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Medical education at the University of Nebraska : an evaluation by students and recent graduate

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MEDICAL EDUCATION AT THE UNIVERSITY OF NEBRASKA.:
AN EVALUATION BY STUDENTS AND RECENT GRADUATES

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and
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Submitted in Partial Fulfillment tor the Degree of
Doctor of Medicine

College of Medicine, University of Nebraska

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Omaha,

Nebraska

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This senior thesis was designed to be a "consumers' report" on medical education at the University of Nebraska. We--the authors--have tried to systematically survey present students and recent past graduates of this College of Medicine for their opinions on many facets of their education. The survey was conducted by means of a questionnaire composed mostly of multiple-choice items, a few open-ended questions--and with plenty of space for comments. Some 600 of these questionnaires were mailed in November, 1965, to medical school sophomores, juniors, seniors, and the immediate past five graduating classes. Of these, approximately 62% were returned in time to be included in this report.

As the reader will soon see, our paper presents a massive amount of data. Why did we go to the trouble of collecting it, and of what significance can it possibly be? The answer to the first question is deceptively simple: We were concerned about the quality of our education. Our concern is not unique to us, not limited to this school, not confined to medicine. The quality of education looms as a prickly topic throughout the nation today. Titles such as "Once the Professor Was a Teacher,"¹ "The Flight From Teaching,"² and "Is There a Teacher on the Faculty?"³ are disturbingly common.

Most such articles are written by professional journalists; some are products of professional educators. Yet the group with the most at stake and those in the best position to evaluate many deficiencies and virtues of higher education are the students themselves. Unfortunately, students are seldom consulted in formal evaluations of curriculum, teaching methods, professors, or even general educational policy. We know for a fact that many students are deeply interested in their education; we are certain that many have thoughtful and constructive opinions about their education; and we feel certain that such opinions can be useful in improving education. This whole thesis is dedicated to these three propositions.

We are aware that some people believe "students are not fit to evaluate their education." We cannot accept such a view. The authors of this paper together have had over 40 years of schooling in more than a half-dozen different states. We have been taught by incredibly exciting and stimulating instructors and by some so inept and boring that it seems unfair to label them "teachers." We purport to be able to differentiate between these two species of academician. More than that, we maintain that the majority of students can make such a differentiation. And most important, students in

general have some insight into why one instructor is effective and another is not, why one course makes learning easy and another does not.

This thesis attempts to describe and catalogue many of the feelings and opinions held by students and graduates of our College of Medicine. Our own private views have admittedly shaped the questionnaire which forms the basis for this paper, but we have tried to deal with the responses to the questionnaire as honestly and as objectively as we could. We hope the reader will find the results thought-provoking and useful in making medical education at the University of Nebraska the finest available anywhere.

METHOD

Once we had decided to sample student opinions, the choice of the questionnaire approach followed rather easily. We needed a method in which responses could be objectively evaluated. We wanted to probe a wide variety of problems and yet be able to conveniently collate the data. And we wished to be able to assure the respondents anonymity. Though the questionnaire offers such advantages, it also has some very real deficiencies. The first problem to confront us was that we were limited in the number of questions we could ask: the longer the questionnaire, the less likely someone would take the trouble to fill it out and return it. Consequently, our survey had to remain quite general and superficial in perspective; there simply was not enough room to investigate very many areas very thoroughly. Another problem we encountered is inherent in the multiple-choice type of question which dominates our survey. The respondent is often placed in a position where the answers provided to a question do not adequately describe his opinions. We tried to balance this drawback by 1) urging our respondents that "If you feel you cannot answer a question honestly with the choices provided, DO NOT ANSWER AT ALL;" and 2)

exercising considerable restraint in interpreting our data. The reader should keep these points in mind when he reviews the results and conclusions later on in this paper. On the whole, however, we feel that the questionnaire approach is quite adequate for our purposes.

The questionnaire itself (see sample in Appendix I) contains some 68 items and can be divided into two more or less distinct parts. The first 51 items probe many aspects of the educational process, some readily identifiable and some rather subtle. These include student-faculty relationships, student-administration relationships, students' feelings toward fellow students, students' views of various teaching departments, and the perceived merits of various teaching devices. The responses to these first 51 items are all graded from relative satisfaction to relative dissatisfaction.

