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EVALUATION OF STUDENT KNOWLEDGE OF STUDENT SERVICES AT SHELTON STATE JUNIOR COLLEGE

by

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A DISSERTATION

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Matthew 11:28-30

Romans 6:23

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CHAPTER I

INTRODUCTION

The junior college emerged as a viable element of the American higher education system during the twentieth century. The first junior college established in this country was in Joliet, Illinois in 1901 (Schneider, 1977, p. 450), and by 1976 approximately 1200 junior colleges had been established with a total student enrollment of over 4,000,000 (Drake, 1976). The student services area in junior colleges, however, is a relatively new phenomenon having expanded and developed primarily after World War II (Thornton, 1972). Historically, this area had a strong impetus in its development from the use of standardized tests for the classification of soldiers and the employment of psychologists and counselors for the screening and placement of new recruits during World War II. Education at all levels incorporated these trends into its programs. In 1958, Congress declared in the passage of Public Law 85-864 that a strong program of guidance was essential for proper identification of talents and human resources:

> We must increase our efforts to identify and educate more of the talent of our nation. This requires programs that will give assurance that no student of ability will be denied an opportunity for higher education because of financial need; will correct as rapidly as possible the existing imbalances in our educational programs which have led to an insufficient proportion of our population educated in science, mathematics,

modern foreign languages, and trained in technology (Monroe, 1976, p. 146).

Junior colleges rapidly grew and expanded in the 1960's under the banner of educational opportunity and training. Even during this "golden age" concerns were expressed over the inadequacy of student services in junior colleges. In 1960 Medsker surveyed student services programs at 243 junior colleges and found that most were staffed with non-professional personnel (Medsker, 1960, p. 75). As early as 1952 Humphreys (1952, p. 30) concluded that relatively few junior colleges have student personnel programs adequate to meet the needs of their students; and often student personnel work is not recognized as one of an institution's major functions.

Previous studies have shown that student services in junior colleges are inadequate in scope and effectiveness (American Association of Junior and Community Colleges, 1965); however, one ray of hope comes from accrediting agencies. The Southern Association of Colleges and Schools (SACS) considers each accreditation standard as being of critical importance to institutional functions, "Meeting each standard is not all that is required for accreditation by and membership in the Southern Association. . . . It is finally concerned, however, with the totality of the effort and the atmosphere in which it is carried on." (SACS, 1977, pp. 1-2). Standard Seven of the Standards of the College Delegate Assembly further states:

> Student development services should be directly related to the stated objectives of the institution and should assist students in the educational process in developing self-reliant, responsible behavior. Through student development

services, the institution should demonstrate its concern for: programs of orientation, counseling, guidance, and academic advisement; reasonable academic standards; preservation of appropriate freedoms in inquiry and expression; and participation in institutional activities, academic and otherwise. Objectives of student development should be clearly defined and publicized.

Productive, effective services for students depend, of course, upon the quality of staff who administer the services. Personnel policies and practices should insure the maintenance of professionally competent student development personnel (SACS, 1977 pp. 26-27).

Statement of the Problem

In accordance with the spirit of SACS Standard Seven, student development services should be evaluated and improved in a programmatic sense. In contrast to the thrust offered by SACS, another compelling incentive for quality in student services is found in the fact that junior colleges are allocated funds by a formula based on full time equivalents (FTE) developed by the Alabama Commission on Higher Education (ACHE) which places a competitive atmosphere on all institutional programs and activities. In addition, the 1980, 1981, and 1982 educational budget years in Alabama were ones of proration, and in light of dwindling resources, junior and community colleges have found it even more necessary to rely on program evaluations as a basis for budget allocations and activity funding. It seems clear then, that careful, systematic development of evaluative approaches in order to justify a student personnel program is essential in today's dollar-competitive environment.

Purpose of Study

The purpose of this study was to evaluate student understanding of, or knowledge about basic areas of student services at Shelton State Junior College as a first step in program evaluation. Shelton State's student services were categorized for the purpose of this study on the basis of the American Association of Junior and Community Colleges' (AAJCC) list of seven major functions which include 21 essential student services. AAJCC's seven areas and specific services are:

1. Orientation to college and career opportunities
   - A. Pre-college information
   - B. Student orientation
   - C. Group information
   - D. Career information
2. Appraisal of individual potentials
   - A. Records
   - B. Educational testing
   - C. Health appraisal
3. Consultation
   - A. Student counseling
   - B. Student advisement
   - C. Applicant counseling
4. Participation of students in activities that supplement classroom experiences
   - A. Co-curricular activities
   - B. Student self government
5. Regulation to provide optimal climate for social and academic development

A. Student registration

B. Academic regulation

C. Social regulation

6. Services that facilitate

A. Financial Aid

B. Placement

7. Organizations that provide for continuing articulation

A. Program articulation

B. In-service education

C. Program evaluation

D. Administrative organizations (AAJCC, 1965)

The specific aims of the study were:

1. To determine if students correctly understood basic information related to the various student services areas.

2. To ascertain whether certain types or categories of students were more knowledgeable about the seven areas of student services than others.

Need for the Study

Three challenges facing student services program are:

1. The U.S. Census Bureau projected an 18% decline in college-age population by 1990 (Department of Commerce, 1979). The National Center for Education Statistics suggested a period of leveling off at 12.8 million students between 1983-85 with a declining population thereafter (Frankel, 1978).

2. Because of the open door admission policy and the emphasis on local access, i.e. service to a region or district, the junior college hosts a student population which is highly diverse and covers a broad spectrum of interests and abilities (Schneider, 1977, p. 453).
3. The number of adult part time students has increased (Cross, 1979).

In the day of declining student populations, the open-door admission policy, and the increase of adult part-time learners, student services programs face a great challenge. Lacking the measurability of credit hour production, student services face a major problem in finding evaluation methods to facilitate planning and budgeting since student personnel services are often the target when colleges make cutbacks (Sussman, 1977). Bowen (1974) observed that accountability is closely related to such concepts as program budgeting and cost benefit analysis. He stated that many public officials, as well as the general public, felt that the increasing sums paid for public services ought to be justified by reliable estimates of the outcome. Kerr (1980) listed two purposes of being accountable:

1. A systematic approach to evaluation allows student administrators and staff to develop evidence of effectiveness and to demonstrate a commitment to self-assessment in anticipation of external pressure rather than merely to react to each criticism, question or cutback as it occurs.

2. Another reason for systematic evaluation is simply to improve programs or increase effectiveness. A systematic evaluation is basically good management. Data obtained through this process can be useful in planning, allocating resources, staffing, and updating programs to assure the greatest impact. (Kerr, 1980, pp. 422-23)

The purpose of this study was viewed as a potential benefit to student services programs in that:

1. Student knowledge of student services areas could be measured.
2. A system of priorities could be established to improve student knowledge of student services areas.
3. Demographic groups within the student population with lack of knowledge of certain student services areas could be identified.

Statement of Delimitation

Certain limitations in this research should be noted: the population was limited to the students enrolled in Fall, 1982 at Shelton State Community College and the results of this study should be generalized only to that extent.

Another limitation inherent in utilizing student opinions is that there is no efficient way to measure possible bias and specific frames of reference that students have in mind when responding.

Definition of Terms

Student Services - All non-academic support programs, including orientation, admissions, financial aid, coun-

seling, and student activities. The terms student affairs, student services, and student development were used synonymously in this research.

Organization of Study

This study is presented in six chapters, beginning with the introduction, statement of the problem, need for the study, statement of delimitation, and definition of terms in Chapter I. Chapter II is a review of related research which serves as background information for the present study. Chapter III describes the study population, development of the survey instrument, and statistical methods utilized in the treatment of data. Findings of the study will be presented in Chapter IV. Chapter V is devoted to a discussion of the findings, conclusions based on the findings, and recommendations growing out of the study. Chapter VI is a summary of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

This study sought to evaluate student services by surveying student knowledge of seven areas of student services. This review of the literature examined studies of student service evaluations in three phases. The first phase dealt with early studies which served initially to define and to develop the student services area. The second phase continued the historical overview of student services evaluation with the examination on different criteria and methods for evaluation. The third and final phase of the literature review examined student knowledge of student service information as a possible criterion in evaluation.

Early Studies

In the history of student services, many attempts have been made to measure the quality and effectiveness of these services. Hopkins (1926) prepared a list of 20 activities in which one might find evidence of the student personnel point of view. Divided into five categories, they were: (1) Selection and Matriculation--selective process, freshman week, psychological tests, and placement tests; (2) Personal Services--faculty advisers, organized student interviews, health service, mental hygiene service, vocational information, employment and placement, and discipline; (3) Curriculum and Teaching--curriculum, selection of instructors, methods of instruction, and objective tests; (4) Research--on teaching and on the individual; (5) Coordination--in

the college, in the whole institution, and of outside agencies. Hopkins stated "that one of the functions of student personnel administration in education is to bring to bear upon any educational problem, the point of view which concerned itself primarily with the individual." (Hopkins, 1926, p. 5) The study consisted of rating and evaluating 14 institutions on the 20 items listed. Hopkins used a subjective rating scale (based on author's impressions) where an "A" rating was applied to the following situation: ". . . work, i.e. selective process, etc. was being accomplished in such a way that other institutions could learn from it." A "B" rating was applied when, ". . . work was done in a creditable but not outstanding manner . . ."; and an "O" rating was applied when ". . . work was not being done at all or in an ineffective manner."

Findings were reported on a table which rated the 14 institutions evaluated on performance of the 20 items the author developed. Of 280 possibilities, there were 159 "A" and "B" ratings. Hopkins concluded that, "there was a general acceptance among institutions that the five areas and 20 items were representative of a student personnel program.

Brumbaugh and Smith (1932) developed a point scale instrument for evaluating personnel work in institutions of higher education. These researchers defined the student personnel function in 10 major divisions: educational counseling; systematized admission and orientation; personal problems; records, data, research; personnel organization; health and recreation; vocational counseling; diagnosis and remedial treatment; student employment and placement, and extra-curricular activities. A list of specific activities falling under each of these divisions was developed from a search of the

literature, and compiled by students enrolled in a course taught by Brumbaugh. This scale consisted of 10 divisions with activities listed under each division as in the following example:

I. Educational Counseling Standard Score 135 points

Institutional Score

Institutional Score	Standard Score	
	45	A. Adequate counsel is given to freshmen Guidance is given in choosing courses and in planning good program of study Systematic conferences are given to prevent failures
	30	B. Adequate counsel is given to upper classmen

To develop the standard score this instrument was sent to 50 administrators who represented a sample of colleges in the United States. They were instructed to distribute 1,000 points among the 10 personnel function divisions in relation to importance of that division. The activities listed under each division were assigned a relative point value which cumulatively equaled the divisional point total. Using the score submitted by these administrators, the instrument was revised and sent to each administrator again. At this time, they were asked to evaluate their institution by this scale. The final instrument consisted of 10 divisions each with a standard score. Each division was made up of a list of activities with a standard score which was a subtotal of the division's standard score. The respondent was asked to evaluate his institution's performance of the activity relative to the

standard score. A major contribution of this research was the establishment of a relative scale value on each of the ten divisions in which student personnel work should function.

Wrenn and Kamm (1948) wrote of the inherent difficulty in evaluation of student services: "The general idea of student personnel work is accepted by an institution, but no one can define it". Also they felt evaluation suffered because of the lack of adequate criteria against which the effectiveness of a service could be judged. As a first step in evaluation 14 student services were determined to be included in a student personnel program. These services were listed as: interpretation of institutional objective to prospective students, admission, orientation of new students, provision of diagnostic and counseling services, physical and mental health services, housing, food service, student activities, student needs as related to curriculum and instruction, financial aid, placement, student records, discipline and systematic evaluation of student services. Wrenn and Kamm based this list of services on an analysis of work already done in the field gleaned from definitive statements made by the American Council on Education, American College Personnel Association, and the North Central Association of Colleges and Secondary Schools.

The evaluation of these 14 services fell into three parts. The first of these dealt with the extent that the administration of the institution considered this service essential. The second part consisted of rating the existence and adequacy of each of the specific services and provisions. The third part consisted of the evaluator putting together the first two parts and rating the adequacy of the service in this particular institution based on the findings of the first two parts.

The major contributions of this research were in the recognition of national accrediting agencies as sources of standards for student personnel services and programs; in establishing a point of comparison to provide criteria for evaluative analysis; and in the use of previous research findings to seek to define and identify student services.

Rackham (1951) applied a different emphasis. He noted intrinsic difficulties in comparisons of student personnel areas because of the lack of a baseline or point of competency. A student personnel inventory was developed with 15 divisions most characteristic of student personnel programs. These divisions were: admissions, counseling, discipline, extracurricular activities, financial aid, health service, housing and board, general organization and administration, orientation, placement, pre-college counseling, records, religion, research, and testing. An inventory was made up of the divisions and the activities which comprised them. Under admissions, the selection process designated the groups for whom the college could provide. The criteria for admission, and the process of admission were also listed. This instrument was submitted to directors of admissions and records, directors of counseling, directors of student health, directors of placement, and deans of students at colleges and universities in the United States with enrollments of 4,000 or more. Participants were asked to check for comprehensiveness of the lists by making additions or deletions. In this determination of whether the statement was satisfactory or unsatisfactory respondents were advised to think in terms of the "ideal" student services program for the average college rather than the current practice on their own campus. The results were tabulated by a panel of students so that each item was weighted and

norms derived. Users of the instrument then would be able to ascertain how closely their program approximated the "ideal" program. In addition, a theoretical profile was constructed by the panel of judges. This was designed to assist an institution in visualizing its comparative ratings in the fifteen areas of student personnel services.

