	U-T	SC	D SU	Total
		<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	<u>n</u>	Р	
А		30	35.7	37	80.4	13	44.8	44	48.3	124
В		31	36.9	9	19.5	8	37.5	37	40.6	85
С		14	16.6	0	0.0	6	20.6	8	8.7	28
D		8	9.5	0	0.0	1	3.4	1	1.0	10
E		1	1.1	0	0.0	1	3.4	1	1.0	3
	Totals	84		46		29		91		250

ADVISOR GRADE

Overall, 250 aviation students responded to question 4 indicating the following results: "A" 49.6%, "B" 34.0%, "C" 11.2%, "D" 4.0%, and "F" 1.2%.

The Chi square test comparing expected frequencies with observed frequencies indicated significance with a Chi square value of 113 > 16.919 (table value). The investigator rejected the null hypothesis which proposed that all of the aviation programs in this study were the same regarding satisfaction with academic advisement. The satisfaction of aviation students for Research Objective Four is significant when

comparing the four aviation programs concerning student confidence in their advisor in this study. This calculation had nine degrees of freedom and was measured at the alpha significance level of .05, for a 95.0% confidence interval.

The rank order of aviation student satisfaction concerning Research Objective Four was: OU 99.4%, SOSU 95.6%, OSU 85.4%, and OSU-Tulsa 84.5%.

Research Objective Number Five

What are the aviation education undergraduate student's written open responses with respect to academic advisement satisfaction?

To answer Research Objective Five students responded through written openresponses to questions 5, 6, 7, and 14. Three categories of responses developed including: academic, personal and career. The majority of responses focused on academic advisement. The second most mentioned category was related to the student's perception of whether or not the advisor exhibited a personal interest in their success as an aviation student. This category also included remarks commenting on the advisors personality and communication strengths and weaknesses. The third and final category consisted of the student's desire for more advisor-supplied information concerning aviation careers, internships, job placement and scholarship opportunities. Written open response samples are recorded in Appendix C, and a sample of the survey and student cover letter are included in Appendix B.
Survey Question Number Five

What Has Been Most Satisfying about Working with Your Advisor?

Responses recorded were: SOSU-70, OSU-67, OU-33, and OSU-Tulsa-24. A satisfied example response was: "Really, the most satisfying would be the fact that he stays on top of what I am taking. He does not have me take any classes I do not need." A dissatisfied example response was: "Nothing I don't work with him that much." A satisfied example response relating to the personal category: "Good personality, involved with every aspect of AVED curriculum" and, "The fact that he personally knows who I am. I am never a number in his office." A female advisor received this satisfied personal remark: "She is very knowledgeable, very friendly, very easy to approach."

Overall, 194 or 72.3% of the 268 aviation students participating in this study responded to question 5, which asked them to comment on the most satisfying aspect of their academic advisement.

Survey Question Number Six

What Has Been Least Satisfying?

Responses recorded were: OSU-60, SOSU-47, OSU-Tulsa-18, and OU-13. A satisfied example response was: "Nothing I find unsatisfying." A personal dissatisfied response example was: "Not very personable to me individually but is with others. It is almost like he is showing favoritism."

Overall, 143 or 53.1% of the 268 aviation students participating in this study responded to question 6, which asked them to comment on the least satisfying aspect of their academic advisement.

Survey Question Number Seven

How Could Your Academic Advising Have Been Improved?

Responses recorded were: OSU-53, SOSU-49, OSU-Tulsa-16, and OU-16. A satisfied eample response was: "I think everything is fine." A dissatisfied response was: "I wish there was only one academic requirement sheet for my major. I have found an orange one, a white one, and a recommended year by year sheet. They are all requiring different classes." One student had this request: "More career planning. Definitely need internship opportunities." A final satisfied response: "Great as is."

Overall, 134 or 49.8% of the 268 aviation education undergraduate students participating in this study responded to question 7, which asked them to comment on how their academic advisement could have been improved.

Survey Question Number Fourteen

If You Have Any Other Comments You Would Like to Share, Please Do So in the Space Below.

Responses recorded were: SOSU-8, OSU-3, OSU-Tulsa-3, and OU-0. One example was: "We need some sort of internship and a career transition program to help graduates find jobs after college since we don't graduate with an ATP license. I don't even know after four years who my advisor is. I do my schedule and get someone's signature." A second example was: "We need to find a way to provide more money to aviation students. It is very hard to fly without it." A third and final example was:

I recently (this semester) switched advisors. My previous one, I would probably gave a D or even an F, but my experience with my new one though limited, has been good. I think advisors need to be young and upto-date with what students are going through now, in the new century.

Overall, 14 or 5.2% of the 268 aviation students participating in this study responded to question 14, which asked students for any final comments they might have .

Summary

Chapter IV presented the findings based on data gathered through the survey of 510 aviation students at OSU Stillwater and Tulsa, OU, and SOSU during the springs 2002 semester. Of the 510 students given the opportunity to participate, 268 or 52.5% completed and returned surveys. Rates of return based on total aviation program participation were: SOSU 36.2%, OSU 33.2%, OU 18.% and OSU-Tulsa 12.3%. Rates of return based on individual aviation program participation were: OSU-Tulsa 66.0%, SOSU 55.6%, OU 49.0%, and OSU 48.5%.

