

OPTIONAL BOARD PLANS FOR RESIDENCE HALL
STUDENTS AT SOUTHWEST MINNESOTA
STATE COLLEGE

By

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CHAPTER I

INTRODUCTION

Southwest Minnesota State College (SMSC), Marshall, Minnesota, first opened its doors to students in September, 1967 (1). It thus became the sixth school in the Minnesota State College System, and the only four-year technical and liberal arts college in that system (1). Today there are seven schools within the system, although SMSC still remains the only one which operates its own food service facilities. All seven of the state colleges are governed by the Minnesota State College Board (MSCB). This board determines the type of meal plan/plans offered and establishes the room and board rate that is to be charged. The rate set is uniform throughout the system.

Since the founding of the college, the food service has strived toward the fulfillment of the following goals (2):

1. Provide quality food which is nutritious and appealing.
2. Provide a dining environment which is conducive to social interaction.
3. Enlarge the student's eating experiences by offering a variety of types and styles of dining.
4. Provide services which will complement the programs of the college and community.
5. Establish workable public relations with the students, various departments of the college and general community.

6. Provide significant laboratory experiences in mass feeding for students majoring in Hotel, Restaurant, and Institution Management.

To help reach these goals, the food service manager conducted a survey of residence halls students in December, 1972. Until that time, only a full-board plan was being offered on all six state college campuses. (The seventh state college does not have a food service facility.) This full-board plan varied from campus to campus, but was either a "seven day (21 meal) plan" including all meals served from Monday breakfast through Sunday evening dinner, or a "seven day (20 meal) plan" including all meals served from Monday breakfast through Sunday noon (3).

At the fall board meeting in 1972, the MSCB granted each college the flexibility to offer only the full-board meal plan or to offer a combination full-board/15 meal plan. The 15 meal plan would include all meals served from Monday breakfast through Friday evening dinner. Because of this greater flexibility, several questions pertaining to optional board plans were included in the December, 1972 food service survey. The results of the survey showed that slightly over 50 percent of the residents favored the optional board plan. However, when the students actually voted on this issue, the full-board only option won by a slight majority.

The college administration decided to continue with the "full-board (20 meal) plan" at SMSC for the 1973-74 academic year. It was realized that there was a large minority of residence halls students, who, for a variety of reasons, were interested in optional board plans. It was understood at that time that more extensive research would have

to be done related to the types of meal options the students at SMSC really wanted.

In addition to establishing the meal options the students want offered at SMSC in 1974-75, this research survey includes information relevant to projecting residence halls occupancy rates for the academic term.

The main objectives of this survey were, therefore:

1. To analyze the relationship of the variables, sex, classification, and length of residency, to the meal options chosen by the respondents
2. To estimate the number of students who would be choosing each of the options
3. To determine the type of meal options which would be offered and
4. To aid the Housing Department in estimating occupancy rates in the SMSC residence halls.

CHAPTER II

REVIEW OF LITERATURE

Feeding of university students began at Oxford and Cambridge, England as early as the 12th century. At that time, students and teachers began eating their evening meals together, although they were very formal gatherings with the teachers eating on a high platform in front of the room (4). When America was being settled, similarly rigid eating patterns were established in its universities. By 1776, there was a total of ten universities in the United States, all of which had food services. These schools usually used a family style table service at meal time, and hired students as waiters. Gradually, this custom was changed to the cafeteria style of service because it was a faster and less costly system. During the transition period, many schools used both types of services. For example, in 1960, Wellesley College was still using table service for the dinner meal, and cafeteria style for breakfast and lunch.

The early philosophy of college personnel regarding food service can be summed up in the question "who came to school to eat?" (5). The pursuit of knowledge through the classroom was the primary goal of a college education. In order to attain this goal, it was believed that a strict routine must be followed regarding all aspects of college life. Little emphasis was placed on the social experiences of quality dining. Meals were prepared and eaten out of biological necessity toward the

attainment of the educational goal. The only decision the student had to make was whether he ate or starved. When Georgetown University opened its doors over 180 years ago, the daily food service routine included getting up at 5:30 a.m., eating breakfast at 7:45 a.m., lunch at 11:45 a.m., dinner at 7:00 p.m., and going to bed at 8:30 p.m. The food served to the students was described as "clean, copious, and good". A typical menu consisted of "codfish and potatoes, fried parsnips and eggs". At mealtime each student walked into the dining room in silence and in single file according to height, "the bell rang, the students sat, the food was served, the student ate or left his food, and the dinner hour was ended" (5). It was not until the late 1800's and early 1900's that greater emphasis began to be placed on nutrition, wider choice of menus, and various types of meal service (6).

One of the greatest problems facing food service directors today is trying to find the type of board plan for residence hall students which is the most economical from the standpoint of management and which gives the students the greatest flexibility and freedom (7). When college food services were first established it was thought that the contract system was best because it was more economical, guaranteed nutritionally adequate diets, and provided a simple method of handling charges. In recent years, however, students have expressed a desire to have several types of meal plans offered. Four of the main reasons are:

1. Life styles and eating habits differing from the traditional three meals per day.
2. Financial constraints.
3. Frequent week-ends spent away from the campus.

4. General lack of understanding of the missed meal factor on the "full-board" plan (8).

One of the first variable meal plans introduced was on an a la carte system combined with a minimum board plan (7). In this system, a student paid for a minimum number of meals, and was later charged for any additional meals he ate. This type of plan was not very satisfactory, however, and resulted in lower volume, poorer labor utilization, more expense in handling student accounts, and less control over the nutritional intake of the students.

A study was conducted on these two systems at Andrews University, Berrien Springs, Michigan, in 1972 (7). This school had been on the a la carte system until 1971 when it changed to the contract system. Comparisons were made on the basis of:

1. Cost to students.
2. Student evaluations of quality, quantity, and cost of the food consumed.
3. Management evaluation of similar factors.
4. Nutrient intake of the students.

It was evident from the research that the nutrient intake was higher on the contract system. However, the students preferred the a la carte system because they felt that it offered a greater variety and higher quality food at a lower total cost (7).

In addition, in 1972, Jonas (9), a graduate student at the University of Idaho, conducted a survey of 33 western colleges which offered a variety of meal plans. These plans consisted of various combinations of the 20 and the 15 meal contracts and cash options. From this survey it was determined that students wanted:

1. Lower costs.
2. More meal plan options.
3. Elimination of the mandatory room and board combinations.
4. Longer cafeteria hours.