The last 17 items hopefully are dissociated from the question of degrees of satisfaction. Instead these items investigate characteristics of the respondents, their views of the strengths and deficiencies of the curricula, and their suggestions for improving medical education. Several of these questions are directed only to respondents who have already graduated from medical school.

The entire questionnaire, complete with an introductory letter and space for comments, filled both sides of each of three $8\frac{1}{2}$ x 11" sheets of paper. The printing was performed with the cooperation and technical advice of the University of Nebraska Printing Shop in Lincoln. On November 1, 1965, each member of the classes of 1961 through 1968 was mailed the questionnaire--together with a stamped, addressed return envelope. All completed questionnaires were returned to a special box in the College of Medicine mail room.

RESULTS

We collected the returned questionnaires until December 15, 1965, approximately six weeks after we had mailed them. Then the bulk of the responses were transposed to computer cards--one card per questionnaire--so that an IBM 1620 could collate the data for us. In all, 372 questionnaires (62%) were returned, with roughly similar percentages being returned from present students and past graduates.

Recording the data in this study has been relatively straightforward and, in general, requires little comment. Responses were simply transposed from the questionnaires to punch cards and then fed into the computer. Whenever the response to a particular item was questionable (e.g., when an "X" was on a line dividing two boxes rather than in an answer-box itself), the response was not punched onto the computer card. The data which follows, therefore, represents clearly legible, unequivocal selections on each item.

By using the computer, together with a simple sorting system of our own, we were able to divide the respondents into several useful categories. These will be discussed individually later. Unfortunately, the computer was able to record only one choice per card

for each question. Consequently, in some of the last 17 questions where respondents could each make several choices, many of the responses had to be tallied by hand--our hands, that is. We will refer to this point again when it becomes pertinent.

The main body of our data is composed of the 68 questions in sequence and, following each, lists of the response distribution by year of graduation and by total number of respondents. Below each list, we inserted an editorial comment. Please do not invest these comments with undue significance. They are not meant to be highly analytical evaluations of data, and they certainly are not conclusions. Their only intended value is to serve as a travelogue to guide the reader through what otherwise might be page after page of dry and imponderable numbers. We try to point out items which interest us and which might interest the reader.

We also use these editorial comments to refer to data which do not appear in this section of our paper. In the appendices, we have listed the responses to the questionnaire by career choice, by location of past training other than medical school, by whether or not the respondent is a practicing physician, and--if the respondent is a practicing physician--by the size of

the town in which he practices. These categories each require a few words of description:

1. When the 372 respondents were asked to indicate their present principal career objective, general practice was named by 130 respondents, specialty practice by 168, research by two, academic medicine by 12, and other or undecided by 60. In Appendix II, we have listed the responses to questions according to future and present a) general practitioners, b) specialty practitioners, and c) researchers and academic-medicine men. Because of the single-mindedness of the computer (referred to earlier)--and the consequent work-load imposed upon the authors--we have tallied the responses to only some of the last 17 questions in Appendix II and those which follow.

2. We asked the respondents to tell us the location of training completed or presently in progress. We then divided the questionnaires into three groups: a) all such training in Nebraska (178), b) all such training--except medical school--outside Nebraska (59), and c) training divided between Nebraska and elsewhere (135). The responses of the first two of these groups are listed in Appendix III.

3. In Appendix IV, we are concerned solely with

respondents who have completed their internships (i.e., the classes of 1961, 1962, 1963, and 1964). We have segregated these graduates into two groups: those who are practicing physicians (102) and those who are not (79).

4. Of the 102 practicing physicians noted above, 76 unequivocally specified the size of town in which they are practicing: less than 1000, 10 respondents; 1000-10,000, 36; 10,000-50,000, six; 50,000-250,000, 17; and greater than 250,000, seven. We have listed the responses of the three groups with the most respondents in Appendix V.