Research Objective One indicated survey participants were predominately advised by aviation faculty, were seniors under the age of 25, approximately one-half were instate and one-half were of out-of-state residency status and were enrolled full-time. Over 91.0% of aviation students parents did not hold an aviation degree with 88.5% or participating students were male. Chi square test analysis indicated the following rank order of aviation student satisfaction:

Research Objective Two concerning satisfaction with academic advisement was: OU 99.9%. SOSU 92.0%, OSU-Tulsa 87.9%, and OSU 83.9%.

Research Objective Three concerning satisfaction with academic advisement relating to career advisement was: OU 76.0%, SOSU 66.9%, OSU 54.6%, and OSU-Tulsa 49.3%.

Research Objective Four concerning satisfaction with academic advisement relating to the students' personal confidence in advisors was: OU 99.4%, SOSU 95.6%, OSU 85.4%, and OSU-Tulsa 84.5%.

Research Objective Five concerning satisfaction with academic advisement through written open responses developed into three categories including, academic, personal and career.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this baseline study was to examine the academic advisement satisfaction of Oklahoma aviation students at Oklahoma State University-Stillwater (OSU), Oklahoma State University-Tulsa (OSU-Tulsa), the University of Oklahoma (OU), and Southeastern Oklahoma State University (SOSU). Results of the study are presented by research objectives.

Population

The population of this study consisted of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. All aviation students enrolled during the spring 2002 semester whether full-time or part-time were given the opportunity to participate in this study.

Statement of Problem

Are aviation students at OSU Stillwater and Tulsa, OU, and SOSU satisfied with their undergraduate academic advisement?

Research Objectives

In order to conduct this research the following research objectives were utilized by this study.

Research Objective Number One

What are the demographic characteristics of the aviation students at OSU Stillwater and Tulsa, OU, and SOSU pertaining to their academic advisement delivery, classification, age, in-state or out-of-state residency, enrollment status, GPA. parents aviation degree holding status, and gender?

Research Objective Number Two

Are aviation students satisfied with academic advisement?

Research Objective Number Three

Are aviation students satisfied with academic advisement concerning aviation career advisement?

Research Objective Number Four

Are aviation students satisfied with academic advisement concerning the student's personal confidence in advisors?

Research Objective Number Five

What are the aviation student's written open responses with respect to academic advisement satisfaction?

The subjects studied were the 510 aviation students at OSU Stillwater and Tulsa, OU, and SOSU. Permission for students to participate in this survey was obtained from aviation program directors and administration officials at each of the four institutions studied.

The survey was pilot-tested fall 2002 by academic advisement experts and contained 24 questions. The survey also included a student cover letter and was administered to aviation students spring 2002 by aviation faculty at OSU Stillwater and Tulsa, and SOSU. The OU aviation program director administered the survey to aviation students during their spring 2002 aviation orientation January 14, 2002. A total of 510 aviation students had the opportunity to voluntarily participate, and 268 completed and returned survey instruments.

As surveys were collected by the investigator they were individually coded and entered into the Statistical Package for the Social Sciences (SPSS) for analysis of the mean, median, mode and range of data. The frequency and percentages of student responses were assessed for Research Objectives One through Four and, in addition, the Chi square statistical test was utilized for Research Objectives Two, Three, and Four on completed and returned surveys.

Summary

This study provides information to evaluate the academic advisement satisfaction of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. Historical documentation of aviation academic advisement and the development of academic advisement in general is presented. The demographics of aviation students receiving academic advisement is provided, as well as their satisfaction with academic advisement. Survey results are the basis for recommendations for future aviation academic advisement, and future research on this topic.

Findings

Results of the study data were the basis for the following findings:

Research Objective Number One

What are the demographic characteristics of the aviation students at OSU Stillwater and Tulsa, OU, and SOSU pertaining to their academic advisement delivery, classification, age, in-state or out-of-state residency, enrollment status, GPA, parents aviation degree holding status, and gender?

- Of the four aviation programs studied 71.3% of aviation students are academically advised by aviation faculty, 17.2% by an advisor in advisement center, and 11.5% by both.
- Participants in this study were 39.2% seniors, 29.1% juniors, 19.0% sophomores, and 12.7% freshman.

71

- Over 85% of students were 25 years of age or under, and 15.2% were 26 years of age and over.
- 4. In-state participants were 53.5%, and out-of-state participants were 46.5%.
- 5. Aviation students indicated full-time enrollment status at 90.7%, and parttime at 6.5%.
- 6. Students' GPA were reported as 20.0% between 3.6 and 4.0, 36.2%
 between 3.1 and 3.5, 33.8% between 2.6 and 3.0, 10.0% between 2.1 and 2.5, and 0.4% reported a GPA of 2.0 or lower. The mean reported GPA was 3.16, the median was 3.2, and the mode was 3.0.
- Only 5.4% of aviation students have a parent that holds an aviation degree. Over 94.0% indicated that neither parent holds this degree
- 8. Aviation students in this study were 88.5% male, and 11.5% female.

Research Objective Number Two

Are aviation students satisfied with academic advisement?