Also from this survey, several general statements about cost and student attitudes could be made.

1. Units of 1,000 were most economical to feed. Any plan involving smaller groups was more costly.
2. Mandatory flat board rates were very unpopular.
3. Food service should be considered as part of the over-all educational process and might need to be subsidized.
4. Food service should be of service to the students.
5. Current innovations and technology could provide for any service or combination of services that might be called for.

Food service directors throughout the country have introduced a variety of meal plans in order to satisfy students. One which is fairly popular with students is the scrip plan.

The University of Missouri at Kansas City offered a scrip plan in addition to the regular board plan in 1972 (10). The scrip plan consisted of a booklet of tickets valued at \$1, 50¢, 25¢, 10¢, 5¢, and 1¢. With these tickets the students purchased, individually, the foods they ate. About 40 percent of the students opted for this plan. However, it was found to be economically unfeasible to operate both types of plans. Put to the student vote, 78 percent opted for an all-scrip plan for the 1973-74 academic year. The plan has been well-accepted, even though it takes more time to handle the scrip during meal times. The greatest

concern of the students, especially those who ate most of their meals when on the contract plan, was the reduced purchasing power they had under the scrip plan.

Another school using a type of scrip plan is Bowling Green State University, Bowling Green, Ohio (11). Under this system, students living in the residence halls are required to purchase a set amount of meal tickets. Food is priced on an a la carte basis in all food service buildings, thus enabling students to eat at several different places. If a student has more tickets than he wants, the excess can be sold to others. This system has supplied the food service with a guaranteed income, and still has given the students some flexibility in their eating habits.

A variation of the scrip plan is the "point system" which Baker (12) introduced at the State University of New York at Cortland. In this plan he first separated the fixed operating expenses from the food cost, and then averaged the food cost for each meal served. The food cost was broken down into 20 cent increments which were set as one point. A total of 10 points (or \$1.20) was assigned for each day. This was distributed as follows:

Breakfast = 40¢ = 2 points
Lunch = 60¢ = 3 points
Dinner = \$1.00 = 5 points

Therefore, to arrive at the base rate when assigning costs to the students, the fixed costs were divided by the number of students. This amount was then added to the charge for the number of meals each student wanted. (A student who wanted 40 percent of the meals received 880 points and paid \$350 for the fixed costs plus \$176, for 880 points x 20 cents, for a total of \$526.)

There was a maximum of 200 points per scrip book with no refunds given. Each book was numbered and all tickets were numbered the same as the booklet. Only the cashiers were authorized to pull the tickets from the book.

To give greater versatility, a retail price of 40 cents was given to each point and these could then be used in snack bars. However, purchases had to be made in increments of 40 cents or cash could be added to a ticket to add up to the amount of purchase. No change was given for these tickets. A person eating less than 40 cents would have to use one point. A person eating 50 cents worth of food could use one point plus 10 cents cash or two points. This gave each student the opportunity to eat at any location and to eat as many meals a day as he desired.

Another type of meal plan which offered flexibility to students was the one offered at the University of the Pacific, Stockton, California (13). At this school all students living in the residence halls were required to be on contract, but they could eat either in the residence halls dining room or in the snack bar. At the beginning of each semester each student received a book of tickets marked breakfast, lunch, or dinner for each day of the term. These books were not transferrable between students and each person had to show an I. D. when using a ticket. A cash value was given to each ticket: breakfast = \$1.00, lunch = \$1.25 and dinner = \$1.75. When using these tickets in the snack bar, purchase of food might be made up to the cash value of the coupon. Any difference in excess had to be paid in cash and no refund was made if the purchase was less.

This system was based upon the program of "free flow" set up at Brandeis University by Jeffrey (13). He developed the plan so that unprofitable operations could be closed and students would be allowed to eat in other food centers.

Advantages of the coupon system were:

1. More flexibility in the hours students could eat.
2. Menu in snack bar (hot dogs, etc.) was such that students could find something they liked if they did not like the residence hall menu.
3. In the snack bar students could share purchases with friends who were not on contract and.
4. The food service could save money by closing down small, unprofitable units.

The University of Wisconsin at Madison offered three meal plans, all on the point system (14). In this system, each meal was given a point value: breakfast = one point, lunch = two points, dinner = three points. Instead of having one ticket per meal, these points were printed on a punch-type ticket. Each of the three meal plans involved the use of 17 tickets per semester. The number of points printed on each ticket depended upon the meal plan chosen. The difference in student costs for these plans was based only on food cost, since all fixed costs were divided equally among the three plans.

The ticket was punched by the cashier when the student came to eat. Tickets could be used at anytime, in the building, for any meal--except lunch. Luncheons were eaten in assigned dorms unless there was class conflict. When eating in the snack bar each point had a cash value of 90 cents. Students had to combine tickets with cash if the purchase

went over the value of the ticket. No cash change was given.

In 1971-72, the University of Rochester offered three meal plan options to its students (15). These options were:

1. 20 meals (three meals Monday through Saturday, two meals on Sunday)
2. 13 meals a week (lunch and dinner, Monday through Saturday, and dinner on Sunday) and
3. No (0) meals.

At the beginning of the school term, 500 students signed up for the zero (no) meal plan and 2,000 for the meal plans (70 percent on 20 and 30 percent on 13). Students were allowed to drop meals at anytime, however, and by February 1, 1972, 700 had gone to zero meals. The main reason for this appeared to be to save money. However, there was more cooking in the dorm rooms, which were not equipped for this.

The plan which is now in effect required freshmen to be on board the first year, and students living in the older residence halls were also on board. Students living in the newer, better equipped dorms were permitted to use the zero option plan. Room assignments have been handled by the lottery system, except for freshmen.

To help food service, a new, variable rate structure was developed whereby those students choosing no meal plan were charged more for their rooms. Rates ranged from \$100 to \$170 and helped cover the fixed costs of food service and additional kitchen facilities in certain dorms. The philosophy related to this plan was that "a dining program is an essential part of residential life and all students were responsible for supporting the basic fixed costs of operation" (15).

In 1972 Kent State University of Ohio experimented with optional meal plans (16). This plan was offered to 900 students, charging them \$100 per 11-week term for 10 meals a week and \$150 per 11-week term for 20 meals a week. The 10-meal plan consisted of any two meals each day, Monday through Friday. The 20-meal plan consisted of three meals a day, Monday through Saturday and two meals on Sunday. The program failed, as there was not enough income to meet all expenses, and there were no additional funds available to expand it.