The major contributions of Rackham's study flow from his assumption of the intrinsic difficulties of evaluating student services. The lack of a baseline or point of competency was Rackham's justification for developing his theoretical profile. In other words, data were not meaningful unless points of comparison were available. Recognition of the need for this profile and hence establishment of competency points (at what point has the institution done its job?) were considered in this study. Rackham recognized this need, and his solution, which was the establishment of competency points set arbitrarily by a panel of judges, was innovative.

Fitzgerald (1962) sought to determine faculty perceptions of student personnel services. The "Student Personnel Services Questionnaire" was composed of 10 functions: admissions, registration/ records, counseling, health, student activities, financial aid, placement, discipline and special functions. These functions were described by 40 statements. Randomly selected faculty were asked to rate the relative importance of each statement to higher education, and to indicate their opinion as to the quality of performance on their campus. Highest perceptions of importance tended to be placed on those functions related to the academic purposes of the institution. Statistical analysis employing chi square showed a significant difference between faculty groups who worked with student organizations

and faculty groups who did not work with student organizations. Faculty with student working relationships viewed student personnel functions as more important for higher education and better achieved on the local campus.

In Fitzgerald's examination of faculty perception, a major finding included the variable that faculty perceptions were pivotal on their experience in working with student groups. While the positiveness of faculty perceptions was related to their contact with student organizations in this study, faculty knowledge of information concerning the specifics of, provisions for, and location of student services was also significantly related to their contact with student groups.

Raines (1965) conducted a definitive study of community college personnel services for the American Association of Junior and Community Colleges, AAJCC, which was financed by the Carnegie Corporation. He surveyed 49 community colleges which had enrollments of at least 1,000 and 74 community colleges with smaller enrollments. These colleges were surveyed by means of a detailed questionnaire and later, the larger community colleges were given a follow up by trained interviewers visting the college for a few days. The conclusions of the study were:

1. Seventy-five of the community colleges had not developed adequate student personnel services.
2. In more than half, the counseling and guidance functions were inadequate.
3. In 90 percent of the colleges, professional leadership, evaluation and research were absent.
4. Areas of service best performed are those concerned with institutional management functions such as

providing information to students, registering and enrolling students, regulating academic standards and conducting co-curricular programs.

5. Student personnel programs generally suffer from a lack of financial support.
6. Student personnel programs are made up of 23 basic functions.

The most significant finding of Raines' study was the identifying of the 23 basic functions which make up a student personnel program. The AAJC committee reorganized these functions into seven services areas and 21 essential services, and adopted them as the base definition and standard for student services in community colleges.

Criteria for Evaluation

The second phase of the literature review examined several studies which used the services identified by Raines' study. Hedlund (1969) conducted a study of student personnel services in the New York state two year colleges using a questionnaire developed from Raines' 1965 study. Students responded to a five point rating scale where the service was perceived as NP (not performed), Poor (performed but inadequate), Fair (service performed but quality does not meet needs), Satisfactory (service performed in acceptable manner), and Outstanding (function performed in excellent manner). This instrument was administered to a random sampling of students, faculty and counselors. Faculty, students, and counselors had a statistically significant disagreement on the evaluations on 16 out of 23 services. The greatest difference was between students' and counselors' perceptions of these services. Since the study was exploratory in nature, the data were

treated using descriptive statistics, which gave the types of comparisons between variables that were desired. Statistical tests were limited to the use of Chi square to ascertain the independence of variables. Findings of the study included the following: the availability of counseling services, as measured by a ratio of staff to students, had a positive effect on program completion; there was no satisfactory criterion applicable to the wide variety of situations by which counseling or other student personnel services could be evaluated. Hedlund encountered difficulties in analysis of data similiar to those in the Rackham study. The lack of a point of competency due to inadequate criteria for evaluation would not provide for statistically meaningful interpretations of data. Statistical tests were applied to respondent groups, counselors, faculty and students, but due to the lack of criteria for evaluation, these same tests were not applied to data collected from these groups.

Selgas and Blocker (1974), also using Raines' 1965 instrumentation as a base, conducted a major evaluation of student services at Harrisburg Area Community College. Seven groups rated college personnel services and functions as to importance, quality and use. The groups consisted of faculty, administrators, student services staff, current students, graduates, non-returning students, and student counselors. Section A of the survey gathered information related to admissions; registration and records; guidance and counseling; job placement and financial assistance; student activities; administrative services; and use of student services. Section B was concerned with psychological services; student counselors; advisory roles; structure of student services; importance of types of counseling; administrative functions as

related to student personnel functions and attitudes towards the counseling process.

Findings of the study were based on student ratings of the instrument which were analyzed using descriptive statistics. The majority of students and professional staff rated the admissions and records process as important and positive. Survey results indicated that several functions in the guidance and counseling division were in need of review including: (1) use of standardized tests in placement, (2) use of diagnostic tests of basic skills, (3) opportunities for career information, and (4) opportunities to learn college procedures, study skills and self development. Respondents also indicated a need for improved part time job services that were relative to career exploration. Student activities were rated lower in importance to the institution than other categories in Section A. Responses indicated a need for a revised student conduct code and improved communication of club information. Based on ratings and numerous comments, a full time psychologist was recommended. Review of the student counselor program in terms of objectives, training and work relationships with professional staff was recommended. The strengths (academic advising) and relative weaknesses (non academic advising) of faculty advisors were identified and recommendations were made that the faculty increase their knowledge of curricula outside their divisions and of job opportunities.

Recommendations and findings of this study should be examined within the context of the institution due to the possible subjective bias in interpreting descriptive statistics; however, the evaluation of functions and services identified by Raines' 1965 study served as parameters of the student services program. While the authors

recognized the lack of measurable criteria and hence the lack of inferential statistical testing, the problem was not unique to their study.

Selgas (1976) surveyed students, faculty, student services staff and administrators of Harrisburg Area Community College using the instrument from his and Blocker's 1975 study in order to provide comparative data for the institution and to substantiate student needs reported by the earlier study. Percent ratings were used to analyze data as in the 1974 study. The following points were noted in comparison with 1974 findings: the appraisal of previous records and record maintenance were rated less positively, students rated faculty advising, orientation, transfer information, and job placement for graduates as poorly performed. Responses to items in counseling and guidance varied considerably in comparison with the 1974 study. Five counseling services, test interpretation, competent counselors, career information, deficiency tests and remedial skills were rated by students as less important than students in the 1974 study. Responses and comments recommended employment of a full time psychologist, and review of student counselor's role and objectives.

While Selgas's objective in his 1976 study was to evaluate student services and to use his 1974 study for comparative data, his treatment of survey results was inadequate. Without criteria for student service evaluation, the study was limited by the statistical treatment of data groups. While assumptions were made from general comparisons of survey results, the findings were limited to the context of the institution studied.

Student Views Sought

The third phase of the literature search used student knowledge of student services as a criteria for evaluation. In the previous two phases of the literature review, it was recognized that ideally, student personnel services should be based on clearly defined objectives. The implementation of activities to achieve those objectives should be evaluated to determine their effectiveness. Two major areas of concern in student personnel service management according to Dressel (1971), are studies of changing student needs and problems and the evaluation of the programs and assistance provided to alleviate them. Evaluation is essential to the implementation of the informational and therapeutic role of student needs because abilities, interests and aspirations, rather than arbitrary departmental and college requirements, should become the basis for student programs.

McMillan and Cerra (1972) wrote of student personnel services' heavy dependence on information, and they observed that if students are to use services such as counseling centers and financial aid, they must know of their existence. This study attempted to assess the information that students had about the counseling center, to examine the accuracy and thoroughness of information and to explore the channel used to obtain it. Nolting and Saffian (1972) noted that traditional information dissemination was mass oriented through catalogs, pamphlets, newsletters and brochures. McMillan and Cerra found that these methods were ineffective, as their study showed only 15% of the population was receiving student service information from these channels. There was a significant difference at the $P<.01$ level between the knowledge of student services that commuter and dorm residents had.

McDavis (1976) field tested an instrument to evalute student personnel programs at the University of Florida. As a first step in the evaluation, he tested respondent knowledge of 12 student personnel services. Selected results showed five percent of students knowledgeable of orientation; 10 percent knowledgeable of the student conduct code; 20 percent knowledgeable of student organizations; 25 percent knowledgeable of career planning and placement, 28 percent aware of the financial aid office and 32 percent aware of student activities. Fifty-nine percent of the student respondents expressed a lack of knowledge of the objectives in student services. Listed below in rank order are the five objectives of student services which respondents listed as most important: (1) to provide services which help students to develop their educational and career objectives (62%), (2) to provide a balance of social, cultural, and recreational activities for students (55%), (3) to assist students to develop their educational and career objectives (54%), (4) to provide opportunities for students to receive individual help (50%), and (5) to provide counseling for students personal concerns (50%).

The determination of student knowledge as a first step in the evaluation of student services was a significant procedure. Student awareness of service must be considered before the data can be interpreted. The evaluation of objectives was also responsive to changing student needs and problems.

Pinsky and Marks (1980) evaluated 10 student personnel services at Iowa State University. The instrument used was based on Fitzgerald's (1962) student personnel services questionnaire and was administered to administrators, faculty, and students. The questionnaire contained 64

items grouped into 10 areas of student services at Iowa State. For each of these services, respondents were asked: the importance of the service, their awareness of the service, and the quality of the service. All respondents agreed on the importance of 7 of the 10 services: admissions and records, counseling, health, housing and food, student activities, and financial aid. Administrators, however, perceived disciplinary services and minority services as more important than did the students. Students rated placement services and special services significantly higher ($P<.05$ level) than faculty and administrators; Faculty and administrators perceived the quality of student personnel services to be at higher levels than did students. Student classification (sophomore, junior, etc.) made no significant difference in response to the questionnaire. A condition that the authors felt had a pervasive effect on the findings of the research was the evidence of lack of information and misinformation among students, faculty and administrators about student personnel services.

Lewicki and Thompson (1982) examined the degree of awareness, usage and satisfaction of student services at a 4 year and 2 year college. It was felt that an early assessment of awareness, usage and satisfaction with student services could assist the institution in meeting the needs of students early in their academic career so that students could benefit from the assessment while there was time in their undergraduate experience. The survey was composed of 22 student services and was adapted from the "Former Student Questionnaire" published by the National Center for Higher Education. Results showed that in 14 out of 22 services student awareness was at 80%. Usage of the services was low with less than 50% of the respondents using the 14 services.

Students listed catalogs and brochures as their source of awareness of student services 84% of the time. This study indicated that student services personnel needed to become more involved in publicizing their services. Direct staff contact with students could increase personalization, and the expertise the staff could offer would result in better informed students. Increased personalization and more knowledgeable students would seemingly stimulate greater usage of student services.

Summary

Research in the student affairs field has dealt with attempts to measure the quality of student services, to establish criteria for evaluating services, and to measure student knowledge of student services as a criteria for evaluation. Kamm (1950) wrote of the need to consider a single criteria for evaluation of services: "a strong program of student services means little unless the various aspects of the program are known and therefore functional to meeting student needs. Lack of student knowledge of student services should not be interpreted to mean inadequacy of the service itself, but should be indicative of the need to inform the student."

CHAPTER III

METHODOLOGY

The purpose of this study was to evaluate student understanding of or knowledge about basic areas of student services at Shelton State Junior College as a first step in program evaluation. This chapter outlines the methodology used in the study and includes the population surveyed, a description of the development of the instrument used to collect the data and the procedures used in analyzing and reporting the data.

Population Surveyed

The population of the study consisted of all students enrolled at Shelton State Junior College (SSJC) during the Fall quarter, 1982. The general student population enrolled at SSJC at the time of the study may be described by the following statistics: 27 percent of the students were enrolled in night programs; 73 percent of the students were enrolled in day programs; 54 percent of the students were enrolled in a full-time course of study (enrolled for 12 quarter hours or more); and 46 percent were classified as part-time students. In addition 85 percent of the students were enrolled in college to complete baccalaureate degree requirements; 15 percent were enrolled in terminal two-year programs which normally do not transfer and are occupational in nature. The racial composition was 76 percent white, 23 percent black and 1 percent of other ethnic origins. The ages ranged from 17-63 years of age. Forty percent of the population was 17-19 years of age, 24.2

percent was 20-24 years of age, 24.8 percent was from 25-34 years of age, and 11 percent of the population was over 35. The population breakdown, by sex, was males numbering 35 percent and females, the remaining 65 percent. In addition for 25.2 percent of the students enrolled, Fall quarter, 1982, was their initial quarter of enrollment.

The sample was drawn by a systematic random sampling technique. Each class listed on the Fall 1982 quarter schedule was assigned a number. Classes were chosen for the study from a random number chart. Table I represents a comparison of the sample with the total SSJC enrolled population on the variables described above. Additional information of the sample composition is listed as follows: 75.5 percent were single (divorced or unmarried); 20.9 percent were employed full-time and 34.7 percent were employed on part-time basis.

Students in the selected classes were administered the inventory instrument by their instructors. Students who had completed an inventory in another class were asked not to participate again. A total of 578 inventories were completed. This number was equivalent to 25.1 percent of the students enrolled that quarter. Of these, 13 or 2.2 percent were discarded because of partial completion. The final sample constituted 24.5 percent of the population. The total population of 2,306 consisted of all students enrolled at SSJC during the Fall Quarter 1983.