 Chi square statistical analysis indicate there is a difference with the following rank order of aviation student satisfaction concerning research objective two: OU 99.9%, SOSU 92.0%, OSU-Tulsa 87.9% and OSU 83.9%. Are aviation students satisfied with academic advisement concerning aviation career advisement?

10. Chi square statistical analysis indicate there is a difference with the following rank order of aviation student satisfaction concerning research objective three: OU 76%, SOSU 66.9%, OSU 54.6%, OSU-Tulsa 49.3%.

Research Objective Number Four

Are aviation students satisfied with academic advisement concerning the student's personal confidence in advisors?

 Chi square statistical analysis indicate there is a difference with the following rank order of aviation student satisfaction concerning research objective four: OU 99.4%, SOSU 95.6%, OSU 85.4%, and OSU-Tulsa 84.5%.

Research Objective Number Five

What are the aviation student's written open responses with respect to academic advisement satisfaction?

Student written open responses were recorded for 194 students or 72.3% of the 268 completed and returned surveys. Written open responses focused on academic, personal, and career aspects of advisement.

Conclusions

Results of the study data are the basis for the following conclusions:

The majority of academic advisement in this study was conducted by aviation faculty. Seniors and juniors made-up 68.3% of the aviation undergraduate students participating in this study, and they were traditional-aged college students 25 years of age and younger. The in-state and out-of state student residency was approximately even, and over 90.0% of respondents were full-time students. Average GPAs were 3.2, and 94.0% of aviation students were first-generation aviation degree seeking. Males dominate this degree field with only 11.5% female enrollment.

In each of the three academic advisement research objectives statistical analysis determined by Chi square analysis indicated a significance in aviation undergraduate student satisfaction with academic advisement. Student written open responses focused on academic, personal and career aspects of academic advisement.

Recommendations

This study is the first to describe academic advisement satisfaction of aviation students at OSU Stillwater and Tulsa, OU, and SOSU. Future research should be conducted to better understand and enhance advisement satisfaction.

The following recommendations are offered:

1. The investigator recommends that institutional and aviation departmental recognition and support of the importance of academic advisement be increased to enhance student satisfaction.

- 2. The investigator recommends that aviation academic advisement be evaluated not only by aviation students but by aviation faculty advisors, advisors in advisement centers, and aviation and institutional administration on a semester basis to enhance student satisfaction.
- 3. The investigator recommends implementation of a reward system for aviation academic advisement excellence based on evaluation by the population most affected, the students.
- 4. The investigator recommends that aviation academic advisors be encouraged to participate in institutional, state, regional and national academic advisement support organizations to increase their awareness and expertise in this area of student services.
- The investigator recommends that aviation programs recognize the high percentage of first generation aviation majors and develop academic advisement strategies to most effectively address their advisement needs.
- 6. The investigator recommends that aviation programs recognize the low percentage of female, and non-traditional aged student populations in aviation degree programs and develop strategies to most effectively address their advisement needs.

The investigator recommends that future research concerning academic advisement satisfaction for aviation students focus on each of the six recommendation areas preciously mentioned. Additional research areas should include:

1. Future aviation research should be conducted by aviation programs outside the limitations of this baseline study to determine academic

75

advisement satisfaction, and results shared to improve advisement satisfaction.

- 2. Future aviation research should exam ways to better communicate through academic advisement the vast array of aviation careers to aviation majors.
- 3. Future aviation research should analyze the recruitment, retention and graduation rates of both in- and out-of-state aviation students. What factors lend to or detract from their success as an aviation major? Could improved aviation academic advisement contribute to their success?
- 4. Future aviation research should examine aviation academic advisement options through computer-assisted advisement. Could computer-assisted advisement assist and ease aviation faculty advisor student loads?
- 5. Future aviation research should examine ways to improve student advisor personal confidence satisfaction.
- 6. Future aviation research should identify, examine, and communicate the legal implications of aviation academic advisement to both aviation faculty advisors, and aviation academic advisors in advisement centers.
- 7. Future aviation research should examine the two most utilized academic advisement philosophies, Developmental and Prescriptive to determine model effectiveness in serving aviation students.
- 8. Future aviation research should investigate if aviation students hold aviation faculty advisors to a higher standard than advisors in advisement centers when indicating their satisfaction with aviation academic advisement.

76

9. Future aviation research in aviation student satisfaction with academic advisement should identify advisors' duties including teaching and student academic evaluation, graduation checks, and parental aviation program orientation concerning aviation program costs.

BIBLIOGRAPHY

ACT (2000). Frequently asked questions related to academic advising. Retrieved November 9, 2000, from http://www.nacada.ksu.edu/Profres/questions.htm.

Allen, H. (2002, February 8). Study shows Oklahoma graduation rate low, retention high. *The Daily O'Collegian*, pp. 1, 11.

Anderson, V. (1995). Identifying special advising needs of women engineering students. *Journal of College Student Development*, *36*(4), 322-329.

Arreola, V. I. (2002, February). ENGSCIADV mailing list (Engineering and Science Advisors). Retrieved from ENGSCIADV-request@ksu.edu.

Aviation & Space Program at OSU. (n.d.). Retrieved February 11, 2002, from http://www.okstate.edu/aviation/

Barnhart, C. L., & Barnhart, R. K. (1988). *The World Book dictionary* (Vols. 1-2). Chicago, IL: World Book.