One of the newest concepts in board plans is the completely voluntary system in use at Georgetown University (5). Under this system, any student, living on or off campus, has the option to purchase a meal contract. The two types of meal contracts offered were the 21 meals (three meals Monday through Sunday) and the 13 meals (two meals Monday through Sunday, no lunch). Of the 2,000 boarders on the meal plans, half selected the 21 meal plan and the other half selected the 14 meal plan. Weekday participation in these meal plans averaged 95 percent and very seldom dropped below 90 percent.

Several items to be considered when going to a voluntary food service are:

1. Accessibility to competition
2. Popularity of the present operation
3. Economic requirements of the institution
4. Needs to pay off bond debts and interest and
5. Quality of management or supervision of the current operation.

During the 1972-1973 school term extensive research into residence-halls-living on the six Minnesota state college campuses was conducted by the Governor's Loaned Executive Action Program (LEAP) (17).

This task force dealt with all aspects of residence hall living. Those items related to food services were designed to help determine what type of life styles and eating habits the students had. Results were as follows:

1. 75 percent of respondents on room and board contract ate 15 food service meals or less per week
2. Breakfast was the most often missed meal by two-thirds of the students
3. Three-fourths of the students who did not eat meals at food service skipped them completely, they did not eat elsewhere
4. Main reasons for skipping meals:
 - a. meals were served too early or too late
 - b. it was inconvenient for students to be there
 - c. disliked the food (menu)
5. Majority of students on a "room-only" contract had neither opted for available limited food contracts nor desired to do so and
6. Instead of room and board contracts, students preferred room-only with access to cooking facilities or with a limited meal contract. Only 23 percent preferred full-board.

The National Association of College and University Food Services (NACUFS) (18) has stated that, "The average college has a student enrollment of 12,000 students, of whom 4,233 live on campus. It operates four dining halls, two snack bars and two miscellaneous units." In 1970, it was estimated that there were seven and one-half million students on college campuses. Dault (19), manager of the Union Building of Purdue University, estimated that there will be approximately 10 million

students and three million faculty and staff on university campuses by 1980. In order to keep the students living in residence halls happy and satisfied, food service directors have been trying a number of innovative ideas in addition to various types of meal plans. Some of these ideas were:

1. New decors
2. Health foods
3. Different types of menus in different areas of Student Unions.
4. Use of more convenience foods and
5. Extended serving hours.

According to Dault (19) the future trends in college feeding will be influenced by:

1. Apartment type residence halls with kitchen facilities or refrigerators in rooms
2. Greater reliance on commercial restaurants on the part of students
3. Menu planning to include more snack type foods and
4. Extending serving hours up to 24 hours a day.

However, many food service directors are worried about the 1974-75 academic year. Not only will food and labor costs be higher, but with the energy shortage, these managers fear greater shortages in food and supplies than was seen in 1973-74. Several ways to combat these shortages and rising costs while continuing to offer various meal plan options as desired by the students are:

1. Reduce number of employees
2. Replace equipment to boost productivity
3. Greater use of convenience foods

4. Fewer menu choices and
5. Greater use of pre-portioned meats, textured vegetable protein, and more merchandizing of salads and deserts.

Price (20), food service director at Luther College, Iowa, emphasized student input and careful planning and supervision of food and labor costs in maintaining the food service budget. Price (20) states "These procedures are essential to the operation of the food service regardless of how many or what kinds of meal plans are offered."

From the review of literature it is apparent that food service personnel tried to adapt their services to the present life-styles of students on college campuses. Over the years plans have changed from mandatory board for all students to a great variety of meal options. In the future, food services will continue to provide satisfactory meal service within the limitations presented to them.

CHAPTER III

PROCEDURE

Students living in residence halls have long been dissatisfied with the full-board plans which have been mandatory on many campuses. In order to ascertain what alternative meal plans would satisfy the majority of students at SMSC, it was decided to conduct an extensive survey pertaining to various meal plan options.

During the winter quarter of 1973-74, the Student Association, under the direction of Myrbach, SMSC research coordinator, had established a computerized telephone survey (Southwest Student Poll) by which different components of the college could research various aspects of campus life. The participants in the survey were randomly selected from the entire student body. The survey was conducted on a weekly basis and the results were published in the college newspaper the week following the actual telephoning process.

This type of survey seemed to be well accepted by the students because the process was quick and simple, and the results were easily attained. Thus, it was decided to use this research instrument to conduct a study of meal plan options. The SMSC research coordinator confirmed the author's theory that a telephone survey similar to the one used by the Student Association would be feasible.

Reasons for selecting this process were:

1. The computer program was already written and being used

Therefore, the initial problems encountered with it had been solved and

2. Responses could be obtained more quickly by telephone than by mail, because written surveys must often be followed by second or third mailings.

It was suggested that the weekly Southwest Student Poll be used to pre-test student interest in a food service survey. Therefore, a two-question pre-test was incorporated into the poll. The questions and results were published in the college newspaper on February 7, 1974 and can be found in Appendix A. This information further substantiated the idea that a computerized telephone survey could measure student interest in optional meal plans, and could be used as an indication of the type of optional meal plans students would like offered.

It was determined, with counsel by Myrbach, that from a random sample of 250 of the 812 residence halls occupants, sufficient data could be obtained for the purpose of this research. It was indicated that a maximum of 14 questions should be included in the survey and that each question could have nine possible answers. However, it was pointed out that four to five answer choices would yield the best results.

After it was determined by the responses that it would be feasible to use the computerized survey process, the author met with Larry Hunter, Vice President of Administrative Affairs, Elaine Bellew, Director of Auxiliary Services, Bryon Hotzler, Food Production Manager, and the executive board of the Inter-Residence Halls Union (IRHU) to obtain suggestions concerning the meal plan options which would be included in the survey (3). Based on the results of the pre-test and the recommendations of the LEAP report, this group suggested that the meal plan

options surveyed be as follows:

1. 20 meals - "seven-day (20 meal) plan" including all meals served from Monday breakfast though Sunday noon.
2. 13 meals - "seven-day (13 meal) plan" including two meals (lunch and dinner) per day, only, Monday though Saturday evening dinner and one meal, only, on Sunday noon.
3. 15 meals - "five-day (15 meal) plan" including all meals served from Monday breakfast though Friday evening dinner.
4. 10 meals - "five-day (10 meal) plan" including two meals (lunch and dinner) per day, only, from Monday through Friday evening dinner.