We have included two additional appendices which do not fit conveniently into the above schema. Appendix VI, though based on a simple notion, requires a rather involved explanation. You recall, we hope, that the answers to questions 1-51 consistently range from relative satisfaction to relative dissatisfaction, from left-hand column to right-hand column. Since this is so, any group of respondents whose answers fall in the left-hand columns show more satisfaction in their responses than if their answers had fallen in the right-hand columns. This qualitative concept attains a rough quantitative significance by using the following pro-

cedure on each group of respondents studied:

1. For questions 1-51, find the total numbers of responses in each of the five answer columns.

2. Count each response in column #1 for one point, each in column #2 for two points, each in column #3 for three points, etc.

3. After determining the total numerical value of all responses to questions 1-51 by the above method, divide the value total by the total number of responses, according to the following equation:

$$\text{S.Q.} = \frac{1 \times (\Sigma_1) + 2 \times (\Sigma_2) + 3 \times (\Sigma_3) + 4 \times (\Sigma_4) + 5 \times (\Sigma_5)}{\Sigma_1 + \Sigma_2 + \Sigma_3 + \Sigma_4 + \Sigma_5}$$

"S.Q.," of course, is no more than an indication of the mean response to the first 51 questions. We chose to call it the "Satisfaction Quotient"--with lower values suggesting greater satisfaction and higher values suggesting greater dissatisfaction. We do not pretend that the Satisfaction Quotient has any absolute significance. It is useful only in comparing groups of respondents in regard to their relative satisfaction as measured by our questionnaire. For this purpose, with due consideration to matters of statistical significance, the Satisfaction

Quotient has some value.

The seventh and last appendix contains our respondents' spontaneous comments. In all, 142 respondents (roughly 38%) put some comment in the space reserved for that purpose. We have included the salient portions of all of these--with the following exceptions:

1. We have not repeated any comments for or against the questionnaire, observations on student surveys in general, or allegations concerning the legitimacy of either of the authors birth.

2. For the most part, we have refrained from including descriptions--no matter how colorful--of specific faculty members or teaching departments. This includes both complimentary and derogatory statements, and there was a salty sprinkling of both.

3. When any comment simply duplicated the data and added nothing further, we felt it was best excluded. For example, a respondent who checked "waste of time" for a certain teaching method also took the trouble to write "That thing is nothing but a waste of time!!!"

We caution our readers that the respondents' comments are not necessarily representative of anyone's opinions other than the persons who wrote them. We feel, however,

they added needed insight and perspective to the cold, hard data. For the most part, the comments are well worth reading, though we must be careful in drawing conclusions from any of them.

Please evaluate the quality of each of the following:

1. the effectiveness with which basic science instructors prepare students to cope with clinical problems.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	10	17	13	5	0	45
1962	14	19	10	3	1	49
1963	5	16	21	5	1	48
1964	6	17	16	1	0	48
1965	8	20	10	2	1	41
1966	2	17	15	3	0	37
1967	1	14	22	6	1	44
1968	0	8	15	3	0	26
Totals	46	128	122	28	4	330
%	14	39	37	9	1	

The majority of the responses indicated satisfactory (37%) to good (39%) preparation. The pre-clinical classes and the class of 1963 responded less favorably than did the others.

2. the effectiveness with which clinical science instructors relate their material to basic science knowledge.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	6	20	15	4	0	45
1962	6	22	15	3	0	46
1963	4	26	12	7	0	49
1964	2	25	16	1	0	44
1965	4	17	15	5	0	41
1966	4	15	15	5	0	39
1967	2	23	14	5	0	44
1968	<u>1</u>	<u>8</u>	<u>7</u>	<u>1</u>	<u>0</u>	<u>17</u>
Totals	29	156	109	31	0	325
%	9	48	33	10	0	

48% of the physicians and the students graded the correlations of clinical material to the basic sciences as good. In general, respondents replied more favorably to this question than to the previous one.