Bazluke, F. T. (1990). *Defamation Issues in Higher Education*. Washington, D.C.: National Association of College and University Attorneys.

Bolen, J. H. (2001a, November). *Academic advising and the adult student*. Paper presented at the Association for Continuing Higher Education, Vancouver, B.C.

Bolen, J. H. (2001b, November). *The unsung heroes of adult student success: The academic advisor*. Paper presented at the Association for Continuing Higher Education, Vancouver, B. C.

Broadway, P. (1999, November 16). *OU's College of Continuing Education*. http://tel.occe.ou.edu/aviadegr.html.

Burke, T. H. (1981). Student and faculty perceptions of students' academic advising needs at The Florida State University (Doctoral dissertation, Florida State University, 1981). *Dissertation Abstracts International*, 42, 1021A.

Burton, J., & Wellington, K. (1998). The O'Bannon model of academic advising: An integrative approach. *NACADA Journal*, *18*, (2), 13-20.

Caidin, M. S. (1988). Airplane. In *The World Book encyclopedia* (Vol. 1, pp. 212-243). Chicago, IL: World Book.

Cartensen, D. J., & Silberhorn, C. (1979). A national survey of academic advising, Final report.

Collis, J. (1990). Educational malpractice: Liability of educators, school administrators, and school officials. Charlottesville, NC: Michie.

Conway, D. (2002). Southeastern Oklahoma State University Aviation Sciences Institute. Retrieved February 10, 2002, from Southeastern Oklahoma State University Website: http://aviation.sosu.edu.

Cowley, W. H. (1949). Some history and a venture in prophecy. In E. G. Williamson (Ed.), *Trends in Student Personnel Work* (pp. 12-27). Minneapolis, MN: University of Minnesota Press.

Crookston, B. B. (1972). A developmental view of academic advising as teaching. *Journal of college Student Personnel, 13,* 12-17.

Cross, K. P. (1974). *Beyond the open door: New students to higher education*. San Francisco, CA: Jossey-Bass.

Dautch, S. E. (1972). Advisee's self-reported satisfaction with academic advising and effectiveness of advisors (Doctoral dissertation, Florida State University, 1972). *Dissertation Abstracts International, 33*, 2706A.

Davidson, M. M. (2001). The computerization of career services: Critical issues to consider. *Journal of Career Development*, 27(3), 217-28.

Dunker, R. E., & Belcastro, F. P. (1993). A comparison of daytime and evening students' satisfaction of daytime and evening students' satisfaction with their faculty academic advising program. *Community College Journal of Research and Practice*, *17*, 123-130.

Embry-Riddle Story (2002). The Embry-Riddle Story. Retrieved February 13, 2002, from Embry-Riddle Aeronautical University Web site: http://comm.db.erau.edu/u_info/history.html.

Feldman, K. A., Ethington, C. A., & Smart, J. C. (2001, November/December). A further investigation of major field and person-environment fit. *The Journal of Higher Education*, 72(6), 670-685.

Fenske, R. H., Porter, J. D., & DuBrock, C. D. (2000). Tracking financial aid and persistence of women, minority, and needy students in science, engineering, and mathematics. *Research in Higher Education*, 41(1), 2000.

Fielstein, L. L., Scoles, M. T., & Webb, K. J. (1992, Fall). Differences in traditional and nontraditional students' preferences for advising and perceptions of services received. *NACADA Journal*, *12*(2), 5-12.

Fiorino, F. (2001, July 16). Pilot-making on a high-speed run. Aviation Week & Space Technology, 155(3), 60-64.

Flaherty, B. (2002, February). Liability insurance (1 paragraph). ACADV Academic Advising Forum <ACADV@LISTSERV>NODAK>EDU> Available E-mail: nacada@ksu.edu.

Frost, S. H. (1991). Academic advising for student success: A system of shared responsibility (Association for the Study of Higher Education, Report No. 3).

Frost, S. H. (1993). Developmental advising: Practices and attitudes of faculty advisors. *NACADA Journal*, *13*(2), 15-20.

Frost, S. H. (1994). Advising alliances: Sharing responsibilities for student success. *NACADA Journal*, 14(2), 54-58.

Gay, L. R., & Airasiam, P. (2000). *Educational research competencies for analysis and application* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.

Glennen, R. E., Farren, P. J., & Vowell, F. N. (1996). How advising and retention of students improves fiscal stability. *NACADA Journal*, 16(1), 38-41.

Gordon, V. N. (1993). *Handbook of academic advising*. Westport, CT: Greenwood.

Gordon, V. N. (1994). Developmental advising: The elusive ideal. *NACADA Journal*, 14(2), 71-74.

Gordon, V. N. (1998). New horizons: Learning from the past and preparing for the future. *NACADA Journal*, *18*(2), 5-12.

Habley, R. W. (1994). Developmental advising: The elusive ideal. NACADA Journal, 14(2), 71-75.

Habley, R. W. 1994). Fire! (ready, aim): Is criticism of faculty advising warranted? *NACADA Journal*, 14(2), 25-30.

Habley, R. W. (1997). Organizational models and institutional advising practices. *NACADA Journal 17*(2), 39-44.