It was further suggested that these meal plans be combined into 14 different options. The completed format of the survey consisted of eleven different options and can be found in Appendix B. Estimated differences in cost between the various meal option plans were drawn from information compiled by Nicholson (21) in a 1972 study.

Further review by Bellew, Myrbach, and the author, indicated that the length of the survey and the complexity of some of the questions would make it difficult to retain the participants' attention and interest. Bellew suggested that a copy of the survey with a cover letter explaining the purpose of the survey should be sent in advance to each participant to help alleviate these problems. A copy of the cover letter can be found in Appendix C. Also, it was suggested that an instruction sheet be written so that each telephone caller would follow the same procedures. This sheet can be found in Appendix D. When the participants were being randomly selected by computer, mailing labels

were simultaneously being printed. The use of these mailing labels speeded up the addressing process.

The Auxiliary Services Committee of IRHU (consisting of five members) was designated by the IRHU executive board to assist in making the telephone calls. The instruction sheet and an introduction sheet were prepared, and the author met with each caller individually to discuss the outlined procedure. The introduction sheet can be found in Appendix

E. Each caller received a packet containing:

1. One instruction sheet
2. One introduction sheet
3. A copy of the Meal Option Survey and the cover letter
4. IBM answer cards (Appendix F)
5. An IBM pencil
6. Paper clips and
7. An IBM print-out sheet pertaining to the students assigned to them with the following information:
 - a. name
 - b. address
 - c. telephone number
 - d. sex
 - e. classification.

The addressed questionnaires and the cover letters were hand delivered to 250 student mailboxes on Tuesday, February 19, 1974. The students were called by the Auxiliary Services Committee members on Wednesday, February 20 and Thursday, February 21. The entire packets with the completed IBM cards were returned to the author on Friday, February 22. The IBM cards were taken to the College Computer Center on

the morning of Tuesday, February 26, and the results were received that afternoon. The X^2 one sample test was used to determine the significance of these results (22).

CHAPTER IV

RESULTS AND DISCUSSION

The objectives of this research were:

1. To analyze the relationship of the variables, sex, classification, and length of residence, to the meal options chosen by the respondents
2. To estimate the number of students who would be choosing each of the options
3. To determine the type of meal options which would be offered and
4. To aid the Housing Department in estimating occupancy rates in the SMSC residence halls.

Decreasing occupancy rates in college and university residence halls have made it necessary for administrative personnel to review the types of housing and food service contracts offered on their campuses. Students have asked for meal plans which are more flexible and which fit into their various life styles better than the standard 20-21 meal plan. The MSCB granted each of the Minnesota state colleges the option of offering either a straight 20-21 meal plan or a combination 20-21/15 meal plan for the 1973-74 academic year. This led to the belief that, with the success of the program, more meal options could be offered for the 1974-75 year. To help determine which meal options would be acceptable to the students at SMSC, the author conducted a survey of 250 students living in residence halls in February, 1974. Four meal-option

plans were considered in this survey. They were the 20, the 13, the 15, and the 10 meal plans described on page 18.

Of the 250 surveys distributed, 168 responses were received.

Reasons for this were:

1. The telephone callers were not able to reach all the students
2. Some students did not want to answer the questions
3. Some students did not understand the questions and
4. Some students were not returning to SMSC in the fall and did not feel that they should answer the questions.

The 168 respondents to the survey were categorized and compared as to sex, classification, and the number of quarters each had lived in the residence halls. This resulted in the following breakdown:

1. Sex:
 - a. 83 males
 - b. 85 females
2. Classification:
 - a. 79 freshman
 - b. 46 sophomore
 - c. 23 junior
 - d. 20 senior
3. Quarters lived in residence halls:
 - a. 86 - 1 to 3 quarters (equivalent to freshman)
 - b. 50 - 4 to 6 quarters (equivalent to sophomore)
 - c. 32 - 7 to 12 quarters (equivalent to junior or senior)

In comparing each group of responses with the overall responses, very few differences were found. The relationship with the 14 questions of the survey (Appendix B) has been noted on each table.

Analysis of the overall results of this survey indicated that the students at SMSC would be satisfied with a two-option meal plan consisting of a choice between 20 and 15 meals per week. Sixty-five percent (110) of the respondents chose a two-option plan (Table I), and 46 percent (77) indicated that the two options desired were the 20 and 15 meals per week (Table II). This trend was seen in all three of the categories (sex, classification, and quarters lived in residence halls) except that the junior classification preferred a 20-13 meal plan. The 20-13 option received 38 percent (63) of the responses as the two-option meal plan which should be incorporated into the 1974-75 academic year.

TABLE I
RESPONSES TO QUESTION TWO--MEAL-OPTION
PLAN CHOICES BY NUMBER

Categories	Answer Choices				Undecided
	Only 1 Meal Option	Choice Between 2 Options	Choice Between 3 Options	Choice Between 4 Options	
Male	14	57	7	4	1
Female	13	53	15	3	1
Freshman	11	53	8	6	1
Sophomore	13	31	1	0	1
Junior	2	15	5	1	0
Senior	1	11	8	0	0
1-3 Quarters	11	59	9	6	1
4-6 Quarters	12	34	3	0	1
7-12 Quarters	4	17	10	1	0
Total of Each Category	27	110	22	7	2

TABLE II
 RESPONSES TO QUESTION FOUR--CHOICES BETWEEN TWO-OPTION
 MEAL PLAN COMBINATIONS BY NUMBER

Categories	Answer Choices			
	20-15	20-13	20-10	Undecided
Male	35	31	16	1
Female	42	32	10	1
Freshman	38	28	12	1
Sophomore	22	18	6	0
Junior	6	12	5	0
Senior	11	5	3	1
1-3 Quarters	43	30	12	1
4-6 Quarters	22	20	7	1
7-12 Quarters	12	13	7	0
Total of Each Category	77	63	26	2

In answer to question six (Table III), a choice between 20 and 15 meal plans, the overall response indicated that more students would choose the 15-meal option than the 20-meal option. However, looked at individually, males, sophomores, and seniors chose the 20-meal plan. When given a choice between 20 meals and 13 meals (Table IV), the overall response indicated that more students would choose the 20-meal plan.