3. the effectiveness with which clinical science instructors teach the humanitarian art of medicine.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	8	11	10	15	2	46
1962	2	16	20	8	0	46
1963	2	8	25	13	1	49
1964	3	16	12	10	0	41
1965	4	14	16	6	2	42
1966	2	12	13	12	0	39
1967	0	8	18	15	1	42
1968	0	8	6	2	0	16
Totals	21	93	120	81	8	323
%	6	29	37	25	3	

Class ratings on the subject of the humanitarian art of medicine varied. The modal responses were as follows: Class of 1961, poor; classes of 1962, 1963, 1965, 1966, and 1967, satisfactory; and the class of 1964, good. Overall, responses to this question were less favorable than to the preceding two. Note that in the table comparing responses of practicing physicians to those of non-practicing physicians, those practicing rated the effectiveness as satisfactory (mode) while those not practicing rated this as good.

4. the basis which students are given for continuing their study after graduation.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	9	16	16	0	1	42
1962	8	17	14	7	0	46
1963	5	23	13	5	0	46
1964	2	18	14	6	0	40
1965	4	22	8	6	0	40
1966	2	17	12	3	0	34
1967	1	16	13	4	1	35
1968	3	10	7	1	0	21
Totals	34	139	97	32	2	304
%	11	46	32	10	1	

57% felt that they were given a good-to-excellent basis for continuing their education while 32% felt that this was satisfactory. Only 11% felt the basis was less than satisfactory.

5. the fairness and objectivity with which the faculty evaluated your performance.

Year	Excellent	Good	Satis- factory	Poor	Very Unsat.	Total
1961	15	18	10	1	1	45
1962	8	20	15	1	0	44
1963	2	26	18	3	1	50
1964	5	20	15	5	0	45
1965	1	17	14	6	1	39
1966	0	13	14	10	1	38
1967	1	8	19	10	6	44
1968	5	16	18	7	0	46
Totals	37	138	123	43	10	351
%	11	39	35	12	3	

The modal response of postgraduates was good and that of students was satisfactory. Only 15% overall felt their evaluation was less than satisfactory. In the table comparing general practice and specialty practice, 40% of those in the general practice column replied satisfactory while those in the specialty column replied good.

6. the fairness and objectivity with which the faculty evaluated your fellow students' performance.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	11	23	8	3	1	46
1962	6	21	17	2	0	46
1963	2	25	18	4	1	50
1964	5	14	19	7	0	45
1965	0	14	16	7	2	39
1966	0	9	12	18	1	40
1967	0	7	19	12	6	44
1968	4	17	17	10	0	48
Totals	28	130	126	63	11	358
%	8	36	35	18	3	

Answers to this question varied markedly. 36% responded with good while 35% answered satisfactory. The responses to this question varied considerably from class to class. 52% of the class of 1961 said faculty evaluation of fellow students was good-to-excellent; 45% of the present senior class answered poor-to-very unsatisfactory.

7. the effectiveness with which the honor system and/or proctoring prevents cheating on examinations.

Year	Excellent	Good	Satis- factory	Poor	Very Unsat.	Total
1961	8	13	12	8	5	46
1962	6	22	10	6	2	46
1963	1	14	23	11	0	49
1964	2	9	16	16	2	45
1965	1	9	11	14	5	40
1966	1	6	9	13	8	37
1967	2	3	9	17	15	46
1968	<u>12</u>	16	16	2	3	<u>49</u>
Totals	33	92	106	87	40	358
%	9	26	30	24	11	

This question provoked much comment (see appendix). The poor column was checked by a large proportion of students and physicians in the classes of 1964 through 1967. The median was in good for 1962 and 1968 and in poor in 1966 and 1967. Overall median is satisfactory.

8. the school administration's concern for the student--as opposed to concern for clerical staff and employees.

Year	Excellent	Good	Satis- factory	Poor	Very Unsat.	Total
1961	7	14	16	7	2	46
1962	4	18	14	10	0	46
1963	3	16	16	11	4	50
1964	3	10	10	14	4	41
1965	5	13	14	8	1	41
1966	2	9	18	10	2	41
1967	3	9	21	7	4	44
1968	5	18	11	7	0	41
Totals	32	107	120	74	17	350
%	9	31	34	21	5	

34% responded satisfactory and 31% answered with good, but 44% of the class of 1964 checked poor or very unsatisfactory.