Habley, W. R., & Morales, R. H. (1998). Advising models: Goal achievement and program effectiveness. *NACADA Journal*, 18(1), 35-41.

History of Aeronautical and Astronautical Engineering, Purdue University (2002). *History of Purdue School of Aeronautics and Astronautics*. Retrieved February 13, 2002, from Purdue University, Aeronautics and Astronautics Web site: http://aae.www.ecn. purdue.edu/AAE/History?history.html.

Hoeft, T. M. (1994, November). *The Utilization of an Undergraduate Academic Advisement Record Form in the Evaluation of Faculty Advisement*. Paper presented at the Conference on Current Collegiate Faculty Evaluation Practices and Procedures of the Center for Educational Development. San Juan, PR.

Houchin, K. (2000). Making your own web site an information clearinghouse. Journal of the American Association of College Registrars and Admissions Officers, 75(3), 7-9.

Jaffe, W. R., & Huba, M.E. (1990). Engineering students' use of and satisfaction with faculty and professional academic advising systems. *NACADA Journal*, *10*(2), 37-43.

Johnson, B. (2001, October). ACADV Network (Academic Advisor Network). Retrieved October 16, 2001, from LISTSERV@LISTSERV.NODAK.edu.

Kahn, K. (1995). Women's aviation survival kit. *The International Women Pilots Magazine/99 News, 16,* September/October 1995.

Key, J. P. (1997). *AGED 5980 Research design*. Agricultural Education, Communications, and 4-H Youth Department. Oklahoma State University, Stillwater, OK.

King, M.C. (1993). Academic advising: The challenge of the 90s. NACADA Journal, 13(1), 6-8.

Kozloff, J. (1984, October). *Recognition and reward of faculty advisors*. Paper presented at the annual meeting of the National Conference on Academic Advising, Philadelphia, PA.

Kramer, G. (1992). Using student focus groups to evaluate academic support services. *NACADA Journal*, 12(2), 38-41.

Kramer, G. L., & Childs, M. W. (1996). Transforming academic advising with information technology. *NACADA Journal Monograph Series*, 4.

Kutz, M. (1998). Characteristics of successful aviation leaders of Oklahoma. Doctoral dissertation, Oklahoma State University, Stillwater, OK.

Lehrer, H. R. (1997, September 24-27). *Educational requirements for a career in airline management*. Paper collection presented at the Fall Education Conference of the University Aviation Association, Dallas, TX.

Leonard, M. J. (1996). The next generation of computer-assisted advising and beyond. *NACADA Journal*, 16(1), 47-50.

Lindseth, P. D. (1996). Identifying indicators of program quality in United States baccalaureate aviation programs. (Doctoral dissertation, The University of Michigan, 1996). *Dissertation Abstracts International*, *57-03A*, 1046.

Lowenstein, M. & Grites, T.J. (1993). Ethics in academic advising. NACADA Journal, 13(1), 53-61.

Luedtke, J. R. (1993). Maximizing participation of women in collegiate aviation education. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, OK.(ERIC Document Reproduction Service No. ED359885).

Masters, R. (2000, Fall). Aerospace department grows with Tinker AFB agreement. Southeastern School of Business Executive Summary, 6, 7.

Matthews, R. T., & Platt, F. D. (1998). *The western humanities*. (3rd ed.). Thousand Oaks, CA: Mayfield.

McAnulty, B. H., O'Connor, C. A., & Sklare, L. (1987). Analysis of student and faculty opinion of academic advising services. *NACADA Journal*, *7*, 49-61.

Miville, M. L., & Sedlacek, W. E. (1995). An assessment of centralized versus faculty advising in a college of engineering. *NACADA Journal*, *15*(2), 20-25.

Myers, J. H. (1999). *Measuring customer satisfaction: hot buttons and other measurement issues*. Chicago, IL: American Marketing Association

NACADA. (1998). Notes to Contributors and Subscribers NACADA Journal, 18(2), 80-81.

NACADA (2002). *National academic advising association*. Retrieved February 23, 2002, from http://www.ksu.edu/nacada

NBCC Insurance Center. (n.d.). Retrieved February 7, 2002, from http://www.nbcc-insurance.com/apply.html?link=graphic.

Nie, N., Bent, D. H., & Hull, C. (1977). *Statistical package for the social sciences*. New York, NY: McGraw Hill.

O'Bannon, T. (1972). An academic advising model. *Junior College Journal, 42,* 62, 64, 66-69.

Oklahoma Aviation Take Flight (2001). Produced by Word One, Associates, Inc. Colorado Springs, CO (Compact Disc). Http://wordlinc.com

Oklahoma City Aviation/Aerospace Education Alliance (1998). Careers in aviation and aerospace. (Brochure). Oklahoma City, OK: Author.

Oklahoma State Regents for Higher Education (1994, January). Systemwide Aviation/Aerospace education program review. Aviation/Aerospace task force's report to the Oklahoma State Regents for Higher Education, p. 46.

P.A.C.A.A. (2001). *Provost's advisory committee on academic advising*. Retrieved December 17, 2001, from: http://www.ou.edu/provost/prone/content/pacaa.htm

Pardee, C. F. (1994). We profess developmental advising, but do we practice it? *NACADA Journal*, *14*(2), 59-61.