Given a choice between 20, 15, or 10 meals per week (Table V), the overall response indicated a choice of the 20-meal option, but juniors and seniors indicated their preference to be the 15-meal option. The junior and sophomore responses differed from the overall response in question 10 (Table VI) indicating that they preferred the 13-meal option to the 20-meal option in the 20, 13, or 10 meal plan. The overall

TABLE III
 RESPONSES TO QUESTION SIX--CHOICE BETWEEN
 20-MEAL AND 15-MEAL PLANS BY NUMBER

Categories	Answer Choices		
	20 Meals	15 Meals	Undecided
Male	41	40	2
Female	40	45	0
Freshman	38	41	0
Sophomore	26	18	2
Junior	5	18	0
Senior	12	8	0
1-3 Quarters	43	43	0
4-6 Quarters	26	22	2
7-12 Quarters	12	20	0
Total of Each Category	81	85	2

TABLE IV
 RESPONSES TO QUESTION SEVEN--CHOICE BETWEEN
 20-MEAL AND 13-MEAL PLANS BY NUMBER

Categories	Answer Choices		
	20 Meals	13 Meals	Undecided
Male	35	44	4
Female	49	34	2
Freshman	41	37	1
Sophomore	25	17	4
Junior	5	17	1
Senior	13	7	0
1-3 Quarters	43	41	2
4-6 Quarters	28	18	4
7-12 Quarters	13	19	0
Total of Each Category	84	78	6

TABLE V
 RESPONSES TO QUESTION NINE--CHOICES BETWEEN
 20-, 15-, OR 10-MEAL PLANS BY NUMBER

Categories	Answer Choices			
	20 Meals	15 Meals	10 Meals	Undecided
Male	29	29	24	1
Female	35	34	15	1
Freshman	32	28	19	0
Sophomore	18	16	11	1
Junior	7	10	6	0
Senior	7	9	3	1
1-3 Quarters	35	33	18	0
4-6 Quarters	19	17	12	2
7-12 Quarters	10	13	9	0
Total of Each Category	64	63	39	2

TABLE VI
 RESPONSES TO QUESTION TEN--CHOICES BETWEEN
 20-, 13-, OR 10-MEAL PLANS BY NUMBER

Categories	Answer Choices			
	20 Meals	13 Meals	10 Meals	Undecided
Male	30	29	22	2
Female	38	31	13	3
Freshman	37	20	21	1
Sophomore	16	24	4	2
Junior	6	10	6	1
Senior	9	6	4	1
1-3 Quarters	38	26	21	1
4-6 Quarters	19	22	6	3
7-12 Quarters	11	12	8	1
Total of Each Category	68	60	35	5

response to that question indicated that the 20-meal option was favored.

More individual differences were found in answering question 12 (Table VII) than any other question. When given a choice between 20, 15, 13, or 10 meals per week, the overall response indicated that the 20-meal option was most popular, followed by the 15-, the 13-, and the 10-meal options. However, the male response indicated that 13 meals per week was their choice, followed by the 20-, the 15-, and the 10-meal options. The freshmen chose the 20-meal option followed by the 13-, 10-, and the 15-meal options. Juniors chose the 15-meal option followed by the 13-, the 20-, and the 10-meal options. Seniors chose the 15-meal option followed by the 20-, the 13-, and the 10-meal options.

There were no distinct trends found between the responses by classification of students and the responses related to the number of quarters a student had lived in the residence halls. Any differences can be noted upon study of the various tables.

In determining which combination of meal plans to offer, 74 (44 percent) of the students surveyed indicated that if only one meal plan was offered, it should continue to be the 20 meal per week plan (Table VIII). If a two-option meal plan was offered, 77 (46 percent) wanted the 20-15 meal plan (Table II). If a three-option meal plan was offered, 76 (45 percent) chose the 20-15-13 meal plan (Table IX). And, if a four-option meal plan was adopted, it would consist of the 20-15-13-10 meal plans (Table VII).

When estimating the participation in each of these plans, if only the 20-meal plan should be offered in 1974-75, the estimated rate of

TABLE VII
 RESPONSES TO QUESTION TWELVE--CHOICES BETWEEN
 20-, 15-, 13-, OR 10-MEAL PLANS BY NUMBER

Categories	Answer Choices				
	20 Meals	15 Meals	13 Meals	10 Meals	Undecided
Male	24	17	26	14	2
Female	30	27	15	13	0
Freshman	28	16	18	17	0
Sophomore	16	12	12	5	1
Junior	4	8	7	4	0
Senior	6	8	4	1	1
1-3 Quarters	29	19	20	18	0
4-6 Quarters	18	14	12	4	2
7-12 Quarters	7	11	9	5	0
Total of Each Category	54	44	41	27	2

TABLE VIII
 RESPONSES TO QUESTION THREE--CHOICE OF
 ONE-MEAL PLAN BY NUMBER

Categories	Answer Choices				
	20 Meals	15 Meals	13 Meals	10 Meals	Undecided
Male	35	14	22	10	2
Female	39	10	26	9	1
Freshman	36	13	21	9	0
Sophomore	23	5	14	3	1
Junior	6	4	8	4	1
Senior	9	2	5	3	1
1-3 Quarters	40	12	25	9	0
4-6 Quarters	23	7	16	2	2
7-12 Quarters	11	5	7	8	1
Total of Each Category	74	24	48	19	3

participation of students living in residence halls would be 100 percent. If the two-option, 20-15 meal plan would be offered, 48 percent of the students surveyed indicated that they would choose the 20-meal option, and 51 percent indicated that they would choose the 15-meal option (Table X). If the three-option, 20-15-13 meal plan would be offered, 29 percent of the residents would choose the 20-meal option, 40 percent the 15-meal option, and 29 percent the 13-meal option. On the other hand if the four-option, 20-15-13-10 meal plan should be offered, 32 percent of the respondents indicated that they would participate in the 20-meal plan, 26 percent in the 15-meal plan, 24 percent in the 13-meal plan, and 16 percent in the 10-meal plan.