9. notification of students by the administration of important events, schedule changes, etc.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	7	22	12	4	1	46
1962	3	18	14	8	1	44
1963	2	21	22	4	1	50
1964	8	17	13	4	1	43
1965	7	18	11	2	4	42
1966	2	12	14	8	4	40
1967	5	6	21	11	3	46
1968	2	13	13	16	5	49
Totals	36	127	120	57	20	360
%	10	35	33	16	6	

Although the overall modal response was good, the median fell at satisfactory. The median in the classes of 1961, 1964, and 1965 was good, and the median in the remaining classes was satisfactory. Of the present sophomore class, 43% answered poor to very unsatisfactory.

10. student government's representation of student opinion and complaints to the administration.

Year	Excellent	Good	Satisfactory	Poor	Very Unsat.	Total
1961	3	12	15	6	5	45
1962	1	11	13	19	2	46
1963	0	12	18	17	2	49
1964	4	2	20	11	9	39
1965	1	6	12	11	9	39
1966	0	6	16	12	6	40
1967	1	2	16	19	5	43
1968	0	4	17	18	4	43
Totals	10	55	131	113	37	346
%	3	16	38	32	11	

The overall median and mode was satisfactory; however, the median in the classes of 1965, 1967, and 1968 graded their representation as poor. The totals reveal that 43% felt representation was less than satisfactory as compared with 19% who felt representation was better than satisfactory.

11. school spirit and pride in the college of medicine among students.

Year	Excellent	Good	Satis- factory	Poor	Very Unsat.	Total
1961	9	20	12	5	0	46
1962	6	22	15	4	0	47
1963	3	19	15	12	1	50
1964	3	15	12	15	0	45
1965	0	13	11	16	1	41
1966	3	10	14	11	2	40
1967	1	14	16	11	3	45
1968	5	17	16	13	1	52
Totals	30	130	111	87	8	366
%	8	36	30	24	2	

Although 44% rated school spirit as good-to-excellent, the median remained satisfactory. Only in the two classes which had been out of school the longest did the median and mode remain under good.

12. What proportion of your classmates have been interested in learning as much as they could while in medical school.

Year	All or almost All	Two-thirds	One-half	One-third	Very few	Total
1961	17	20	7	1	1	46
1962	10	22	11	4	0	47
1963	8	20	14	6	1	49
1964	6	10	15	13	1	45
1965	4	9	15	9	4	41
1966	3	12	12	9	3	39
1967	5	14	16	9	2	46
1968	15	14	15	6	1	51
Totals	68	121	105	57	13	364
%	18	33	29	16	4	

The overall median and the mode felt that two-thirds of their classmates were interested in learning. In the classes of 1964 through 1967 the median response was one-half.

13. What proportion of your classmates have been genuinely concerned about their patients' welfare.

Year	All or almost All	Two-thirds	One-half	One-third	Very few	Total
1961	23	16	5	2	0	46
1962	15	20	8	3	0	46
1963	19	22	7	2	0	50
1964	13	16	12	3	1	45
1965	19	14	4	3	1	41
1966	12	16	7	3	1	39
1967	8	16	14	4	2	44
1968	6	4	1	1	0	12
Totals	115	124	58	21	5	323
%	36	38	18	6	2	

36% felt that almost all or all and 38% felt that two-thirds of their classmates were sincerely interested in their patients' welfare. The median was in the latter. Only 8% felt that fewer than half their classmates were interested in their patients' welfare. In comparing those with all Nebraska training and those with no Nebraska training, note that 36% of those in the former group felt all or almost all of their classmates were genuinely interested in the welfare of their patients while 22% of those with no Nebraska training felt this way.

14. What proportion of your fellow classmates will be physicians to whom you would entrust your own health problems.

Year	All or almost All	Two-thirds	One-half	One-third	Very few	Total
1961	10	22	9	4	1	46
1962	4	24	8	10	1	47
1963	8	18	11	11	1	49
1964	2	18	10	13	2	45
1965	7	14	6	12	2	41
1966	7	10	10	9	4	40
1967	2	16	13	11	2	44
1968	6	17	14	10	0	47
Totals	46	139	81	80	13	359
%	13	39	22	22	4	

The median and the mode would entrust their own health problems to two-thirds of their own classmates. The median for the classes of 1964, 1966, and 1967 placed this responsibility with only one-half of their respective classmates. Twenty-six percent would trust fewer than one-half their classmates.