Patankar, M. (1998). Rule-based expert system approach to academic advising. *Innovations in Education and Training International (I.E.T.I.)*, 35(1), 49-58.

Prince, J. P., Chartrand, J. M., & Silver, D. G. (2000). Constructing a quality career assessment site. *Journal of Career Assessment*, 8(1), 55-67.

Rickinson, B. (1998). The relationship between undergraduate student counseling and successful degree completion. *Studies in Higher Education*, 23(1), 95-102.

Robertson, W. O. (1998). The utilization of NASA and other internet aerospace websites by coordinators of Tennessee space week. Doctoral dissertation, Oklahoma State University, Stillwater, OK.

Rodriques, C. L. (1997). The establishment and development of aviation and aviation education from its earliest forms through World War I (Doctoral dissertation, Southern Illinois University at Carbondale, 1997). *Dissertation Abstracts International, 58-07A*, p. 2568.

Rossett, A. (1987). *Training needs assessment*. Englewood Cliffs, NJ: Educational Technology Publications.

Rudolph, F. (1962). *The American college and university*. New York, NY: Vantage Books.

Schaumburg, G. (2002a). Aviation department. Retrieved February 10, 2002, from University of Oklahoma, College of Continuing Education Website: http://www.occe.ou. edu/main/welcome/aviation.htm.

Schaumburg, G. (2002b). The aviation degree. Retrieved September 20, 2001, from University of Oklahoma, College of Continuing Education Website: http://tel.occe. ou.edu/aviadegr.html.

Schein, H. K. (1994). From the editor. NACADA Journal, 14(2), 4.

Showell, J. A. (1998). Some legal implications in academic advising. *NACADA Journal*, 18(2), 40-46.

Spicuzza, F. J. (1992). A customer service approach to advising: Theory and application. *NACADA Journal*, 12(2), 49-58.

Spitzer, T. M. (2000). Predictors of college success: A comparison of traditional and nontraditional age students. *National Association of Student Personnel Administration*, 38(1), 82-98.

Steinhaus, C. S. (1999, Spring). Walking with students to increase satisfaction and retention. *NACADA Journal*, 19(1), 54-58.

Task force reports retention and graduation findings, makes recommendations. (2002, February). Retrieved February 10, 2002, from Oklahoma State Regents for Higher Education Website: http://www.okhighered.org/whatsnew/archives/retention-recommend.html

Teague, G. V., & Grites, T. J. (1980). Faculty contracts and academic advising. Journal of College Student Personnel, 21, January 1980, 40-44.

Thayer, P. (2000, May). Retention of students from first-generation and low income backgrounds. *Opportunity Outlook, The Journal of the Council for Opportunity in Education.* Paper commissioned by the National TRIO Clearinghouse.

Tukey, D. D. (1994). Computerized grade calculations for academic advisors. *NACADA Journal*, *14*(2), 138-40.

Turk, R. (1999, October 19). Better education vital to industry, Keating says. *The Norman Transcript*, pp. 1, A2.

Turk, R. (1999, September 12). Airport funding, Westheimer Airpark to benefit from emerging developments. *The Norman Transcript*, pp. 1, B2.

Turrentine, C. G., Schnure, S. L., Ostroth, D. D., & Ward-Roof, J. A., (Fall, 2000). The parent project: What parents want from the college experience. *NASPA Journal*, *38*(1), 31-43.

Vavra, T. G. (1997). Improving your measurement of customer satisfaction: A guide to creating, conducting, analyzing, and reporting customer satisfaction measurement programs. Milwaukee, WI: ASQ, American Society for Quality Press.

Weir, S. (2000, Spring). Using an electronic listserv as an advising tool. *NACADA* Journal, 20(1), 47-50.

Wikle, M. (2002, February). Oklahoma Academic Advising Association: Making connections that count. Retrieved February 26, 2002, from http://www.cas.okstate.edu/aocada/.

Wright Brothers to the "right stuff." (1999, November 24). *The Norman Transcript*, pp. C-11.

APPENDIXES

APPENDIX A

INSTITUTIONAL REVIEW BOARD

APPROVAL FORM

Oklahoma State University Institutional Review Board

Protocol Expires: 3/21/02

Date : Thursday, March 22, 2001

IRB Application No ED00239

Proposal Title: A COMPARISON OF ACADEMIC ADVISEMENT EXPECTATIONS OF AVIATION VERSUS SECONDARY EDUCATION UNDERGRADUATE STUDENTS AT OKLAHOMA STATE UNIVERSITY

Principal Investigator(s) :

H.C. McClure 317 Willard Stillwater, OK 74078 Debra Denise Vaughn 317 Willard Stillwater, OK 74078

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s) : Approved

Signature :

Carol Olson, Director of University Research Compliance

Thursday, March 22, 2001 Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

APPENDIX B

COVER LETTER AND SURVEY

OKLAHOMA STATE UNIVERSITY

School of Educational Studies

College of Education 204 Willord Stillwater, Oklahorna 74078-4045 405-744-6275; Fax 405-744-7758

January 10, 2002

Dear Aviation Student,

I am an aviation doctoral candidate in Aviation and Space Education, College of Education, Oklahoma State University. And, am conducting research on the following dissertation topic:

A STUDY OF ACADEMIC ADVISEMENT SATISFACTION OF OKLAHOMA AVIATION UNDERGRADUATE STUDENTS AT OSU, OSU-TULSA, SOSU, AND THE UNIVERSITY OF OKLAHOMA

During the next 4 to 6 minutes, please complete the attached questionnaire. Your participation will provide data for future academic advisement policies. Study results will be available in the Oklahoma State University, Edmon Low Library, summer 2002.