TABLE I

COMPARISON OF SAMPLE AND ON SPECIFIC

CRITERION CATEGORIES POPULATION

Categories	Percent of Random Sample	Percent of Actual Fall Population
Night program enrollees	21.8	27
Day program enrollees	78.2	73
Full-time students	76.1	54
Part-time students	23.9	46
College transfer students	85	82
Occupational programs	15	18
Male students	31.5	35
Female students	68	65
Black students	23	25.5
White students	77	74.5
Students's initial enrollment	25.2	32.6
Previously enrolled	74.8	67.4
Students 17-19 years of age	40	44
Students 20-24 years of age	24.2	29.7
Students 25-34 years of age	24.8	16.1
Students 35 and older	11	5.2

The Student Services Information Inventory

The Student Services Information Inventory (SSII) used to collect data was developed after a review of the literature and designed to gather information on student knowledge of 21 services, which make up seven student service areas (see Appendix A). The SSII was specially developed for use in this study and was tailored to be a more effective measure than other instruments. This instrument was designed so that the respondent could demonstrate his knowledge by his ability to apply and/or define certain student service information.

The SSII consisted of two sections. The first section requested the following data: age, sex, race, marital status, income level, major program, time of attendance, course load, employment status, number of quarters enrolled and previous college enrollment. These data were divided into demographic groups and were tested for statistical significance in the following research questions:

1. Is there a significant difference in performance on the SSII by the following age intervals: 17-24, 25-34, and over 35?
2. Is there a significant difference in performance on the SSII by male and female respondents?
3. Is there a significant difference in performance on the SSII by black and white respondents?
4. Is there a significant difference in performance on the SSII by single and married respondents?
5. Is there a significant difference in performance on the SSII by transfer program and occupational program respondents?

6. Is there a significant difference in performance on the SSII by respondents who attend classes at night and those in the day?
7. Is there a significant difference in performance on the SSII by respondents who are enrolled in full-time course of study and part-time course of study?
8. Is there a significant difference in performance on the SSII by respondents who are employed full-time and those employed part-time?
9. Is there a significant difference in performance on the SSII by respondents in their initial quarter of enrollment and those previously enrolled?

The second section of the SSII (see Appendix A), consisted of four types of items: multiple choice (items 12-34), true/false (items 35-38), fill-in-the-blank (items 59-67) and ratings (items 68-75).

Specifically items were based on 21 essential student services listed by the American Association of Junior and Community Colleges and from the Manual of Institutional Self Study Program of the Commission on Colleges of the Southern Association of Colleges and Schools. The survey items were designed to provide evaluative data on the specific student services covered in this study. A grid providing a listing of the student services and the specific items which were used to evaluate each item is in Appendix B. The services evaluated in this study were:

1. Orientation to college and career opportunities
   A. Pre-college information
   B. Student orientation
   C. Group information
   D. Career information

2. Appraisal of individual potentials
   - A. Records
   - B. Educational testing
   - C. Health appraisal
3. Consultation
   - A. Student counseling
   - B. Student advising
   - C. Application counseling
4. Participation of students in items that supplement classroom experiences
   - A. Co-curricular activities
   - B. Student self government
5. Regulation to provide optimal climate for social and academic development
   - A. Student registration
   - B. Academic regulation
   - C. Social regulation
6. Services that facilitate
   - A. Financial aid
   - B. Placement
7. Organization that provide for continuing articulation
   - A. Program articulation
   - B. In-service education
   - C. Program evaluation
   - D. Administrative organizations (AAJCC, 1965)

A pilot study was conducted during the Summer quarter of 1982. Students enrolled in elementary statistics classes at Shelton State Junior College were asked to complete the SSII, and to make suggestions regarding the content, form, instructions or clarity of the instrument. As a result, several changes were made in the instrument prior to its administration.

Analysis of Data

In light of the nature and objectives of the research, emphasis was placed on the practical significance of the study rather than just statistical significance. Data were analyzed on the Univac III at the University of Alabama using the Behavioral Science Statistical Program Library developed by Barker and Barker, (1977) and the Statistical Package for the Social Services (SPSS).

SPSS was used to compute and develop tables containing simple frequencies and percentages to allow compilation of data collected in section one of the SSII. These frequencies were used in the formation of Table I. By use of the frequency tables, it was determined that the following demographics would be statistically examined for significance: age intervals, 17-24, 25-34 and over 35; sex; race; marital status; major program; day or night attendance; full or part-time courseload; full or part-time employment status; and initial or previous enrollments.

The Behavioral Science Statistical Program Library was applied to analyze data collected by the second section of the SSII. Specifically, CORR20, which provides discriminant analysis in principal components (two and multiple groups), was used to assess differences in performance on the seven service areas in the SSII by the groups in the nine

demographic areas. The variables were the seven service areas listed by the AAJCC. Inventory items were grouped into these service areas by the grid in Appendix B. Group comparisons using the demographic groupings tabulated by the SPSS program were analyzed by CORR20 for statistically significant difference in performance levels. For each of these groupings the F-ratio was computed for the overall difference in the profile of the seven service areas and the probability level determined. In addition, the F-ratio and probability level for each variable (student services area) were listed for each group comparison, indicating which variables significantly separated the groups. Other data provided by CORR20 which were used to analyze and report results include: number of subjects in each group; composition of each group; average score correct in each variable or student services area; and the standard deviation on the corresponding variable and score.

In items 68-75, respondents used a Likert-rating scale coded by using assigned values to provide an index of student satisfaction of the student services program. This index of student satisfaction was tested with the same demographic groups to determine what groups were significantly more satisfied or dissatisfied. The statistical test used was ANOVO1 from the Behavioral Science Statistical Program Library which provides a t test for independent groups to determine whether there was a significant difference in the satisfaction level of the groups within each of the demographic categories.

CHAPTER IV

ANALYSIS OF DATA AND FINDINGS

This chapter presents an analysis of the 565 survey responses completed by a randomly selected sample of students enrolled in the Fall, 1982 at Shelton State Junior College. The findings are reported in two parts. The first reports the analysis of data in which items used to evaluate specific student service areas (see Appendix B) were tabulated with percent of correct responses as an indicator of student understanding of basic information related to various student service areas and then treats those data appropriate to the research questions stated in Chapter III. The second part reports the analysis related to the satisfaction level expressed by respondents.

Analysis of Data

The examination of student knowledge in the several student services areas revealed the level of correct responses students were able to make to items related to a given service. The student service area one, orientation to college and career opportunities, 55.39 percent of those responding gave correct responses; for student service area two, appraisals of individual potentials, 42.31 percent gave correct responses; student service area three, consultation, 42.23 percent gave correct responses; student service area four, participation in activities which supplement classroom experiences, 13.36 percent; student service area five, regulation for social and academic develop-

ment, 61.41 percent; student service area six, services that facilitate, 49.76 percent and student service area seven, articulation - 73.75 percent gave correct responses.

Student service area seven had the highest percent of correct responses. Specifically, this service area was made up of program articulation, in-inservice education, program evaluation and administrative organizations. The lowest percentage of correct responses came in student service area four, 13.36 percent, which includes co-curricular activities and student government. Respondents scored less than 50 percent correct on two other areas. These were student service area two, appraisals of individual potentials and area three, consultation. In addition, respondents scored greater than 50 percent on two areas. These were student service area one, orientation to college and career opportunities, and student service area five, regulation for social and academic development. In summary, student knowledge of student service areas as indicated by their percent of correct responses, ranged from 13.36 percent to 73.75 percent correct.

Demographic categories were extracted from information gathered from section one of the Student Services Information Inventory (SSII). The second section of the SSII consisted of four types of items. Three of the four item types were used in examination of research questions. They were multiple choice (items 12-34); true/false (items 35-58); and fill-in-the-blank (items 59-67). Student knowledge of information representative of student services was measured by the number of correct responses on these three item types. Specific relationships of individual items to specific student services and student service areas

were listed in Appendix B. Examination of each research question consisted of: number of subjects in each group; composition of each group; number of items in each student service area; average score correct in each student service area and the corresponding standard deviation of this average score correct. The discriminant analysis F-ratio of performance on seven student service areas was examined for significance. If significance was established, the univariate F-ratios on each service area were also examined for significance. Although mean scores can reveal what the average respondent scores are, they cannot show whether these are statistically significant differences between respondent groups. To obtain this information, discriminant analysis was used to analyze group differences in their knowledge of student services.

Discriminant analysis is a multivariate technique which can differentiate between two or more groups. The essential property of discriminant analysis is that it will distinguish better than any other linear function between the special groups on which common measurements (scores on the SSII in this case) are available. The computer program, CORR20 was developed by Barker in 1973.

The first research question asked whether there was a significant difference in performance on the SSII by respondents of the following age intervals: 17-24, 25-34, and over 35. Table 2 presents the data on which the findings presented below are based.

The 445 respondents from 17-24 years old, the 91 respondents from 25-34 years old and the 29 respondents over 35 years old, did not differ significantly in their performance on the SSII. Discriminant analysis

TABLE 2

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICES AREAS
STATISTICAL ANALYSIS BY THE AGE OF RESPONDENTS

Student Service Areas (Abridged)	Total Items Each Area	Item Responses: Age Group (17-24) N-445 $\bar{x}$	SD	Age Group (25-34) N-91 $\bar{x}$	SD	Age Group (35 over) N-29 $\bar{x}$	SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[b]	F Ratio
1. Orientation	20	11.01	(2.59)	11.69	(2.79)	10.1	(2.82)	31.93	6.96	4.58*
2. Appraisals	9	2.94	(1.32)	3.15	(1.21)	2.76	(1.38)	2.23	1.71	1.30
3. Consultation	12	5.07	(2.0)	5.39	(1.96)	4.1	(1.78)	18.06	3.93	4.59*
4. Participation	10	1.24	(1.8)	1.15	(1.63)	.655	(.566)	4.81	3.02	1.59
5. Regulation	22	10.40	(2.18)	10.82	(2.19)	9.83	(2.36)	12.55	4.79	2.62
6. Facilitation	5	2.50	(1.04)	2.52	(1.04)	2.1	(.8596)	2.23	1.05	2.14
7. Articulation	12	8.82	(2.04)	9.10	(2.61)	8.52	(2.48)	4.59	4.71	.98

[a]Discriminant Analysis F ration (14 and 1112) = 1.502; P = .1028; Wilkes Lambda = .963
[b]Degrees of Freedom Between Groups = 2
[c]Degrees of Freedom Within Groups = 562
*p<.05

Table 2 (continued)

Discriminate Analysis

Canonical Discriminant Roots

Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	59.88	59.88	12.547	8	.1294
2	40.12	100	8.436	6	.2081

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)

Group	Root 1	Root 2
1 (17-24) yrs. old	2.0588	5.0609
2 (25-34) yrs. old	2.0802	5.4425
3 (over 35) yrs. old	1.3973	5.1593

Standardized Canonical Discriminant Root Coefficients

	Root 1	Root 2
1. Orientation to College and Career Areas	.6043	.7293
2. Appraisals of Individual Potential	.2623	.4545
3. Consultation	.7736	.4328
4. Participation in Activities that Supplement Classroom Experience	.4807	-.1842
5. Regulation for Social and Academic Development	.4589	.5522
6. Services that Facilitate	.5837	.0006
7. Services that Provide for Continuing Articulation	.2573	.3655

gave an overall F-ratio of 1.502, which with 14 and 1112 degrees of freedom, was not significant (P<.05). While not significant Root 1 accounted for 59.88 percent variance with a probability of .1294 (chi square = 12.547; d.f. = 8) Root 2 accounted for 40.12 percent of the variance with a probability equal to .2081 (chi square = 8.436; d.f. = 6).

Since the overall F-ratio was not significant, it was not a valid procedure to interpret the univariate F-ratios calculated for each student service area. It was interesting to note, however, that area one which concerned orientation to college and career opportunities was significant with a p=.0107. The third student service area, consultation, was significant with a p=.0106. Examination of Table 2, which listed SSII results by the age groups of respondents, showed area five, regulations for social and academic development had comparable mean and standard deviations as areas one and three approached significance at the p<.05 level with p= .0721.

An analysis of the coefficients of the variables (the seven students service areas) was also presented on Table 2. They represented the relative contributions of the variables to the respective roots, and showed that root 1 was primarily represented, with item loadings >.30, student service areas one, three, four, five, six--orientation to college and career opportunities, consultation, participation in activities that supplement classroom experience, regulation for social and academic development, and services that facilitate respectively. These correlated loadings showed which variables contribute most towards separation between the groups. It was noted that the student service areas with the highest correlational coefficient were area one (.6043)

and area three (.7736). As reported earlier these areas were also significant on the univariate F-tests. In addition, the value of the mean of the discriminant scores was reported for each root. The centroid mean values was the central location of these scores in space.

Based on the discriminant analysis F-ratio, the research question was rejected. There was no significant difference in amount of knowledge as indicated by performance on the SSII between age groups. There was significance, however, at the $p<.01$ level on the individual areas one, orientation to college and career opportunities and area three, consultation.

The second research question asked whether there was a significant difference in performance on the SSII by sex of the respondent. Table 3 presented the data on which the findings presented below are based.

The 178 male respondents and 387 female respondents differed significantly in their performance on the SSII. Discriminant analysis gave an overall F-ratio of 3.447, which with 7 and 557 degrees of freedom, was significant ($p<.001$). Root 1 was significant and accounted for 100 percent variance with a probability of .0017 (chi square = 23.768, d.f. = 7).

Since the discriminant analysis F-ratio was significant, the univariate F-ratios were interpreted. Area one which concerned orientation to college and career opportunities had a F-ratio of 5.6154 and was significant with a probability of .0172. Area six which concerned services that facilitate had an F-ratio of 8.8096 and was significant with a probability of .0035.

An analysis of the coefficients of the variables were also presented in Table 3. They represented the relative contributions of the

variables to the respective roots, and showed that root 1 was primarily represented with item loadings >.30; student service areas one, three, four, and six--orientation to college and career areas, consultation, participation in activities that supplement classroom experience, and services that facilitate, respectively. These correlational loadings showed which variables contributed most to the separation between groups, males/females. It was noted that the student service areas with the highest correlational coefficients were area one and area six. Upon examination, student knowledge of area six, as indicated by scores contributed most (.6092) towards separation of male and female respondents and their respective discriminant scores. As reported earlier these areas were also significant on the univariate F-test. The centroid value for each group, or the value of the mean of each group's discriminant score was .4511 for male respondents and .9138 for female respondents. This value summarized the group locations in the reduced space defined by the discriminant root and indicated that the groups were different.