TABLE IX

RESPONSES TO QUESTION FIVE--CHOICES BETWEEN THREE-OPTION
MEAL PLAN COMBINATIONS BY NUMBER

Categories	Answer Choices			
	20-15-10	20-13-10	20-15-13	Undecided
Male	16	28	37	2
Female	23	21	39	2
Freshman	16	24	38	1
Sophomore	10	15	19	2
Junior	5	7	10	1
Senior	8	3	9	0
1-3 Quarters	20	27	38	1
4-6 Quarters	9	16	23	2
7-12 Quarters	10	6	15	1
Total of Each Category	39	49	76	4

TABLE X
 PERCENTAGE OF STUDENTS CHOOSING EACH OPTION

Meal Plan	Meal Options				
	20	15	13	10	Undecided
20-15	48	51			1
20-13	50		46		4
20-10	66			33	1
20-15-10	38	38		23	1
20-13-10	40		36	21	3
20-15-13	29	40	29		2
20-15-13-10	32	26	24	16	2

In projecting residence halls occupancy for the 1974-75 academic year, 82 (49 percent) of the students surveyed indicated that they would be returning, 37 (22 percent) were not sure of their plans, and 49 (29 percent) were definitely not going to live in residence halls next year (Table XI). These results were given to the housing officer at SMSC. The author does not know how much emphasis was placed on these percentages when the actual housing projection of 696 residents was made. However, based upon the estimated residence halls occupancy of 696 for the fall quarter of 1974-75, the number of students projected to participate in each meal option can be found in Table XII.

The overall results to each question on the survey were tested for significance by the X^2 one sample test. All the results proved to be significant (Table XIII) except those from questions six (Table III), seven (Table IV), and 11 (Table XIV). Question 14 (Table XV)

TABLE XI
 RESPONDENTS INDICATING RESIDENCE HALL
 OCCUPANCY IN 1974-75 BY NUMBER

Categories	Answer Choices		
	Yes	No	Undecided
Male	38	28	17
Female	44	21	20
Freshman	49	11	19
Sophomore	21	13	12
Junior	9	10	4
Senior	3	15	2
1-3 Quarters	54	14	18
4-6 Quarters	19	14	17
7-12 Quarters	9	21	2
Total of Each Category	82	49	37

TABLE XII
 NUMBER OF STUDENTS PROJECTED TO PARTICIPATE
 IN MEAL OPTIONS BY NUMBER

Categories	Meal Options				Undecided
	20	15	13	10	
20-15	334	355			7
20-13	348		320		28
20-10	459			230	7
20-15-10	264	264		161	7
20-13-10	278		251	146	21
20-15-10	202	278	202		14
20-15-13-10	223	181	167	111	14

TABLE XIII

χ^2 SIGNIFICANT VALUES APPLIED TO THE
RESULTS OF THE SURVEY QUESTIONS

Question	Degrees of Freedom	χ^2 Value	Significant Value
1	2	19.3928	.001
2	3	155.9759	.001
3	3	46.3212	.001
4	2	25.0963	.001
5	2	14.0736	.001
6	1	.0963	N.S.
7	1	.2222	N.S.
8	1	18.1137	.001
9	2	7.2409	.01
10	2	10.9079	.01
11	2	4.6181	N.S.
12	3	9.0848	.05
13	1	110.8395	.001
14	Insufficient data to compute significance		

TABLE XIV

RESPONSES TO QUESTION ELEVEN--CHOICES BETWEEN
~~15~~ OR ~~13~~ MEAL PLANS BY NUMBER

Categories	Answer Choices			
	20 Meals	15 Meals	13 Meals	Undecided
Male	22	32	26	3
Female	26	36	23	0
Freshman	26	29	24	0
Sophomore	15	17	13	1
Junior	2	11	9	1
Senior	5	11	3	1
1-3 Quarters	29	31	26	0
4-6 Quarters	14	22	12	2
7-12 Quarters	5	15	11	1
Total	48	68	49	3

was not tested for significance because of insufficient data. The results and the values used to determine significance can be found in Table XVI. Responses to question 13 (Table XVII), personal opinions, were significant and positive.

TABLE XV
RESPONSES TO QUESTION FOURTEEN--IF QUESTION
THIRTEEN WAS ANSWERED "NO" BY NUMBER

Categories	15-13-10	15-13	15-10	13-10	Undecided or Answered Yes to 13
Male	4	2	0	0	77
Female	3	2	0	1	79
Freshman	4	1	0	0	74
Sophomore	2	0	0	0	44
Junior	0	1	0	0	22
Senior	1	2	0	1	16
1-3 Quarters	6	1	0	1	78
4-6 Quarters	1	1	0	0	48
7-12 Quarters	0	2	0	0	30
Total of Each Category	7	4	0	1	156

Responses to question eight (Table XVIII) indicated the choice of the 20-meal plan over the 10-meal plan. This was true of both males and females and by all classifications, even though the 10-meal plan was to cost 14 percent less.

TABLE XVI
 χ^2 SIGNIFICANT VALUES

Degrees of Freedom	Degrees of Significance		
	.001*	.01	.05
1	10.83	6.64	3.84
2	13.82	9.21	5.99
3	16.29	11.34	7.82

*Values with the highest degree of significance.

TABLE XVII
 RESPONSES TO QUESTION THIRTEEN--OPINION
 IN RELATION TO MEAL PLANS BY NUMBER

Categories	Answer Choices		
	Yes	No	Undecided
Male	73	6	4
Female	75	8	2
Freshman	70	8	1
Sophomore	43	1	2
Junior	21	1	1
Senior	14	4	2
1-3 Quarters	75	10	1
4-6 Quarters	46	1	3
7-12 Quarters	27	3	2
Total of Each Category	148	14	6

TABLE XVIII
 RESPONSES TO QUESTION EIGHT--CHOICE BETWEEN 20-MEAL AND
 10-MEAL PLANS BY NUMBER

Categories	Answer Choices		
	20 Meals	10 Meals	Undecided
Male	50	32	1
Female	61	24	0
Freshman	51	28	0
Sophomore	30	15	1
Junior	15	8	0
Senior	15	5	0
1-3 Quarters	56	30	0
4-6 Quarters	35	14	1
7-12 Quarters	20	12	0
Total of Each Category	111	56	1

CHAPTER V

SUMMARY AND CONCLUSIONS

Many students living in residence halls on college and university campuses have indicated that they would like more variety and flexibility in the types of meal plans offered to them. To help the SMSC administration and the MSCB determine what type of meal option plans would satisfy the students at SMSC, the author conducted a survey concerned with the following meal options:

1. 7 day (20 meal) plan
2. 7 day (13 meal) plan
3. 5 day (15 meal) plan
4. 5 day (10 meal) plan

The objectives of the survey were to determine the type of meal options which should be offered at SMSC, to estimate the number of students who would choose each option, and to aid in estimating occupancy rates in the residence halls for the 1974-75 academic year.