Responses will be held in confidence, and will be untraceable to individuals. Surveys will be destroyed after results are compiled. There are no risks in your participation, and participation is entirely voluntary.

If you have questions concerning this study, please contact Debra D. Vaughn at (580) 220-2863, Dr. Nelson Ehrlich (405) 744-3982, or Sharon Bacher, Institutional Review Board Executive Secretary (405) 744-5700.

Thank you for your participation in this aviation project.

Sincerely,

Debra W. Varg

Debra D. Vaughn Doctoral Student Aviation and Space Education

nelson J Chrlich

Dr. Nelson Ehrlich Assistant Professor Aviation and Space Education

Aviation and Space Education Higher Education Human Resource Development Organization and Leadership Research and

Adult Education

Evaluation Social Foundations Student Personnel Technology

Aviation Students Academic Advisor Survey

Please share your opinions with us by answering the following questions. Your responses will remain confidential and you will not be identified in any way. The research report will feature only a summary of the findings

- 1. Are you academically advised by-
 - Aviation faculty advisor
 - Advisor in advisement center
 - 🗆 Both

2. What is your classification?

- G Freshman
- □ Sophomore
- □ Junior
- □ Senior
- 3. Please indicate your level of <u>Satisfaction</u> or <u>Dissatisfaction</u> with each of the following statements by selecting the ONE response that best reflects your opinion.

		Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/No Opinion
<u>A</u> .	My advisor explains major requirements					
В.	My advisor helps me plan my career in aviation	a			٦	
C.	My advisor is very knowledgeable about aviation careers	۵			٦	
D.	My advisor explains pre-requisite course requirements	٩	٦			
E.	My advisor solicits my input in planning my curriculum	٩	۵	٦		٦
F.	My advisor's office hours are adequate for academic advisement				٦	٦
G.	My advisor is knowledgeable of campus resources	٩	۵	۵	۵	a
H.	I am confident in my advisor's ability					
I.	I would recommend my advisor to other aviation students	٦				
J.	My advisor influenced my decision to pursue aviation as a career			٦	ū	
K.,	Overall, my advisor is doing a good job	<u>à</u>				

4. If you had to give your advisor a grade, what would it be? (Circle) A B C D F

5. What has been most satisfying about working with your advisor?

6. What has been least satisfying?

7. How could your academic advising experience have been improved? ____

DEMOGRAPHICS

The following questions are for research classification purposes only. Your responses will remain completely confidential.

8. Which category best describes your age?		25, or under		26, or over						
9. Are you an in-state or out-of-state student?		In-state		Out-of-state						
10. Enrollment status:		Full-time		Part-time						
11. Approximate cumulative grade point average (G.P.A.):										
12. Do either of your parents hold an aviation de	🗆 No									

13. Gender: 🗆 Male 🔹 🗆 Female

14. If you have any other comments you would like to share, please do so in the space below. Thank you again for you participation in this important <u>aviation research.</u>

APPENDIX C

EXAMPLES OF WRITTEN RESPONSES

ON THE SURVEY

QUESTION #5: AVIATION STUDENTS WRITTEN RESPONSES

What Has Been Most Satisfying about Working with Your Advisor?

His knowledge in aviation.

Being able to make the right choices in my career field.

They have put me on an excellent time frame to graduate.

Helping w/schedule & internships

Working with the whole flight experience.

She knows me very well by name. She is very personal in her daily transactions with students. She is very knowledgeable of not only the school and its course work, but also shows/demonstrates much knowledge of the aviation industry.

Whenever I need something done regarding my dealings with the University, he helps me promptly.

The relaxed environment. Also the confidence I feel in his knowledge about the subject. He is available, he is not hard to talk with & will work with you if you have a problem.

He was a pilot, and he knows what he is doing to help your career in aviation.

Finding ways to use classes for multiple requirements, which helped to reduce time and money spent here.

Getting answers I need to know.

Finding a class schedule that works with my work & family schedules.

Listening to his experiences in aviation. He shares his mistakes so that we don't make the same ones. His personal experience and knowledge about the particular aspect of aviation I plan to pursue.

He helps me with anything I need. He has written my letter of recommendation and has helped me with classes and my future career.

His accessibility, and his willingness to work with me toward my goal.

Has helped me plan my course for graduation.

Assisting me in graduating as quickly as possible.

His knowledge of the aviation industry.

Talking about classes, hearing stories.

He doesn't try to push my college career in the direction he wants it to go.

Being able to be flexible & plan my own schedule (around flight times, etc.-big blocks of time are left open for flying).

Very knowledgeable, accommodates everyone, very friendly.

QUESTION #6: AVIATION STUDENTS WRITTEN RESPONSES

What Has Been Least Satisfying?