Based on the discriminant analysis F-ratio the research question was accepted. There was a significant difference in knowledge of student services by sex of the respondent. It was noted that areas one, orientation to college and career opportunities and area six, services that facilitate, contributed most to the separation of discriminant scores as evidenced by the univariate F-ratios and the standardized canonical discriminant root coefficients.

The third research question asked whether there was a significant difference in performance on the SSII by the race of the respondent. Table 4 presented the data on which findings below are based.

TABLE 3

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY THE SEX OF RESPONDENT

Student Service Areas (Abridged)	Item Responses: Total Items Each Area	Males N-178 $\bar{x}$	Males N-178 SD	Females N-387 $\bar{x}$	Females N-387 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	10.68	(2.72)	11.25	(2.62)	39.31	7.01	5.61**
2. Appraisals	9	2.96	(1.32)	2.96	(1.30)	.0001	1.71	.000
3. Consultation	12	4.87	(2.04)	5.16	(1.97)	9.85	3.97	2.478
4. Participation	10	1.02	(1.58)	1.28	(1.81)	8.549	3.018	2.832
5. Regulation	22	10.58	(2.23)	10.37	(2.18)	5.2021	4.823	1.078
6. Facilitation	5	2.29	(.912)	2.57	(1.06)	9.1072	1.033	8.809**
7. Articulation	12	8.70	(2.19)	8.92	(2.16)	5.7759	1.229	1.229

[a]Discriminant Analysis F ration (r and 557) = 3.447***; p = .0017; Wilkes Lambda = .958
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 563

*p<.05 **p<.01 ***p<.001

Table 3 (continued)

Discriminant Analysis

Canonical Discriminant Roots					
Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	23.768	7	.0017

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)	
Group	Root 1
1. Males	.4511
2. Females	.9138

Standardized Canonical Discriminant Root Coefficients	
	Root 1
1. Orientation to College and Career Areas	.4877
2. Appraisals of Individual Potential	.001
3. Consultation	.3248
4. Participation in Activities that Supplement Classroom Experience	.3472
5. Regulation for Social and Academic Development	-.2146
6. Services that Facilitate	.6092
7. Services that Provide for Continuing Articulation	.2291

The 144 black respondents and 421 white respondents differed significantly on their performance on the SSII. Discriminant analysis gave an overall F-ratio of 5.375, which with 7 and 557 degrees of freedom, was significant ($p<.001$). Root 1 was significant and accounted for 100 percent of the variance with a probability of .0000 (chi square = 36.64; d.f.=7).

Since the discriminant analysis F-ratio was significant, the univariate F-ratios were interpreted. Area one, which concerns orientation to college and career opportunities, had an F-ratio of 4.99 and was significant with a probability of .0242. Area three, consultation, was significant with an F-ratio of 4.67 and a probability of .0291. Area six, services that facilitate, was significant with an F-ratio of 11.9 and a probability of .0013. Area seven, services that provide for continuing articulation, was significant with an F-ratio of 8.117 and a probability of .0048.

An analysis of the coefficients of the variables (the seven student service areas) were also presented on Table 4. They represented the relative contributions of the variables to the respective roots and showed that root 1 was primarily represented with items loadings >.30; student service area one, three, six, seven--orientation to college and career opportunities, consultation, services that facilitate, and services that provide for continuing articulation, respectively. These correlational loadings showed which variables contributed most to the separation between groups, blacks/whites. It was noted that the student service areas with the highest correlational coefficients were areas six (.551) and seven (-.4740). These two areas contributed most toward the separation of black and white respondents and their respective

TABLE 4

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY RACE OF RESPONDENT

Student Service Area (Abridged)	Item Responses					Univariate F-Tests[a]		
	Total Items Each Area	Black N-144		White N-421		x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
		$\bar{x}$	SD	$\bar{x}$	SD			
1. Orientation	20	11.5	(2.65)	10.93	(2.65)	35.017	7.008	4.99*
2. Appraisals	9	3.1	(1.33)	2.91	(1.3)	3.95	1.707	2.32
3. Consultation	12	5.38	(2.05)	4.96	(1.97)	18.51	3.96	4.67*
4. Participation	10	1.31	(1.43)	1.16	(1.83)	2.23	3.03	.7348
5. Regulation	22	10.47	(2.34)	10.43	(2.15)	.1528	4.83	.0316
6. Facilitation	5	2.73	(1.09)	2.40	(.989)	11.53	1.03	11.19**
7. Articulation	12	8.41	(2.13)	9.02	(2.16)	37.69	4.64	8.117**

[a]Discriminant Analysis F ratio (7 and 557) = 5.375***; p = .000; Wilkes Lambda = .937
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 563

*p<.05 **p<.01 ***p<.001

Table 4 (continued)

Discriminant Analysis

Canonical Discriminant Roots

Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	36.64	7	.0000

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)

Group	Root 1
1. Blacks	.2710
2. Whites	.9869

Standardized Canonical Discriminant Root Coefficients

	Root 1
1. Orientation to College and Career Areas	.3729
2. Appraisals of Individual Potential	.2546
3. Consultation	.3607
4. Participation in Activities that Supplement Classroom Experience	.1435
5. Regulation for Social and Academic Development	.0298
6. Services that Facilitate	.5551
7. Services that Provide for Continuing Articulation	-.4740

discriminant scores. As reported earlier, these areas were also significant on the univariate F-ratios, with six and seven showing greater significance. The centroid value or the mean of each group discriminant score was -.2710 for black respondents and -.9869 for white respondents.

Based on the discriminant analysis F-ratio, the research question was accepted. There was a significant difference in knowledge of student services by the race of the respondent. It was noted that areas one, three, six and seven contributed most to the separation of discriminant scores as evidenced by the univariate F-ratio and the standardized canonical discriminant root coefficients.

The fourth research question asked whether there was a significant difference in performance on the SSII by the marital status of the respondent. Table 5 presented the data on which the findings below are based.

The 105 married respondents and 460 single respondents (number includes divorced and widowed respondents) differed significantly on their performance on the SSII. Discriminant analysis gave an overall F-ratio of 2.912, which with 7 and 557 degrees of freedom was significant ($p<.01$). Root 1 was significant and accounted for 100 percent variance with a probability of .0059 (chi square=20.148; d.f.=7).

Since the discriminant analysis F-ratio was significant, the univariate F-ratios were interpreted. Area six, services that facilitate, had an F-ratio of 4.4561 and was significant with a probability of .0330. This was the only significant area among the seven student service areas.

An analysis of the coefficients of the variables (the seven student service areas) were also presented on Table 5. They represented the relative contributions of the variables to the respective roots and showed that root 1 was represented with item loadings >.30; student service areas one, four and six--orientation to college and career opportunities, participation in activities that supplement the classroom experience, and services that facilitate, respectively. These correlational loadings showed which variables contributed most to the separation between groups, married/single. It was noted that the student service area with the highest correlation coefficient was area six (-.4716). This area contributed most towards the separation of married and single respondents and their respective discriminant scores. As reported earlier, this area also showed significance on the univariate F-ratio. The centroid value or the mean of each group discriminant score was 2.2496 for married respondents and 1.8414 for single respondents.

Based on the discriminant analysis F-ratio, the research question was accepted. There was a significant difference in knowledge of student services by the marital status of the respondent. It was noted that area six, services that facilitate, contributed most to the separation of discriminant scores as evidenced by the univariate F-ratios and the standardized correlational discriminant root coefficients.

The fifth research question asked whether there was a significant difference in performance on the SSII by the program of the respondent. Table 6 presented the data on which the findings below are based.

TABLE 5

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY THE MARITAL STATUS OF RESPONDENT

Student Service Areas (Abridged)	Item Responses: Total Items Each Area	Married N-105 $\bar{x}$	Married N-105 SD	Single N-460 $\bar{x}$	Single N-460 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	11.44	(2.88)	10.99	(2.6)	17.067	7.0405	2.422
2. Appraisals	9	2.94	(1.21)	2.97	(1.33)	.0428	1.7142	.0250
3. Consultation	12	5.09	(2.06)	5.06	(1.98)	.0532	3.993	.0133
4. Participation	10	.97	(1.67)	1.25	(1.75)	6.634	3.021	.2195
5. Regulation	22	10.57	(2.27)	10.41	(2.18)	2.324	4.83	.4813
6. Facilitation	5	2.3	(.97)	2.53	(1.03)	4.641	1.041	4.4561*
7. Articulation	12	8.93	(2.38)	8.83	(2.12)	.8672	4.71	.1842

[a]Discriminant Analysis F ratio (7 and 55-) = 2.912**; p = .0056; Wilkes Lambda = .965
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 563

*p<.05 **p<.01 ***p<.001

Table 5 (continued)

Discriminant Analysis

Canonical Discriminant Roots					
Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	20.148	7	.0059

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)	
Group	Root 1
1. Married	2.2496
2. Single	1.8414

Standardized Canonical Discriminant Root Coefficients	
	Root 1
1. Orientation to College and Career Areas	.3484
2. Appraisals of Individual Potential	-.0354
3. Consultation	.0258
4. Participation in Activities that Supplement Classroom Experience	-.3317
5. Regulation for Social and Academic Development	.1556
6. Services that Facilitate	-.4716
7. Services that Provide for Continuing Articulation	.0963

The 447 respondents enrolled in college transfer programs and 76 respondents enrolled in occupational programs did not differ significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 1.077, which with 7 and 515 degrees of freedom was not significant (p=.3764). Root 1 was not significant and accounted for 100 percent variance with a probability of .3759 (chi square=7.539; d.f.=7).

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratio. It was interesting to note, however, that area five, regulation for social and academic development, had an F-ratio of 5.61 and was significant with a probability of .0173. Areas one, orientation to college and career opportunities, and two, appraisals of individual potentials, approached significance with F-ratios of 3.32 and 3.17, and probabilities of .0654 and .0718 respectively.

An analysis of the coefficients of the variables (seven student service areas) were also presented on Table 6. They represented the relative contributions of the variables to the respective roots and showed that root 1 was represented with item loadings >.30; student service areas one, two, three, four, five, six and seven--orientation to college and career areas, appraisals of individual potentials, consultations, participation in activities that supplement the classroom experience, regulation for social and academic development, services that facilitate and services that provide for continuing articulation, respectively. These correlational loadings showed which variables contributed most to the separation between groups, transfer/occupational. It was noted that the student service area with the highest

TABLE 6

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY PROGRAM OF RESPONDENT

Student Service Areas (Abridged)	Item Responses: Total Items Each Area	Transfer N-447 $\bar{x}$	Transfer N-447 SD	Occupational N-76 $\bar{x}$	Occupational N-76 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	11.29	(2.66)	10.07	(2.4)	22.88	6.887	3.32
2. Appraisals	9	3.04	(1.31)	2.75	(1.35)	5.473	1.726	3.17
3. Consultation	12	5.2	(2.0)	4.76	(1.89)	12.218	3.935	3.11
4. Participation	10	1.27	(1.8)	.97	(1.21)	5.730	2.944	1.91
5. Regulation	22	10.61	(2.16)	9.96	(2.47)	27.273	4.862	5.61**
6. Facilitation	5	2.54	(1.02)	2.4	(1.01)	1.354	1.042	1.29
7. Articulation	12	8.96	(2.2)	8.57	(1.96)	9.740	4.696	2.07

[a]Discriminant Analysis F ratio (7 and 515) = 1.077; p = .3764; Wilkes Lambda = .986
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 521

*p<.05 **p<.01 ***p<.001

Table 6 (continued)

Discriminant Analysis

Canonical Discriminant Roots					
Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	7.539	7	.3759

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)	
Group	Root 1
1. Transfer	9.5372
2. Occupational	8.8211

Standardized Canonical Discriminant Root Coefficients	
	Root 1
1. Orientation to College and Career Areas	.6625
2. Appraisals of Individual Potential	.6473
3. Consultation	.6406
4. Participation in Activities that Supplement Classroom Experience	.5035
5. Regulation for Social and Academic Development	.8590
6. Services that Facilitate	.4151
7. Services that Provide for Continuing Articulation	.5241

correlation coefficients was area five (.8590). This area contributed most towards the separation of transfer and occupational respondents and their respective discriminant scores. As reported earlier this area also showed significance on the univariate F-ratio. Correspondingly, areas one and two which approached significance have the next highest correlation coefficients, .6625 and .6473 respectively. The centroid value or the mean of each groups discriminant scores was 9.5372 for transfers and 8.8211 for occupational students.

Based on the discriminant analysis F-ratio, the research question was rejected. There was not a significant difference in knowledge of student services by the program of the respondent. It was noted, however, that area five, regulation for social and academic development, contributed most to the separation of discriminant scores as evidenced by the univariate F-ratios and the standardized canonical discriminant root coefficients.

The sixth research question asked whether there was a significant difference in performance on the SSII by time of attendance. Table 7 presented the data on which the findings below are based.

The 446 respondents that attended day classes and the 65 respondents that attended night classes did not differ significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 1.159, which with 7 and 449 degrees of freedom was not significant (p=.3240). Root 1 was not significant and accounted for 100 percent variance with a probability of .3240 (chi square=8.104; d.f.=7).

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratios. It was interesting to note, however, that area five, regulation for social and

academic development, had an F-ratio of 3.988 and was significant with a probability of .0436.