15. How often were you likely to feel comfortable disagreeing openly with faculty members?

Year	Always	Usually	One-half the time	Seldom	Never	Total
1961	0	15	7	21	3	46
1962	1	8	15	22	1	47
1963	0	18	7	18	6	49
1964	1	19	12	11	2	45
1965	2	10	9	18	3	42
1966	1	6	5	24	4	40
1967	0	10	12	18	7	47
1968	0	9	6	22	13	50
Totals	5	95	73	154	39	366
%	1	26	20	42	11	

53% of those replying felt they were seldom or never comfortable disagreeing openly with faculty members. The median in the classes of 1962 through 1965 was under one half of the time. This question provoked several comments (see appendix). 49%, the mode, of those practicing felt that they seldom felt comfortable disagreeing while 33%, the mode, of those not practicing usually felt comfortable.

16. How often did you find the college atmosphere to be intellectually stimulating?

Year	Always	Usually	One-half the time	Seldom	Never	Total
1961	4	24	12	6	0	46
1962	2	22	18	5	0	47
1963	2	21	19	6	2	50
1964	2	21	17	4	0	44
1965	0	20	19	2	0	41
1966	2	15	9	14	0	40
1967	0	10	25	10	2	47
1968	3	23	15	8	0	49
Totals	15	156	134	55	4	364
%	4	43	37	15	1	

Although 43% thought that the college was usually intellectually stimulating, the median felt that this was true only one-half the time. In the present senior class, 35% indicated that medical school was seldom intellectually stimulating. 59% of those practicing felt that the college was usually intellectually stimulating while 34% of those not practicing responded similarly. A similar relationship is found when comparing those entirely Nebraska trained (45%) to those with no Nebraska training (32%).

17. How often were you likely to feel comfortable discussing an academic problem with the appropriate faculty member?

Year	Always	Usually	One-half the time	Seldom	Never	Total
1961	7	22	10	7	0	46
1962	6	22	12	6	1	47
1963	5	27	10	7	1	50
1964	4	25	11	2	1	43
1965	4	21	10	6	1	42
1966	2	17	7	13	0	39
1967	7	17	10	9	3	46
1968	6	16	15	11	2	50
Totals	41	167	85	61	9	363
%	11	46	23	17	3	

The mode and the median indicated that they were usually comfortable discussing academic problems with the appropriate staff member.

18. How often were you likely to feel comfortable discussing a personal problem with a faculty member?

Year	Always	Usually	One-half the time	Sel- dom	Never	Total
1961	2	10	6	19	6	43
1962	1	7	7	17	14	46
1963	2	16	3	21	5	47
1964	2	8	11	11	8	40
1965	0	10	5	16	6	37
1966	0	6	6	12	13	37
1967	1	5	4	20	12	42
1968	2	8	3	18	16	47
Totals	10	70	45	134	80	339
%	3	21	13	40	23	

Overall, 63% seldom or never felt comfortable discussing personal problems with a faculty. These sentiments were marked by 68% of the class of 1966, 72% of the class of 1968, and 76% of the class of 1967.

Please evaluate the relative importance of the following in your medical education. Evaluate only those teaching methods with which you have already had experience.

19. Basic science lectures

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	27	13	5	1	0	46
1962	27	11	7	1	0	46
1963	34	7	6	2	0	49
1964	25	11	3	2	1	42
1965	23	10	4	2	1	40
1966	23	7	7	1	1	39
1967	17	14	12	1	1	45
1968	22	12	11	4	0	49
Totals	198	85	55	14	4	356
%	56	24	15	4	1	

All classes, both by the median and by the mode, rated basic science lectures as a principal learning source--but not without comment (see appendix).