His time schedule for his office time.

I have not had an unsatisfying moment.

Difference of opinion between former & current advisors.

Just the enrollment process all together.

No career guidance.

Not knowing for "sure" what classes you "need" to graduate.

Not real friendly.

Complications involving conflicting courses.

When he gives you the crazy eye and slaps you for saying something stupid.

Not being sure about graduation requirements and ways to use time efficiently until I made several trips to my advisor's office.

Not enough info. Over required classes.

Not enough contact.

If he had helped me in class selection a little more, I could have been done a semester early.

Difficulty getting appointment.

I really can't think of anything.

At first he didn't seem to really put much effort into helping me but as the semesters passed he took much more effort & pride into helping me.

It seems because I am a transfer student I am planning the order and the classes I take. Switching advisors.

Most everything. I have wasted hours and have not been well advised on what courses to take and when.

He doesn't seem interested in what I plan to do when I graduate.

Hasty way of dealing with me.

No complaints.

His talking down to me. Not offering advice. Also had in class. His class was the basis of my opinion.

Nothing.

QUESTION #7: AVIATION STUDENTS WRITTEN RESPONSES

How Could Your Academic Advising Have Been Improved?

Ask more of my opinion.

Help students in sending out resumes and finding job opportunities.

Career guidance that is the only way. My advisor is doing a superb job in all other aspects of advisement.

By having a complete printed form of what I have to complete to graduate. Then I could check them off as I complete the course.

Let me know about pre-requisite requirements.

More coordination between advisors.

More communication.

Have someone encourage me.

More time with my advisor.

Better software.

Updates on "Post-College" environment (Careers, trends, hiring, summer job/internship opportunities).

He could have told me when I was newer to the school, what classes were offered in that semester that I needed and so on.

Better office hours.

More of a solid explanation regarding degree requirements is needed.

Maybe a scheduled time to work on scheduling.

More advising.

I didn't really understand the CLEP program when I came to school. If more emphasis would have been placed on it I would have been a little more efficient in getting through my degree requirements.

More input on exactly what I needed to take during what semester when I was starting out.

Take more interest in the students career goals and plan classes, advise, discuss accordingly, as opposed to just filling university requirements.

Advisor could actually take a moment and study what classes I have and I need. Could act like he cares a little more.

Better organization & more attention to detail.

Have advisor review my records and make suggestions on how to proceed.

More motivation and enthusiasm.

I think everything is fine.

No improvement needed.

Sit me down and show me each class I need to take in order to make my transition smooth and beneficial.

More personal.

It would be nice if he knew my name or made me feel like he cared about me.

By simply being more personable.

I want him to throughly explain what I need as far as credits and flight hours go. I also want him to help me lay-out a plan.

Letting me have some input on what, when my classes are, more classes need to be offered so that they do no all fill up and leave others in need of classes in order to be full time.

If I felt comfortable talking with my advisor.

QUESTION #14: AVIATION STUDENTS WRITTEN RESPONSES

If You Have Any Other Comments You Would like to Share, Please Do So in the Space Below. Thank You Again for Your Participation in this Important Aviation Research.

It is a common and unfortunate fact that many students in aviation are tossed around from advisor to advisor.

Maybe ask what student's plans are career-wise.
VITA 2

Debra Denise Vaughn

Candidate for the Degree of

Doctor of Education

Thesis: A STUDY OF ACADEMIC ADVISEMENT SATISFACTION OF OKLAHOMA AVIATION UNDERGRADUATE STUDENTS AT FOUR SOUTHWESTERN STATE UNIVERSITIES

Major Field: Applied Educational Studies

Biographical:

- Personal Data: Born in Ardmore, Oklahoma, September 19, 1955, the daughter of E.W., "Jr." and Rebecca R. Thompson. Mother of Rebecca Rae, and Elizabeth Jo Vaughn.
- Education: Graduated from Dickson High School, Ardmore, Oklahoma in May 1973; received the following bachelor and master's degrees from Southeastern Oklahoma State University: Bachelor of Arts Degree in Social Studies Education, 1990; Bachelor of Science Degree in Health and Physical Education, 1991; Master of Education/History,1992; Master of Education/Secondary Education-Health Physical Education and Recreation, 1995. Completed the requirements for the Doctor of Education degree with a major in Applied Educational Studies at Oklahoma State University in August, 2002.
- Professional Experience: Southeastern Oklahoma State University, Student Support Services-Coordinator of Tutoring Program, 1991 to 1995;
 Oklahoma State University-Oklahoma City, Student Support Services-Counseling Coordinator, 1995 to 1997; University of Oklahoma, Honors College/OU Scholars-Academic Counselor, 1997 to 1999; Oklahoma State University-Oklahoma City, United Auto Workers-General Motors Oklahoma City Education Development Coordinator, 1999 to 2000; Oklahoma State Regents for Higher Education, State Outreach

Coordinator for Smart Start, 2000-2001; Southeastern Oklahoma State University/Ardmore Higher Education Center, Academic Coordinator 2001 to present.

Professional Memberships: National Academic Advisement Association; Oklahoma Division of Student Assistance Programs, Southwest Association of Student Assistance Programs. Oklahoma Academic Advisement Association.