An analysis of the coefficients of the variables (seven student service areas) were also presented on Table 7. They represented the relative contributions of the variables to the respective roots and showed that root 1 was represented with item loadings >.30; student services areas two and five--appraisal of individual potentials and regulation for social and academic development, respectively. These correlational loadings showed which variables contributed most to the separation between groups, day/night students. It was noted that the student service area with the highest correlation coefficient was area five (.6998). This area contributed most towards the separation of day and night respondents and their respective discriminant scores. As reported earlier, this area also showed significance on the univariate F-ratio. The centroid value or the mean of each groups discriminant scores was 3.9321 for day enrollees and 4.5009 for night enrolees.

Based on the discriminant analysis F-ratio of the research question was rejected. There was not a significant difference in knowledge of student services by the time of attendance. It was noted, however, that area five contributed most to the separation of discriminant scores as evidenced by the univariate F-ratio and the standardized canonical discriminant root coefficients.

The seventh research question asked whether there was a significant difference in performance on the SSII by courseload of respondents. Table 8 presented the data on which the findings below are based.

The 430 respondents, enrolled in a full-time courseload, and 135 respondents, enrolled in a part-time courseload, did not differ

TABLE 7

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY TIME OF ATTENDANCE

Student Service Areas (Abridged)	Item Responses: Total Items Each Area	Day N-446 $\bar{x}$	Day N-446 SD	Night N-65 $\bar{x}$	Night N-65 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	10.99	(2.62)	10.94	(2.88)	.1436	7.0311	.0204
2. Appraisals	9	2.91	(1.28)	3.11	(1.41)	2.1752	1.675	1.298
3. Consultation	12	5.04	(1.97)	4.85	(2.12)	2.195	3.945	.5564
4. Participation	10	1.18	(1.74)	1.06	(1.64)	.8086	2.989	.2706
5. Regulation	22	10.29	(2.14)	10.88	(2.61)	19.397	4.864	3.988**
6. Facilitation	5	2.45	(1.01)	2.4	(1.07)	.1429	1.043	.1369
7. Articulation	12	8.81	(2.17)	8.8	(2.37)	.0020	4.807	.0004

[a]Discriminant Analysis F ratio (7 and 499) = 1.159; p = .3240; Wilkes Lambda = .984
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 505

*p<.05 **p<.01 ***p<.001

Table 7 (continued)

Discriminant Analysis

Canonical Discriminant Roots					
Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	8.104	7	.3240

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)	
Group	Root 1
1. Day Enrollees	3.9321
2. Night Enrollees	4.5009

Standardized Canonical Discriminant Root Coefficients	
	Root 1
1. Orientation to College and Career Areas	-.0502
2. Appraisals of Individual Potential	.4004
3. Consultation	-.2623
4. Participation in Activities that Supplement Classroom Experience	-.1830
5. Regulation for Social and Academic Development	.6998
6. Services that Facilitate	-.1302
7. Services that Provide for Continuing Articulation	-.0066

TABLE 8

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY COURSELOAD OF RESPONDENT

Student Service Areas (Abridged)	Total Items Each Area	Item Responses: Full time N-430 $\bar{x}$	Full time N-430 SD	Part time N-135 $\bar{x}$	Part time N-135 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	11.08	(2.68)	11.06	(2.61)	.0420	7.071	.0059
2. Appraisals	9	2.95	(1.31)	2.99	(1.29)	.1032	1.7141	.0602
3. Consultation	12	5.1	(2.0)	4.95	(1.98)	2.443	3.99	.6123
4. Participation	10	1.27	(1.83)	.97	(1.42)	9.209	3.017	3.0526
5. Regulation	22	10.43	(2.13)	10.46	(2.42)	.0864	4.832	.0179
6. Facilitation	5	2.56	(1.03)	2.42	(.99)	.8727	1.048	.8324
7. Articulation	12	8.85	(2.09)	8.86	(2.41)	.0112	4.709	.0024

[a]Discriminant Analysis F ratio (7 and 557) = .891; p = .5130; Wilkes Lambda = .989
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 563

*p<.05 **p<.01 ***p<.001

Table 8 (continued)

Discriminant Analysis

Canonical Discriminant Roots					
Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	6.243	7	.5130

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)	
Group	Root 1
1. Full time	-1.3706
2. Part time	-1.6044

Standardized Canonical Discriminant Root Coefficients	
	Root 1
1. Orientation to College and Career Areas	.0302
2. Appraisals of Individual Potential	-.0983
3. Consultation	.3131
4. Participation in Activities that Supplement Classroom Experience	.6978
5. Regulation for Social and Academic Development	-.0536
6. Services that Facilitate	.3651
7. Services that Provide for Continuing Articulation	-.0195

significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of .891, which with 7 and 557 degrees of freedom was not significant (p=.5130). Root 1 was not significant and accounted for 100 percent variance with a probability of .5130 (chi square=6.243; d.f.7).

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratio. It was interesting to note, however, that area four, participation in activities that supplement classroom experience, approached significance with a F-ratio of 3.0526 and a probability of .0773.

An analysis of the coefficients of the variables (student service areas) were also presented on Table 8. They represented the relative contributions of the variables to the root and showed that root 1 was represented with item loadings >.30; student service areas three, four and six--consultation, participation in activities that supplement classroom experience, and services that facilitate, respectively. These correlational loadings showed which variables contributed most to the separation between groups, full-time/part-time respondents. It was noted that the student service area with the highest correlation coefficient was area four, (.6978). This area contributed most to the separation of full and part-time respondents and their respective discriminant scores. As reported earlier, this area approached significance on the univariate F-ratio. The centroid value or mean of each groups discriminant scores was -1.3706 for full time students and -1.6044 for part time students.

Based on the discriminant analysis F-ratio the research question was rejected. There was not a significant difference in knowledge of student services by the courseload of the respondent. It was noted,

however, that area four contributed most to the separation of discriminant scores as evidenced by the univariate F-ratio and the standardized canonical discriminant root coefficients.

The eighth research question asked whether there was a significant difference in performance on the SSII by the employment status of the respondent. Table 9 presented the data on which the findings below are based.

The 224 respondents, employed full or part time and the 251 unemployed respondents did not differ significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 1.914, which with 7 and 557 degrees of freedom was not significant (p=.0646). Root 1 was not significant and accounted for 100 percent variance with a probability of .0652 (chi square=13.323; d.f. 7).

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratio. It was interesting to note, however, that areas five, regulation for social and academic development, and seven, services that provide for continuing articulation, were significant with F ratios of 3.692 and 3.937 and probabilities of .0520 and .0449, respectively.

An analysis of the coefficients of the variables (student service areas) were also presented on Table 9. They represented the relative contributions of the variables to the respective roots and showed that root 1 was represented with item loadings >.30; student service areas five and seven--regulation for social and academic development and services that provide for continuing articulation. These correlational loadings showed which variables contributed most to the separation between groups, employed/unemployed students. It was noted that the

TABLE 9

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY EMPLOYMENT STATUS OF RESPONDENT

Student Service Areas (Abridged)	Item Responses: Total Items Each Area	Employed N-224 $\bar{x}$	Employed N-224 SD	Unemployed N-251 $\bar{x}$	Unemployed N-251 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	11.05	(2.53)	11.11	(2.82)	.5000	.7069	.0707
2. Appraisals	9	2.99	(1.27)	2.92	(1.36)	.9036	1.713	.5276
3. Consultation	12	5.06	(1.92)	5.08	(2.16)	.0477	3.99	.0120
4. Participation	10	1.26	(1.89)	1.12	(1.54)	2.512	3.029	.8326
5. Regulation	22	10.59	(2.15)	10.24	(2.24)	17.73	4.82	3.692*
6. Facilitation	5	2.47	(.976)	2.51	(1.08)	.2824	1.049	.2691
7. Articulation	12	9.01	(2.56)	8.65	(2.04)	18.42	4.676	3.937*

[a]Discriminant Analysis F ratio (7 and 557) = 1.914; p = .0646; Wilkes Lambda = .977
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 563

*p<.05 **p<.01 ***p<.001

Table 9 (continued)

Discriminant Analysis

Canonical Discriminant Roots					
Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	13.323	7	.0652

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)	
Group	Root 1
1. Employed	3.2206
2. Unemployed	2.8442

Standardized Canonical Discriminant Root Coefficients	
	Root 1
1. Orientation to College and Career Areas	-.0730
2. Appraisals of Individual Potential	.1996
3. Consultation	-.0299
4. Participation in Activities that Supplement Classroom Experience	.2507
5. Regulation for Social and Academic Development	.5267
6. Services that Facilitate	-.1426
7. Services that Provide for Continuing Articulation	.5438

student service areas with the highest correlation coefficient were areas five (.5267) and seven (.5438). These areas contributed most to the separation of employed and unemployed respondents and their respective discriminant scores. As reported earlier these areas showed significance on their univariate F-ratios. The centroid value or mean of each groups discriminant scores was 3.2206 for employed respondents and 2.8442 for unemployed respondents.

Based on the discriminant analysis F-ratio, the research question was rejected. Though the probability approaches significance at the $p<.05$ level, there was not a significant difference in knowledge of student services by the employment status of the respondent. It was noted, however, that areas five and seven contributed most to the separation of discriminant scores as shown by significance on the univariate F-ratios and the standardized canonical discriminant root coefficients.

The ninth research question asked whether there was a significant difference in performance on the SSII by the quarter of enrollment. Table 10 presented the data on which the findings are based.

The 184 respondents in their first quarter of enrollment, and 384 respondents previously enrolled, differed significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 4.957, which with 7 and 557 degrees of freedom was significant ($p=.0001$). Root 1 was significant and accounted for 100 percent variance with a probability of .0001 (chi square=33.873; d.f.=7).

Since the discriminant analysis F-ratio was significant, the univariate F-ratios were interpreted. Area one, orientation to college and career opportunities, was significant with an F-ratio of 13.7923 and

probability of .0005. Area two, appraisals of individual potentials, was significant with an F-ratio of 10.5051 and a probability of .0017. Area three, consultation, was significant with an F ratio of 10.6741 and a probability of .0016. Area four, participation in activities that supplement classroom experience, was significant with a F-ratio of 15.1325 and a probability of .0003. Area five, regulation for social and academic development, was significant with a F-ratio of 16.636 and a probability of .0002. Area six, services that facilitate was significant with an F-ratio of 16.8991 and a probability of .0002. In summary, there was a significant difference in performance in six out of seven student service areas by quarter of enrollment.

An analysis of the coefficients of the variables (student service areas) were also presented on Table 10. They represented the relative contributions of the variables to the respective roots and showed that root 1 was represented with item loadings >.30; student service areas one, two, three, four, five, six. These correlational loadings showed which variables contributed most to the separation between groups, first quarter/previously enrolled students. It was noted that while all correlation coefficients were high (over .50), the highest was area six (.7049), services that facilitate. These areas contributed most to the separation of initially and previously enrolled respondents and their respective discriminant scores. As reported earlier, these areas showed significance on the univariate F-ratios. The centroid value or mean of each groups discriminant scores was 4.8638 for initially enrolled respondents and 5.8932 for previously enrolled respondents.

Based on the discriminant analysis F-ratio the research question was accepted. There was a significant difference in knowledge of stu-

TABLE 10

STUDENT KNOWLEDGE OF INFORMATION CONCERNING THE SEVEN STUDENT SERVICE AREAS
STATISTICAL ANALYSIS BY QUARTER OF ENROLLMENT

Student Service Areas (Abridged)	Item Responses: Total Items Each Area	First Quarter N-184 $\bar{x}$	First Quarter N-184 SD	Previously Enrolled N-381 $\bar{x}$	Previously Enrolled N-381 SD	Univariate F-Tests[a]: x^{-2} Between Groups[b]	x^{-2} Within Groups[c]	F Ratio
1. Orientation	20	10.48	(2.59)	11.36	(2.64)	95.191	6.901	13.7923***
2. Appraisals	9	2.71	(1.33)	3.08	(1.28)	17.679	1.683	10.5051***
3. Consultation	12	4.67	(1.98)	5.26	(1.98)	41.839	3.93	10.6741***
4. Participation	10	.97	(.95)	1.39	(1.99)	44.701	2.954	15.1325***
5. Regulation	22	9.9	(2.14)	10.7	(2.18)	78.098	4.694	16.636***
6. Facilitation	5	2.3	(.91)	2.61	(1.05)	17.226	1.019	16.8991***
7. Articulation	12	8.8	(2.23)	8.89	(2.14)	.7495	4.708	.1592

[a]Discriminant Analysis F ratio (7 and 557) = 4.957; p = .0001; Wilkes Lambda = .941
[b]Degrees of Freedom Between Groups = 1
[c]Degrees of Freedom Within Groups = 563

*p<.05 **p<.01 ***p<.001

Table 10 (continued)

Discriminant Analysis

Canonical Discriminant Roots

Root	Percent of Variance	Cumulative Percent	CHI Square	D.F.	Significance
1	100	100	33.873	7	.0001

Canonical Discriminant Roots Evaluated at Group Means (Group Centroids)

Group	Root 1
1. First Quarter enrolled	4.8638
2. Previously enrolled	5.8932

Standardized Canonical Discriminant Root Coefficients

	Root 1
1. Orientation to College and Career Areas	.6385
2. Appraisals of Individual Potential	.5589
3. Consultation	.5633
4. Participation in Activities that Supplement Classroom Experience	.6681
5. Regulation for Social and Academic Development	.6996
6. Services that Facilitate	.7049
7. Services that Provide for Continuing Articulation	.0694

dent services by the quarter of enrollment. It was noted that areas one through six contributed most to the separation of discriminant scores as shown by their significance on the univariate F ratios and loadings on the standardized canonical discriminant root coefficients.