Questionnaires were sent to 250 randomly selected students. Answers to the survey were received by telephone contact from 168 students.

The results of the survey indicated that 49 percent of the residents would be returning in 1974-75, 37 percent would not be returning, and 29 percent were undecided. The survey results further indicated that the students at SMSC would be satisfied with a two-option meal

plan consisting of a choice between 20 and 15 meals per week. Based upon the residence halls occupancy projection of 696 residents for the 1974-75 academic year, if the 20-15 meal plan option was offered, 334 (48 percent) would choose the 20-meal option, 355 (51 percent) would choose the 15-meal option, and seven (one percent) would be undecided.

The X^2 one sample test was used to determine the significance of the overall responses. Results from questions one, two, three, four, five, eight and thirteen were significant to the .001 degree. Results from questions nine and ten were significant to the .01 degree. Results from question 12 were significant to the .05 degree. Results from questions six, seven, and eleven were not significant. Insufficient data was available to determine the statistical significance of responses to question 14. Significant values of X^2 established the validity of those responses from which they were received.

If the two-option meal plan should be offered for the 1974-75 academic year, it would be interesting to see how closely the projections concur with actualities. The use of the telephone survey presented a point of personal contact that produced 67 percent response. The use of the computer simplified the categorizing and analyzing of results.

BIBLIOGRAPHY

1. Southwest Minnesota State College Information Bulletin - 1972-1973.
2. Bancroft, Frank and Elaine Bellew: Specifications and Conditions for Operating the Food Services at the Six Minnesota State Colleges, March, 1974.
3. Bellew, Elaine and John D. Welty: Implementation of the SCB Housing Task Force and LEAP Recommendations at Southwest Minnesota State College. Status Report. February 5, 1974.
4. Stokes, John W.: Food Service in Industry and Institutions. Dubuque, Iowa: William C. Brown Company. 1960.
5. Raposa, William E.: Voluntary food service: a success story. College Services Administration. 1:1, September, 1973.
6. Bryan, Mary de Garmo: The School Cafeteria. New York: F. S. Crofts and Company, 1943.
7. Chilson, Bennett D. and Marie E. Knickrehm: Students prefer a la carte system for cost, quality, and flexibility. College and University Business. 53:3, 1972.
8. Bellew, Elaine and John Welty: Implementation of the LEAP Report. 1973.
9. Colleges answer the call for broader services. Institutions/Volume Feeding. 71:4, August 15, 1972.
10. Erdis, Wayne: The University of Missouri - Kansas City scrip meal plan. ACUHO News. 12:3, November-December, 1973.
11. Milliron, A. I.: Birthday cakes, steaks and coupons help students enjoy board contracts. College and University Business. 54:5, May, 1973.
12. Baker, Merrill: Making points with students. College Services Administration. 1:1, September, 1973.
13. Fairbrook, Paul: Food management: new meal plan lets students take a ticket to lunch, brunch, or munch. College and University Business. 52:5, May, 1972.

14. Wisconsin New Flexible Meal Plan. *Cooking for Profit*, Number 236, August, 1970.
15. Scott, H. D.: How the University of Rochester solved its dining problems. *College Services Administration*. 1:1, September, 1973.
16. College goes commercial. *Institutions/Volume Feeding*. 71:4, August 15, 1972.
17. LEAP Higher Education Task Force Report, August, 1973.
18. NACUFS issues college profile. *School Food Service Journal*. 28:3, March, 1974.
19. Trends in college and university food service. *Cooking for Profit*, Number 236, August, 1970.
20. The Cornell Hotel and Restaurant Administration Quarterly. 12:1, May, 1972.
21. Nicholson, Ellen: Contract meal plan survey. *Contract Meal Plan Service: ACUHO Research and Information Committee*. May, 1972.
22. Siegel, Sidney: *Nonparametric Statistics for the Behavioral Sciences*. New York: McGraw-Hill Book Company, Inc., 1956.

APPENDIX A

RESULTS OF SOUTHWEST STUDENT POLL

The following article appeared in Impact, February 7, 1974, page 3.

Southwest students this week feel that they would like to continue the present 20 meal plan per week as they have it now. However, if a meal were to be cut out, the meal preferred to be eliminated would be breakfast. 42 percent of the students preferred it eliminated to five percent for lunch and two percent for dinner. 20 percent of the students preferred all weekend meals to be dropped.

1. If optional board plans were offered to residence hall students next fall, which plan would you choose?

	<u>Percent</u>									
	Overall	Male	Female	Freshmen	Sophomores	Juniors	Seniors	On-campus	Villages	Off-campus
1. 20 meals (3 meals Mon. through Sat.- 2 meals Sun.)	34	37	31	39	29	19	48	42	20	27
2. 15 meals (3 meals Mon. through Sat.)	18	19	15	27	25	5	0	24	13	8
3. 10 meals (2 meals Mon. through Sat.)	19	16	23	18	18	29	14	23	20	14
4. 0 meals	4	3	4	2	0	14	0	3	0	5
0. No comment	25	24	27	14	29	33	38	8	47	46

2. If you could eliminate some meals from the present 20-meal plans, which meals would they be?

1. Weekend meals	20	18	23	18	21	10	33	24	13	16
2. Breakfast	42	37	48	57	36	48	24	52	27	32
3. Lunch	5	6	4	7	4	10	0	5	7	5
4. Dinner	2	2	2	2	0	5	0	2	0	3
0. No comment	31	37	23	20	39	39	43	18	53	43

APPENDIX B

MEAL OPTION SURVEY

Section II

1. Are you planning on living in the residence halls next year?

1. Yes
2. No
3. Undecided

2. Which of the following meal option plans would you prefer to have offered to residence hall students next year realizing that with each additional option, the cost per option could rise approximately two percent? (Example: the 20-meal option on a two-option plan--such as a 20-15--could cost approximately two percent more than the 20 meals on a one-only option plan.)

1. Only one meal option
2. A choice between two meal plans
3. A choice between three meal plans
4. A choice between four meal plans

3. If only one meal plan were available, which would you prefer?

1. 20 meals per week--three Monday through Saturday, two on Sunday
2. 15 meals per week--three Monday through Friday
3. 13 meals per week--two Monday through Saturday, one on Sunday
4. 10 meals per week--two Monday through Friday (any 10)

4. If a two-option meal plan were offered, which combination of plans would you favor?

1. 20-15
2. 20-13
3. 20-10

5. If a three-option meal plan was offered, which combination of plans would you favor?

1. 20-15-10
2. 20-13-10
3. 20-15-13

6. If a 20-15 meal plan was offered, and the 15-meal option cost approximately 10 to 12 percent less than the 20, which would you choose?

1. 20 meals
2. 15 meals

7. If a 20-13 meal plan was offered, and the 13-meal option cost approximately seven percent less than the 20, which would you choose?

1. 20 meals
2. 13 meals

8. If a 20-10 meal plan was offered, and the 10-meal option cost approximately 14 percent less than the 20, which would you choose?

1. 20 meals
2. 10 meals

9. If a 20-15-10 meal plan was offered, and the 15-meal option cost approximately 10 to 12 percent less than the 20, and the 10-meal option was 15 to 18 percent less than the 20, which would you choose?

1. 20 meals
2. 15 meals
3. 10 meals

10. If a 20-13-10 meal plan was offered, and the 13-meal option cost approximately seven percent less than the 20, and the 10-meal option was 15 to 18 percent less than the 20, which would you choose?

1. 20 meals
2. 13 meals
3. 10 meals

11. If a 20-15-13 meal plan was offered, and the 15-meal option cost approximately 10 to 12 percent less than the 20, and the 13-meal

option was seven percent less than the 20, which would you choose?

1. 20 meals
2. 15 meals
3. 13 meals

12. If a four-meal option plan was offered, and the 15-meal plan cost approximately 10 to 12 percent less than the 20, and the 13-meal plan was seven percent less than the 20, and the 10-meal plan was 15 to 18 percent less than the 20, which would you choose?

1. 20 meals
2. 15 meals
3. 13 meals
4. 10 meals

13. Do you feel that the selection of meal plans mentioned above would satisfy the majority of residence halls students?

1. Yes
2. No

14. If the answer to question 13 is "No", which of the following combinations of meal options would you favor?

1. 15-13-10
2. 15-13
3. 15-10
4. 13-10

APPENDIX C

COVER LETTER

To: Students Residing in Residence Halls

Survey for Meal Plan Options

In order to make plans and to set prices for housing and food service accommodations to be offered to students on the six state college campuses for the academic year 1974-75, the State College Board has asked that each college submit recommendations concerning the type of meal plan options that would best fit the needs of students.

A telephone survey of students living in the residence halls will be conducted on Wednesday, February 20, and Thursday, February 21. You have been randomly selected to participate in a computerized survey concerning the meal plan option(s) that will be offered at Southwest next year. If you wish to participate in this process, please read, carefully, the attached questionnaire and have your answers ready when a member of the Auxiliary Services Committee of IRHU calls you on Wednesday or Thursday of this week.

Remember: This is your chance to help decide which meal plan option(s) will be offered at SMSC next year.

APPENDIX D

INSTRUCTIONS FOR CONDUCTING A TELEPHONE MEAL PLAN OPTION SURVEY

This survey will be conducted on 250 residence halls students. They have been randomly selected and only the people whose names are on the print-out sheet should be asked the questions. I have written a short introduction which should be read to each person called. If the person called does not wish to participate, thank them for listening and go on to the next name on the list. DO NOT COAX THEM TO PARTICIPATE.

Each participant will involve the use of two IBM cards. You have two sample cards to refer to when calling. These cards must be marked in ink in the top right-hand corner as to person and card number.

Example: 1-1 (Person 1 - Card 1)
 1-2 (Person 1 - Card 2)
 2-1 (Person 2 - Card 1)
 2-2 (Person 2 - Card 2)

You also have a list of the names you are to call and the number sequence you are to begin with (such as Person 48 - Card 1). All of the rest of the card must be filled out in IBM pencil. Your sample cards have been marked off into three (3) sections.

Section I

The first three columns of each card will be filled out the same for each person. You can get the information for columns one and two from the name print-out sheet.

1. Sex - 0 - Female
1 - Male
2. Classification - 0 - Freshman
1 - Sophomore
2 - Junior
3 - Senior

The answer to column three of Section I must be asked. This will be the first question you actually ask the person. It is found on your telephone introduction sheet.

Section II

Section II of each card consists of the next seven columns (actually columns four through ten of the card). These are the only other columns that are to be filled in. Therefore, questions one through seven will be answered on card one, and questions 8 through 14 will be answered on card two. In filling out the cards, the answer number for each question corresponds to the number blank on the card. At no time will the 0 response be used in this section. If the person being called does not wish to answer a particular question, leave a blank and go on to the next question and the next answer column of the card.

Section III

Section III consists of the next 17 columns of the card (actually columns 11 through 27 of the card). These columns are to remain blank. The computer which will be analyzing the information on these cards is not programmed to accept information in these columns.

Upon completing the questionnaire with each student, please paper clip the two cards together, and check off on the print-out sheet the person's name who was called. When all the people on your list have been called, and the cards filled out, please return the cards, the name print-out sheet, and the IBM pencil to the Information Desk in the Student Center.

Any questions?

- Be sure to take your time and be accurate.

APPENDIX E

INTRODUCTION SHEET

Good morning (afternoon, evening). This is _____
calling. I am a member of the Auxiliary Services Committee of IRHU and
am calling in regard to the Meal Option Survey you received in your
mailbox on Tuesday. Your name has been randomly selected, and will not
be used in the survey results. Are you willing to answer the survey
questions?

The first question I will ask is a preliminary one, and is not
on your copy of the questionnaire:

1. How many quarters have you lived in the residence halls?

0. 1 to 3

1. 4 to 6

2. 7 to 12

(Remember: This question is actually the third column on each card--
Section I.)

APPENDIX F

IBM CARDS

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Section I	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Section II	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Section III	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Section I	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Section II	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
Section III	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9

VITA 1

Patricia Lynn Breider

Candidate for the Degree of

Master of Science

Thesis: OPTIONAL BOARD PLANS FOR RESIDENCE HALL STUDENTS AT SOUTHWEST
MINNESOTA STATE COLLEGE

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