Analysis of Student Satisfaction

The fourth type of item (68-75) in section two of the SSII used a Likert-rating scale. The likert scale called for a graded response to each statement. The response was expressed in terms of the following five categories: strongly agree (SA); agree (A); undecided (U); disagree (D); and strongly disagree (SD). Since Likert rating scales present a number of positive and negative statements regarding an attitude object, they are interpreted in this application as a measure of satisfaction or dissatisfaction. Using a valid statistical procedure, items 68-75 were coded using assigned values to provide an index of student satisfaction for the student services program. Responses of SA (strongly agree) or A (agree) were coded as +1. Responses of U (undecided) were coded as 0. Responses of D (dissatisfied) and SD (strongly dissatisfied) were coded at -1. Coded values were summed for items 68-75 which provided a satisfaction value or index for each respondent which ranged from -8 to 8. This index of student satisfaction was tested with the demographic categories used in the analysis of the first division of this chapter. The groups were: Age groups (17-24)/(25 and over); Male/Female; Black/White; Married/Single; Transfer/Terminal Programs; Day/Night students; Full-time/Part-time students; Employed/Unemployed students; and Initial Quarter of Enrollment/Previously enrolled students. Groups were tested with ANOVO1 to determine if these demographic groups differed significantly in their satisfaction/dissatisfaction of student services.

ANOVO1 provided a t ratio which established whether the differences in means were significant.

Astin (1980) wrote that student satisfaction is a useful category because of the ease in evaluating an attitude scale. In addition, the undergraduate experience is often significant in the individual's life, and therefore the student's perception of the value of that experience is one of the most important indicators of pogram effectiveness.

The results of ANOVO1 are listed on Table 11. The mean of each demographic categories' satisfaction/dissatisfaction index was listed. The number of respondents in each group, the standard deviation and degrees of freedom were also reported on Table 11. In addition, the t ratio of significance between two groups was given. It was noted that among the demographic categories that no group was significantly more satisfied or dissatisfied at the $P<.05$ or $<.01$ levels with student services at Shelton State Junior College. In a study conducted by Hallenbeck at Kent State University using similiar methodology and statistical tests of variance, only different age levels showed statistically significant levels of satisfaction/dissatisfaction. Hallenbeck statistically compared respondents by the following categories: ethnic classification, sex, ACT scores; parent's educational background; level of participation in student organizations and age levels.

Age levels, sex, and ethnic classification were also tested at Shelton State and no statistical differences were found. It was important to note that age level divisions in the Hallenbeck study actually contrasted undergraduate and graduate enrollees while the age levels tested at Shelton State were all undergraduates.

The mean rating of all groups was 3.451 which indicated a general level of satisfaction with student services. The highest level of satisfaction was expressed by part time students (3.778). The lowest level of satisfaction was expressed by married students (3.086).

TABLE 11

STATISTICAL EXAMINATION OF INDEX OF SATISFACTION
BY DEMOGRAPHIC CATEGORIES

Demographic Categories of Respondents	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	d.f.	t Ratio
Age groups (17-24) N-445/ (25 and over) N-120	3.503	3.22	3.417	3.06	563	.272
Male (N-178)/Female (N-387)	3.135	3.35	3.646	3.1	563	-1.725
Black (N-144)/White (N-420)	3.146	3.09	3.617	3.2	562	-1.564
Married (N-105)/Single (N-460)	3.086	3.13	3.576	3.19	563	-1.443
Transfer (N-447)/Terminal (N-76)	3.477	3.16	3.697	3.23	521	- .553
Day (N-442)/Night (N-65)	3.606	3.17	3.108	2.85	505	1.297
Full-time (N-430)/Part-time (N-135)	3.393	3.3	3.778	2.79	563	-1.337
Employed (N-314)/Unemployed (N-251)	3.557	3.18	3.394	3.2	563	.603
First Quarter Enrolled (N-184)/ Previously Enrolled (N-381)	3.565	3.15	3.446	3.2	563	.418

CHAPTER V

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to evaluate student understanding of and knowledge about basic areas of student services at Shelton State Junior College (SSJC) as a preliminary step to program evaluation. The specific aims of the study were: to determine if students understood basic information related to various student service areas; and to ascertain whether certain types or categories of students were more knowledgeable about the seven student service areas than others. The population for this study consisted of all students enrolled at SSJC during Fall 1982 quarter. The sample was drawn by a systematic random sampling technique. The final sample consisted of 565 students or 24.5 percent of the population.

The data were collected using the Student Services Information Inventory (SSII). These data were analyzed by examining the total sample's correctness of responses to the SSII and by comparing various demographic groups which make up the student population at SSJC in order to investigate possible differences in knowledge of the seven student services areas. These areas are: orientation to college and career opportunities; appraisals of individual potentials; consultation; participation of students in activities that supplement classroom experiences; regulation to provide optimal climate for social and academic development; services that facilitate; and organizations that provide for continuing articulation. The demographic groups compared

were: Age groups (17-24), (25-34), (35 and over); male/female; black/white; single/married; transfer/terminal; day/night; full-time/part-time; employed/unemployed; and new/previously enrolled. Research questions concerning these groups were submitted to discriminant analysis to assess differences. In addition, these demographic groups were examined to see if they varied significantly in their levels of satisfaction with student services ANOVO1 from the Behavioral Science Statistical Program Library was used to provide a t-test for independent groups to determine whether or not a significant difference in the satisfaction level of the groups within each of the demographic categories existed.

Since the final sample consisted of 565 respondents and was randomly selected, the assumption was that the sample was representative of the entire population - the Fall 1982 enrollment at SSJC - and that statistical inferences could be made from examination of that sample. The examination of correctness of student knowlege about the student service areas revealed that for student service area one - orientation to college and career opportunities - 55.39 percent responses were correct; student service area two - appraisals of individual potentials - 42.31 percent were correct; student service area three - consultation - 42.23 percent correct; student service area four - participation in activities which supplement classroom experiences - 13.36 percent correct; student service area five - regulation for social and academic development - 61.41 percent of the responses were correct; student service area six - services that facilitate - 49.76 percent were correct and student service area seven - services that provide for continuing articulation - 73.75 percent of the responses were correct.

Overall, then, marked weaknesses were found in students' knowledge in one area and marginal knowledge was found in four areas. Only in two areas were students able to respond correctly to 60 percent or more of the items. On the average, 48.31 percent of the students answered correctly.

Findings related to the research questions posed in this study contrast specific demographic groups and their performance on the SSII. The findings were:

Research Question 1: Is there a significant difference in performance on the SSII by respondents of the following age intervals: 17-24 years, 25-34, and over 35?

The 445 respondents from 17-24 years old, the 91 respondents from 25-34 years old and the 29 respondents over 35 years old, did not differ significantly in their performance on the SSII. Discriminant analysis gave an overall F-ratio of 1.502 which was not significant; it is not a valid procedure to interpret the univariate F-ratios calculated for each student service area. It was interesting to note, however, that in area one - orientation to college and career opportunities - these age groups differed significantly with a probability of .0107. The third student service area - consultation - was marked by similar significant differences with a probability of .0106. Nevertheless, based on the discriminant analysis F-ratio, the findings related to research questions number one were that there was no significant difference in the amount of knowledge as indicated by performance on the SSII between the age groups 17-24, 25-34, and over 35 years of age.

Research Question 2: Is there a significant difference in performance on the SSII by sex of the respondent?

The 178 male respondents and 387 female respondents differed significantly in their performance on the SSII. Discriminant analysis gave an overall F-ratio of 3.447 which was statistically significant ($p<.001$). Since the discriminant analysis F-ratio was significant, the univariate F-ratios were interpreted. Two areas stood out, area one -orientation to college and career opportunities - had an F-ratio of 5.6154, significant at $p=.0172$. Area six - services that facilitate - had an F-ratio of 8.8096, $p<.01$. Based on the discriminant analysis F-ratio, the research question was answered affirmatively: A significant difference in knowledge of student services as indicated by performance on the SSII by the sex of the respondent was found.

Research Question 3: Is there a significant difference in performance on the SSII by race of the respondent?

The 144 black respondents and 421 white respondents differed significantly on their performance on the SSII. Discriminant analysis revealed an overall F-ratio of 5.375 which was significant ($p<.001$). Since the discriminant analysis F-ratio was significant, the univariate F-ratios were interpreted. Area one - orientation to college and career opportunities - had an F-ratio of 4.99, $p<.03$; area three - consultation - was significant with an F-ratio of 4.67, $p<.03$; area six - services that provide for continuing articulation - was significant with an F-ratio of 8.117, $p<.01$. Based on the discriminant analysis F-ratio, the research question was answered affirmatively. A significant difference in knowledge of student services was found as indicated by performance on the SSII by race of the respondent.

Research Question 4: Is there a significant difference in performance on the SSII by the marital status of the respondent?

The 105 married respondents and 460 single respondents differed significantly in their performance on the SSII. Discriminant analysis gave an overall F-ratio of 2.912 which as significant ($p<.01$). Since the discriminant analysis F-ratio was significant the univariate F-ratios were interpreted. Area six - services that facilitate - had an F-ratio of 4.4561, $p<.03$. Based on the discriminant analysis F-ratio, the research question was answered affirmatively; there was a significant difference in knowledge of student services as indicated by performance on the SSII by the marital status of the respondent.

Research Question 5: Is there a significant difference in performance on the SSII by the program of the respondent?

The 447 respondents enrolled in college transfer programs and 76 respondents enrolled in occupational programs did not differ significantly in performance on the SSII. The discriminant analysis F-ratio was 1.077 which was not significant ($p<.3764$). Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratio. It was interesting to note, however, that in area five - regulation for social and academic development - these groups differed significantly with a probability of .0173.

Nevertheless, based on the discriminant analysis F-ratio, the findings related to research question five were that there was not a significant difference in knowledge of student services as indicated by performance on the SSII by the program of the respondent.

Research Question 6: Is there a significant difference in performance on the SSII by time of attendance?

The 446 respondents that attended day classes and the 65 respondents that attended night classes did not differ significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 1.159, which was not significant (p=.3240).

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret that univariate F-ratios. It was interesting to note, however, that in area five - regulation for social and academic development - these attendance groups differed significantly with a probability of .0436.

Nevertheless, based on the discriminant analysis F-ratio, findings related to research question six were that there was not a significant difference in knowledge of student services as indicated by performance on the SSII by the time of attendance.

Research Question 7: Is there a significant difference in performance on the SSII by courseload of respondents?

The 430 respondents, enrolled in a full-time courseload, and 135 respondents, enrolled in a part-time courseload did not differ significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of .891, which was not significant with a probability of .5130.

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratio. It was interesting to note, however, that in area four - participation in activities that supplement classroom experience - these groups approached significant differences with a probability of .0773.

Nevertheless, based on the discriminant analysis F-ratio the findings related to research question seven were that there was not a

significant difference in knowledge of student services as indicated by performance on the SSII by the courseload of the respondent.

Research Question 8: Is there a significant difference in performance on the SSII by the employment status of the respondent?

The 224 respondents, employed full or part time and the 251 unemployed respondents did not differ significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 1.914, which was not significant with a probability of .0646 but approached significance at the $p<.05$ level.

Since the discriminant analysis F-ratio was not significant, it is not a valid procedure to interpret the univariate F-ratio. It was interesting to note, however, that in areas five - regulation for social and academic development - and seven - services that provide for continuing articulation - that these groups were significant with probabilities of .0520 and .0449, respectively.

Based on the discriminant analysis F-ratio, findings related to the research question eight were that though the probability approaches significance at the $p<.05$ level, there was not a significant difference in knowledge of student services as indicated by performance on the SSII by the employment status of the respondent.

Research Question 9: Is there a significant difference in performance on the SSII by the quarter of enrollment?

The 184 respondents, in their first quarter of enrollment, and 384 respondents previously enrolled differed significantly in performance on the SSII. Discriminant analysis gave an overall F-ratio of 4.957, which was significant with a probability of .0001.

Since the discriminant analysis F-ratio was answered affirmitively, the univariate F-ratios were interpreted. Area one - orientation to college and career opportunities - was significant with a probability of .0005. Area two - appraisals of individual potentials - was significant with a probability of .0017. Area three - consultation - was significant with a probability of .0016. Area four - participation in activities that supplement classroom experience - was significant with a probability of .0003. Area five - regulation for social and academic development - was significant with a probability of .0002. Area six - services that facilitate - was significant with a probability of .0002. In summary, there was a significant difference in performance in six out of seven student services areas by quarter of enrollment.

Based on the discriminant analysis F-ratio, the findings related to research question nine were that there was a significant difference in knowledge of student services as indicated by performance on the SSII by quarter of enrollment.

Index of Satisfaction

An index of student satisfaction was tested with the demographic categories used in the analysis of the first division of this chapter. The categories were: Age groups (17-24) (25 and over); male/female; black/white; married/single; transfer/terminal; day/night; full-time/part-time; employed/unemployed; and new/previously enrolled. Groups were compared using ANOVO1 to determine if they differed significantly in their satisfaction/dissatisfaction level with student services. ANOVO1 provided a t-ratio which established whether the differences in means were significant. It was found that among the demographic categories there was no significant difference in degree of satisfaction with student services at SSJC.

Discussion of Findings

It was interesting to note that student knowledge of student service area seven was the greatest as indicated by the percent of correct responses. It seemed likely that the percent of correct responses was more indicative of what the student perceived the institution to be doing than actual student knowledge. The justification for this assumption was based in part on the fact that none of the services in student service area seven are publicized. Student knowledge of this area would seem to be based more on the effect of his contact in other student service areas and the institution. In addition, student service area seven which consists of program articulation, in-service education, program evaluation and administrative organizations ordinarily would not seem to be an area of high student knowledge.

The lowest correct response percentages came in student service area four, 13.36 percent; which was made up of the following functions: co-curricular activities and student government. Information about these functions was outlined by the college catalog, and through brochures and memorandums. These methods would seem to be inadequate as evidenced by the low correct response percentage.

An examination of the average correct response percentages would show that generally half of the student body lacked knowledge of the seven student service areas. This would indicate a great need to improve the communication of information to the student population at SSJC about these essential areas of student services.

The findings of the study showed that four out of the nine research questions were answered affirmatively, i.e., that certain demographic

groups differed significantly. These four research questions centered on the following groups: males/females; black/white; single/married; and new/previously enrolled. By the examination of different demographic groups in SSJC's population, it was hoped that areas of student services where students might be less informed would be found and thereby associated with the group's specific need for information. This could provide relevant student knowledge and would allow student services to be more responsive to unique information needs within each demographic group.

The survey of literature revealed no studies which specifically addressed these demographic groups. Most studies evaluated and compared faculty and administrators with student evaluation. In Hallenbeck's (1970) study of student satisfaction, a statistical comparison was made on the following groups: sex, age, and ethnic background. Of these, only age groups showed statistical significance. In comparison, student knowledge of student services at SSJC showed significant differences by the sex and ethnic origin of the student. The importance of these findings is derived from analysis of group performance which showed the individual group's differences in information by performance levels.

A further analysis of the findings would seem to indicate that the greatest factor in knowledge of student services at Shelton State Junior College would be whether the student was in his initial quarter of enrollment or previously enrolled. Student knowledge as reflected by their average scores was higher for previously enrolled students. McMillan and Cerra (1972) wrote of student services' heavy dependence on information and they noted that if students are to use services such as counseling centers and financial aid, they must know of their existence.

Since information concerning these seven student service areas was communicated only through the student handbook in the Shelton State Junior College catalog, it would seem to confirm Notting and Saffian's findings that traditional information dissemination was mass oriented through catalogs, brochures and newsletters. In general, student knowledge of the seven student service areas as indicated by correct responses to survey items averaged 48.31 percent on the SSII. This would seem to contradict McMillan and Cerra's findings that in general 15 percent of the population received information through traditional information dissemination. Their study also showed a significant difference ($p<.01$) of student knowledge of counseling services between commuters and residents. Since Shelton State Junior College is composed entirely of commuters, this would seem to indicate a special need to disseminate information effectively and could account for some of the percentages of incorrect responses found in this study.

McMillan and Cerra (1972) found that 40 percent of the students who knew of the center's existence, obtained information from other students; 18 percent mentioned orientation; and 17 percent suggested that faculty and staff had given them information. Brochures, catalogs and the school newspaper were mentioned by less than 15 percent of the students as an information source. Lewicki and Thompson (1982) found in their study of freshmen and sophomores' knowledge levels that 84 percent indicated knowledge of student services through posters and brochures, 67 percent had knowledge of student services from a friend and 31 percent obtained knowledge of student services from a faculty member. This study surveyed two four-year colleges and a community college, which could explain disparities in the findings of the two studies.

Comparisons can be made with findings at Shelton State Junior College and findings by McDavis (1976) at the University of Florida. Selected results showed 10 percent knowledgeable of the student conduct code and 46.5 aware of the student conduct code at SSJC; 20 percent knowledgeable of student organizations and 9.2% aware of student organizations at SSJC, 28 percent aware of the financial aid office and 67.7 percent aware of financial aid office at SSJC.

The method of information dissemination of student services at SSJC was mass oriented through catalogs and brochures, and seemed to be relatively ineffective from the examination of knowledge levels. These levels were indicated by correct response percentage on individual items of the SSII and ranged from a low of 5 percent to high of 94.7 percent. The average percent correct was less than half (48.31 percent).

The second part of the study compared the student satisfaction level by testing for significance between the demographic groups in their levels of satisfaction. While no one group of the demographic categories was significantly more satisfied/dissatisfied, overall the groups showed a general satisfaction with student services at SSJC. These findings contradict Schmidt and Sedlacek's, (1972) study at the University of Maryland. Schmidt and Sedlacek found that student satisfaction differed significantly ($F-15.99$, $p<.01$) depending on whether the students were new or previously enrolled. New students rated significantly more satisfaction, It is interesting to note in the factor analysis of items relating to student satisfaction that the greatest factor loadings .66 and .61 concerned the students' relationship with faculty in the instructional and advising role. Statistical comparison of new students with previously enrolled students

at SSJC showed no significant difference. Perhaps this contradiction could be explained by the primary mission of junior colleges which is towards teaching, with an emphasis on smaller classes and greater involvement with teaching faculty.

A study by Sturtz (1971) at Iowa State Univeristy, found adult students (25 years +) significantly more satisfied with college than younger students (under 25 years old). The F-test was significant at $p<.01$ level. Additional findings showed adult students to be significantly more satisfied with the "quality of education" ($p<.01$) and "policies and procedures" of the college ($p<.01$). While Sturtz did not specifically evaluate satisfaction of student services, the researcher addressed the variable areas of social life, quality of education and policies and procedures as student service functions. Comparisons by age groups at SSJC which used the same age group, 17-24 years of age/25 years and over, did not show significant differences. It is important to note at this point that Sturtz's population was all females. It was a finding of this study at SSJC that males and females differ significantly in their knowledge of student services, but in this study the female group was not comparable to the Sturtz study in age breakdown.

Conclusions

Shelton State Junior College's student services program is made up of areas traditionally assigned to the student services area by accrediting agencies and over governing/regulatory boards. While varied in origins, these student service areas and the specific services which make up these areas may be found in the American Association of Junior and Community Colleges' (AAJCC) list of seven major areas which include

21 essential student services. The study sought to evaluate the student services at SSJC by this standard.

Findings within the limitations of this study would appear to justify the following conclusions: (1) Generally, students enrolled at SSJC learn of student services from the college catalog, brochures, and orientation. SSJC's programs of mass oriented communication about student services would seem to be consistent with practices elsewhere in the nation. (2) No effort is made to communicate information about student services to specific demographic groups which make up the student population even though there are unique needs in the groups for such information. (3) A major conclusion of this study is that a "halo effect" strongly influenced student ratings on specific student services. Anastasi (1968) defined "halo effect" as a tendency on the part of raters to be unduly influenced by a favorable or unfavorable trait. (4) A final conclusion seems warranted: the student accepts as adequate the services supplied by the SSJC because of his "blind faith" in the institution. He assumes the college has provided what is necessary, and does not realize the importance of certain information or knowledge that he may lack about student services.

Recommendations

Based on the findings and conclusions of this study the following recommendations are made:

1. Special attention should be made to identify further the demographic groups within the population who lack basic information on important student services and to devise effective ways of providing them the necessary information.

2. Further research should be conducted to identify specific informational needs of SSJC students.
3. The college should undertake systematic efforts to inform all students of services and procedures which can help them--to insure that students have basic information or knowledge of student services to facilitate their personal and academic development.
4. A serious effort should be made in all colleges and universities, but especially in two-year institutions, to examine the temporal process of information given to ensure an early informed status for students about essential services and benefits.

CHAPTER VI

SUMMARY OF STUDY

This chapter, a summary of the study, is persented in three sections: purpose of the study, statement of procedures, and major conclusions.

Purpose of the Study

The purpose of this study was to evaluate student understanding of, or knowledge about basic areas of student services at Shelton State Junior College as a first step in program evaluation. Shelton State's student services were categorized for the purpose of this study on the basis of the American Association of Junior and Community Colleges (AAJCA) list of seven major functions which includes 21 essential student services.

The specific aims of the study were:

1. To determine if students correctly understood basic information related to the various student services areas.
2. To ascertain whether certain types or categories of students were more knowledgeable about the seven areas of student services than others.

Procedure

Students in randomly selected classes were administered the Student Services Information Inventory (SSII) by their instructors. The final

sample, 565, constituted 24.5 percent of the population. Data were analyzed on the Univac III at the University of Alabama using the Behavioral Science Statistical Program Library developed by Barker and Barker, (1977) and the Statistical Package for the Social Services (SPSS).

SPSS was used to compute and develop tables containing simple frequencies and percentages. These frequencies were used to determine that the following demographics would be statistically examined for significance: age intervals, 17-24, 25-34, and over 35; sex; race; marital status; major program; day or night attendance; full or part-time courseload; full or part-time employment status; and initial or previous enrollments. SPSS also provided data on correct response percentages relative to each student service area.

The Behavioral Science Statistical Program Library was applied to analyze data collected by the second section of the SSII. Specifically, CORR20, which provides discriminant analysis in principal components (two and multiple groups), was used to assess differences in performance on the seven service areas in the SSII by the groups in the nine demographic areas. The variables were the seven service areas listed by the AAJCC. Group comparisons using the demographic groupings tabulated by the SPSS program were analyzed by CORR20 for statistically significant difference in performance levels.

In items 68-75, respondents used a Likert-rating scale, coded using assigned values, to provide an index of student satisfaction of the student services program. This index of student satisfaction was tested with the same demographic groups to determine what groups were significantly more satisfied or dissatisfied. The statistical test used

was ANOVO1 from the Behavioral Science Statistical Program Library which provides a t test for independent groups to determine whether there was a significant difference in the satisfaction level of the groups within each of the demographic categories.

Major Conclusions

The major conclusions of the study were that (1) Students enrolled at SSJC learn of student services from the catalog, brochures and orientation. (2) Effort is not made to communicate information about student services to specific demographic groups. (3) Demographic groups which showed statistical differences in their information or knowledge levels were: Males/females; blacks/whites; single/married and new/previously enrolled. No difference in satisfaction level was determined for these groups. (4) The existence of a "halo effect" would seem to affect student satisfaction.

Recommendations appropriate to the conclusions reached were offered. They included: (1) special attention should be made to identify further demographic groups within the population who lack basic information on important student services and to devise effective ways of providing them the necessary information; (2) further research should be conducted to identify specific informational needs of SSJC students; and (3) the college should undertake systematic efforts to inform all students of services and procedures which can help them insure that students have basic information or knowledge of student services to facilitate their personal and academic development.

Appendix A

Student Services Information Inventory

General Information: Check the blank that applies to you.

1. Age: 17-19 _____ 20-24 _____ 25-35 _____ 36-55 _____
   over 55 _____

2. Sex: Male _____ Female _____

3. Race: Black _____ White _____ Please specify _____

4. Marital status: Married _____ Single _____ Divorced _____
   Widowed _____

5. Income:
   (approximate)
   Less than $4,000 _____ $4,000 to $7,500 _____

   (personal income)
   $7,500 to $10,000 _____ $10,001 to $21,000 _____
   Over $21,000 _____

6. Program enrolled in: _____

7. Time of attendance: Day _____ Night _____ Both _____

8. Courseload: Full time _____ (12 hrs. or more) Part time _____ (less than 12 hrs.)

9. Employed: Full time _____ Part time _____ Unemployed _____

10. Number of quarters you have attended Shelton State: _____

11. Have you attended or are you presenlty attending another college or university? Yes _____ No _____
    If yes, which college or university? _____

In the statements listed below, please select the item which best reflects your knowledge and experience. The letter of your selection should be circled in the space to the left of the numbered item.

12. A B C D E Costs per credit hour are:

A. $12.50 per quarter hour
B. $12.50 per quarter hour to a maximum of $125.00
C. $25.00 for first hour, $12.50 for every hour after that, to a maximum of $125.00
D. $125.00 for the quarter regardless of number of hours
E. Don't know

13. A B C D E Terminal degree programs are:

A. Associate in Applied Science
B. Associate in Arts
C. Associate in Science
D. All of the above
E. Don't know

14. A B C D E Which statement best describes terminal degree programs?

A. Terminal degree programs concentrate on occupational training.
B. Terminal degree programs provide for transfer to four year or senior colleges.
C. Terminal degree programs are not designed for transfer to four year or senior colleges.
D. Terminal degree programs provide training in job related skills over a two-year period.
E. I do not know.

15. A B C D E Which of the following programs is an occupational terminal degree program?

A. Agricultural Education
B. Mental Health Technology
C. Medical Technology
D. Mathematics
E. B and C

16. A B C D E At the counseling center a student could take which of the following test services?

A. Placement tests in math, English, and reading
B. ACT, SAT tests
C. I.Q. tests
D. A and C
E. None of the above

17. A B C D E The linkage program is a:

A. Co-operative agreement between Shelton State and UAB
B. Co-operative program with Regional Technical Institute
C. Co-operative program to avoid duplication and maintain low tuition
D. Co-operative program with School of Community and Allied Health of UAB, where student obtains academic coursework at Shelton State and applies for second year training in a health occupation
E. All of the above

18. A B C D E For admission to Shelton State a prospective student must:

A. Submit an application and application fee of $5.00
B. Submit an application and application fee and high school transcript
C. Submit application, fee, high school diploma or GED, and college transcripts (if any)
D. Submit an application and ACT scores
E. All of the above

19. A B C D E Which of the following programs of study is a college transfer program?

A. Pre-law
B. Agribusiness Technology
C. General Business
D. Home Economics
E. A and D

20. A B C D E Which of the following health services are provided by Shelton State:

A. A first aid station is located in the Dean of Students' office and the chemistry lab.
B. Health education courses are offered.
C. A college nurse is on call.
D. Hearing and vision testing is available.
E. None of the above

21. A B C D E Which of the following statements are true concerning the confidentiality of their records?

A. Students have privacy rights concerning the confidentiality of their records.
B. High school transcripts, or GED scores and certificate or college transcripts are kept in student files.
C. Achievement tests and high school transcripts are evaluated to help students.

D. Previous college work is evaluated by the college for transfer.
E. All of the above

22. A B C D E Which of the following counseling services are available to students?

A. Personal counseling
B. General information by phone or in person
C. Academic counseling
D. Student progress in program of study
E. All of the above

23. A B C D E Students wanting to know a faculty member's office hours should:

A. Contact the college receptionists
B. Check the office door of the instructor
C. See the Dean of Instruciton
D. Ask the individual instructor
E. All of the above

24. A B C D E College transfer degrees are:

A. Associate in Applied Science
B. Associate in Arts
C. Associate in Science
D. B and C
E. None of the above

25. A B C D E Which statement best describes college transfer programs?

A. College transfer programs are designed to complete the first two years of a four year college program.
B. College transfer programs complete general education requirements.
C. College transfer programs are disgned to meet requirements of four year college programs, by fulfilling general education requirements of the freshman and sophomore years.
D. All of the above statements
E. None of the above statements

26. A B C D E Students may obtain information about careers from:

A. Counselors
B. Librarians
C. Placement Director
D. Co-op Education Director
E. All of the above

27. A B C D E A student is enrolled in three 5-hour courses for a total of 15 quarter hours. He makes 2 B's and 1 A. What is his QPA?

A. 3.5
B. 3.7
C. 3.3
D. 4.0
E. 3.0

28. A B C D E The student conduct code:

A. Lists prohibited conduct
B. Assures due process
C. Guarantees appeal procedure
D. All of the above
E. None of the above

29. A B C D E Which of the following financial aid programs is Not available to students?

A. BEOG (Basic Grant)
B. SEOG (Supplement Grant)
C. College Work Study
D. Insured student loans
E. Scholarships

30. A B C D E Students having questions about financial aid should contact:

A. Humphrey Lee
B. Dorothy Pickard
C. Mary Anne Thomas
D. A and B
E. None of the above

31. A B C D E Which statement best defines academic suspension?

A. Academic suspension occurs when a student's cumulative average falls below a 2.00.
B. Academic suspension occurs when a student's average falls below a 1.5.
C. A student on academic probation whose cumulative average falls below a 1.5 is academically suspended for one quarter.
D. Academic suspension occurs when a student fails to make a 2.00.
E. Academic suspension occurs when a student's average falls below a 2.5.

32. A B C D E Which of the following statements about academic probation is true?

    A. Academic probation occurs when a student's average falls below 1.5 on any quarter.
    B. Academic probation occurs when a student's cumulative average is below 2.0.
    C. A student is continued on probation as long as his cumulative average is below 2.0.
    D. A student is continued on probation as long as his cumulative avearge is below 2.0 and he made at least 1.5 at the end of the quarter.
    E. All of the above

33. A B C D E A student is on academic probation. He takes 15 hours and makes 2 D's and 1 B. His status is:

    A. Academic Suspension for 1 quarter
    B. Continued Academic Probation
    C. Academic Probation
    D. Suspension for 1 year
    E. All of the above

34. A B C D E The co-operative education program provides which of the following services?

    A. Resume writing skills
    B. Part-time job service
    C. Interview and application skills
    D. Internship placements
    E. All of the above

Please circle the following statement as being true, T or false, F.

35. T F Non-credit courses cost the same as credit courses.

36. T F Non-credit courses may be changed to credit at any point in the quarter.

37. T F Students may add courses up to midterm.

38. T F After midterm, students receive an F in the course if they are failing and W if they are passing.

39. T F Probation results from a student's avearge falling below a 2.00.

40. T F After a quarter on probation, a student whose cumulative average falls below a 1.5 is suspended for one quarter.

41. T F Credit courses are graded on an A,B,C,D,F basis.

42. T F Credit courses are listed in quarter hours.

43. T F The counseling center is open from 8:00 a.m. to 8:00 p.m.

44. T F Information concerning Veteran's benefits are available in the Financial Aid office.

45. T F Veterans must maintain a minimum quality point average for a given number of hours attempted.

46. T F Class attendance is required.

47. T F Information and I.D. cards may be obtained in the Dean of Students' office.

48. T F Course transferability is publicized.

49. T F Courses that do not transfer are publicized.

50. T F Students are advised of their transfer college requirements.

51. T F Faculty, administrators, and counselors handle transfer institutions.

52. T F The college is well informed of new programs in transfer institutions.

53. T F Teaching skills and innovations are sought and encouraged.

54. T F Student services are regularly evaluated.

55. T F Improvements and suggestions about student services are solicited from students.

56. T F Divisions of student services are affiliated with their professional organizations.

57. T F The college is regionally accredited.

58. T F Parking decals allow students to park at the University of Alabama in student zones.

Please fill in the blank on the following statements.

59. I would contact _____ if I wanted to participate in the student newspaper.

60. I would contact _____ if I wanted to participate in the Afro American Association.

61. I would contact _____ if I wanted to participate in the Shelton Singers.

62. I would contact _____ if I wanted to participate in intramurals.

63. I would contact _____ if I wanted to participate in drama production.

64. I would contact _____ if I wanted to participate in Student Government.

65. I would contact _____ if I was interested in the part-time job services.

66. I would contact _____ if I was interested in concerts.

67. I would contact _____ if I wanted to participate in the Alumni Association.

Please respond to the following items by circling the answer which best reflects your feelings. SA = Strongly Agree A = Agree N = No Opinion D = Disagree SD = Strongly Disagree

SA A N D SD 68. Hours for registration are well publicized and adequate.

SA A N D SD 69. The registration process is clearly outlined.

SA A N D SD 70. Overall, I am happy with registration.

SA A N D SD 71. The college is aware of students' special health problems.

SA A N D SD 72. Course offerings for the year are publicized.

SA A N D SD 73. Grade protest procedures are publicized.

SA A N D SD 74. The Student Life Committee provides a channel for student imput into college organization and administration.

SA A N D SD 75. Career interests testing is offered to students.

Appendix B

Matrix of Student Services Activities, Related Survey Items, and College Efforts Directed toward Survey Topics

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
1. Orientation to college and career opportunities		
A. Pre-college information	12. Costs per credit hour	Recruitment, personal contacts, advertisement and college brochures
	15. Which of the following programs is an occupational terminal degree program?	Student handbook listing of programs. Advertisement and brochures.
	18. For admission to Shelton State a prospective student must:	
	19. Which of the following programs of study is a college transfer program?	

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
B. Student orientation	14. Which statement best describes terminal degree programs? 25. Which statement best describes college transfer programs?	Orientation process: student handbook: delineation of differences between occupational and transfer training programs.
	22. Which of the following counseling services are available to students?	Orientation process and student handbook.
	23. Students wanting to know a faculty member's office hours should: 30. Students having questions about financial aid should contact: 46. Class attendance is required. 47. Information and I.D. cards may be obtained in the Dean of Students' office.	Admissions counseling
C. Group information	40. After a quarter on probation, a student whose cumulative average falls below a 1.5 is suspended for one quarter.	student handbook: specification of credit hours, grading systems, academic standing, and requirements

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	41. Credit courses are graded on an A,B,C, D,F basis. 42. Credit courses are listed in quarter hours 43. The counseling center is open from 8:00 a.m. to 8:00 p.m. 44. Information concerning Veteran's benefits are available in the Financial Aid Office.	Academic counseling Admissions counseling
D. Career Information	13. Terminal degree programs are: 14. Which statement best describes terminal degree programs? 17. The linkage program is a: 19. Which of the following programs of study is a college transfer program? 24. College transfer degrees are:	Catalog effectiveness conveying knowledge of course offerings and how they fit into specific careers catalog information

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	26. Students may obtain information about careers from: 25. Career interests testing is offered to students.	Career center as sources of career information Career Testing
2. Appraisal of individual potentials		
A. Records	18. For admission to Shelton State a prospective student must:	catalog, counseling, orientation; student handbook: admission requirements Record coordination/control
	21. Which of the following statements are true concerning student records?	Maintain policy on confidentiality of records and transfer of previous work.
	31. Which statement best defines academic suspension? 32. Which of the following statements about academic probation is true?	Catalog knowledge of academic requirements for good standing, student handbook and counseling.

Majory Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	36. Non-credit courses may be changed to credit at any point in the quarter.	Registration Academic regulation
B. Educational Testing	16. At the counseling center a student could take which of the following test services? 75. Career interests testing is offered to students.	Testing services offered by counseling centers.
	21. Which of the following statements are true concerning student records?	Evaluation by use of high school records and achievement test for counseling, advisement and career counseling.
C. Health Appraisal	20. Which of the following health services are provided by Shelton State? 71. The college is aware of students' special health problems.	Health services offered. First aid station. Special health accommodations

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
3. Consultation:		
A. Student Counseling	16. At the counseling center a student could take which of the following test services?	Test services
	22. Which of the following counseling services are available to students?	Counseling services personal, academic general information, program advising
	26. Students may obtain information about careers from:	Career information source
	43. The counseling center is open from 8:00 a.m. to 8:00 p.m.	In-house information, student handbook
B. Student Advisement	13. Terminal degree programs are: 14. Which statement best describes terminal degree programs? 15. Which of the following programs is an occupational terminal degree program? 24. College transfer degrees are:	Effectiveness of orientation process, admission counseling, faculty advisement in student comprehension of programs of study

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	25. Which statement best describes college transfer programs?	
	23. Students wanting to know a faculty member's office hours should:	Faculty advisement. Counselor advisement.
	43. The counseling center is open from 8:00 a.m. to 8:00 p.m.	
C. Applicant Counseling	18. For admission to Shelton State a prospective student must:	Admission requirements/ counseling. General information sources
	22. Which of the following counseling services are available to students?	
	30. Students having questions about financial aid should contact:	resource person for financial aid

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
4. Participation of students in activities that supplement classroom experiences:		
A. Co-curricular activities	59. I would contact _____ if I wanted to participate in the student newspaper.	Resource person for participation in student organization. Effectiveness of orientation process. Student handbook.
	60. I would contact _____ if I wanted to participate in the Afro-American Association.	
	61. I would contact _____ if I wanted to participate in the Shelton Singers.	
	62. I would contact _____ if I wanted to participate in intramurals.	
	63. I would contact _____ if I wanted to participate in drama production.	
	64. I would contact _____ if I wanted to participate in Student Government.	

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	66. I would contact _____ if I was interested in concerts. 67. I would contact _____ if I wanted to participate in the Alumni Association.	
B. Student Self Government	28. The student conduct code:	Effectiveness of student handbook 1) identify prohibited conduct 2) appeal procedure 3) due process
	64. I would contact _____ if I wanted to participate in Student Government.	Knowledge of resource person from student handbook
	74. The Student Life Committee provides a channel for student input into college organization and administration.	Purpose, function of student government

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
5. Regulation to provide optimal climate for social and academic development:		
A. Student Registration	37. Students may add courses up to mid-term. 68. Hours for registration are well publicized and adequate. 69. The registration process is clearly outlined. 70. Overall, I am happy with registration. 72. Course offerings for the year are publicized.	Clarity of student handbook Late registration limitations Program Evaluation
B. Academic Regulation	27. A student is enrolled in three 5-hour courses for a total of 15 quarter hours. He makes 2 B's and 1 A. What is his QPA? 31. Which statement best defines academic suspension? 32. Which of the following statements about academic probation is true?	Catalog/student handbook: defining good academic standing, probation, suspension

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	33. A student is on academic probation. He takes 15 hours and makes 2 D's and 1 B. His status is:	
	39. Probation results from a student's average falling below a 2.00.	
	40. After a quarter on probation, a student whose cumulative average falls below a 1.5 is suspended for one quarter.	
	35. Non-credit courses cost the same as credit courses.	Clarity of catalog, student handbook: course credits, audit procedures
	36. Non-credit courses may be changed to credit at any point in the quarter.	
	37. Students may add courses up to midterm.	
	38. After midterm, students receive an F in the course if they are failing and W if they are passing.	Clarity of catalog: Drop/add limitations

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	41. Credit courses are graded on an A,B,C, D, F basis. 42. Credit courses are listed in quarter hours. 46. Class attendance is required.	Course requirements: credit hours as listed by student handbook.
	45. Veterans must maintain a minimum quality point average for a given number of hours attempted.	Veteran counseling
	73. Grade protest procedures are publicized.	Academic freedom and due process
C. Social Regulation	28. The student conduct code:	Clarity of student handbook: due process, appeal procedure, and prohibited conduct
	47. Information and I.D. cards may be obtained in the Dean of Students' office.	Identification and information services traffic and parking regulations.

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	58. Parking decals allow students to park at the University of Alabama in student zones.	
6. Services that facilitate		
A. Financial aid	29. Which of the following financial aid programs is not available to students?	Financial aid programs
	44. Information concerning Veteran's benefits is available in the Financial Aid office.	Veterans' benefits counseling and advisory.
	45. Veterans must maintain a minimum quality point average for a given number of hours attempted.	
B. Placement	34. The co-operative education program provides which of the following services?	Job skills

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
	65. I would contact _____ if I was interested in the part-time job services.	Resource person identified by student handbook and orientation process
7. Organizations that provide for continuing articulation		
A. Program articulation	24. College transfer degrees are: 25. Which statement best describes college transfer programs? 48. Course transferability is publicized. 49. Courses that do not transfer are publicized. 50. Students are advised of their transfer college requirements. 51. Faculty, administrators, and counselors handle transfer questions.	Articulation with four year programs to provide transfer equivalency, publicized transfer, requirements by catalog.

Major Area: Specific Student Service	Inventory Item Related to Service	College Efforts Directed Toward Item
B. In-service Education	52. The college is well informed of new programs in transfer institutions. 53. Teaching skills and innovations are sought and encouraged.	In-service programs to facilitate teaching.
C. Program Evaluation	54. Student services are regularly evaluated. 55. Improvements and suggestions about student services are solicited from students.	Systematic evaluations and program evaluation/ improvement.
D. Administrative organizations (AAJC, 1965)	56. Divisions of students services are affiliated with their professional organizations. 57. The college is regionally accredited.	Professional organization affiliation. Continuing education/ in-service. Systematic evaluations.

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