20. Basic science laboratories

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	15	11	13	6	1	46
1962	9	20	13	4	1	47
1963	3	20	17	6	2	48
1964	7	16	10	8	0	41
1965	3	13	9	13	2	40
1966	4	8	8	15	3	38
1967	2	8	10	16	6	42
1968	0	8	18	15	11	52
Totals	43	104	98	83	26	354
%	12	29	28	24	7	

The mode, only 29%, felt that laboratories were a valuable ancillary source while the median rated these as a satisfactory source. The mode in the classes, 1966 and 1967, and the median of the class of 1967 indicated that these were not very helpful sources. The physicians in general believed laboratories to be more valuable than did respondents still in school. Classes still in school were much more likely to mark not very helpful and waste of time (1966, 49%; 1967, 52%; 1968, 50%). Those in

general practice thought laboratories were less valuable in the preclinical years than did the specialty practitioner. Nebraska-trained respondents liked laboratories less than did non-Nebraska trained respondents.

21. Basic science assigned texts

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	24	15	6	0	0	45
1962	25	14	8	0	0	47
1963	19	21	9	0	0	49
1964	22	7	13	0	0	42
1965	20	12	7	0	0	39
1966	20	10	7	1	1	39
1967	25	6	13	1	1	46
1968	25	15	10	1	1	52
Totals	182	100	73	3	3	359
%	50	28	20	1	1	

50% rated the basic science assigned texts as a principal learning source. Responses were fairly constant from year to year.

22. Optional reading in the basic science years

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	4	19	13	10	0	46
1962	2	16	14	15	0	47
1963	4	17	10	15	1	47
1964	2	18	6	12	2	40
1965	2	19	9	10	1	41
1966	1	14	10	10	3	38
1967	5	16	6	15	2	44
1968	3	5	14	16	6	44
Totals	23	124	82	103	15	347
%	7	36	24	29	4	

43% indicated that the basic science optional reading was of more than satisfactory value. The classes of 1967 and 1968 marked not very helpful as their modal response.

23. Basic science years: discussion with fellow students

Year	Principal learning source	Valuable ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	3	24	6	12	1	46
1962	8	20	14	4	1	47
1963	5	20	10	12	0	47
1964	7	18	13	5	0	43
1965	4	15	17	5	0	41
1966	1	17	16	2	2	38
1967	7	24	12	5	1	46
1968	3	24	12	11	1	51
Totals	38	159	100	56	6	359
%	11	44	28	15	2	

Both the median and the mode indicated that discussions with fellow students were a valuable ancillary source.

24. Individual instructor-student talks in the pre-clinical years

Year	Principal learning source	Valuable ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	12	10	17	6	0	45
1962	5	11	15	14	1	46
1963	8	11	11	13	1	44
1964	8	13	12	7	0	40
1965	9	10	9	9	1	38
1966	3	11	11	7	2	34
1967	4	19	10	9	0	42
1968	5	20	15	6	1	47
Totals	54	105	100	71	6	335
%	16	31	30	21	2	

Responses to this question varied among the classes. The mode graded instructor-student talks as a valuable ancillary source while the median rated them as satisfactory. The median is satisfactory for the classes 1961 through 1963 and 1966. The remaining classes felt such talks were a valuable ancillary source. 32%, the mode, of the practicing physicians graded individual instructor-student talks as a satisfactory source while the non-practicing physicians (mode, 30%) felt they were

not very helpful.

As far as ranking of teaching methods in the pre-clinical years is concerned, respondents rated lectures most favorably, then assigned texts, followed by talks with fellow students, the instructor-student talks, and finally laboratories and optional reading.

25. Lectures in the clinical years

Year	Principal learning source	Valuable ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	21	18	6	1	0	46
1962	16	21	8	0	1	46
1963	17	21	9	3	0	50
1964	16	13	11	4	1	45
1965	19	5	9	6	3	42
1966	4	14	17	6	0	41
1967	8	10	10	5	2	35
1968	1	0	0	0	0	1
Totals	102	102	70	25	7	306
%	33	33	24	8	2	

Lectures in the clinical years did not receive the same enthusiastic response as lectures in the basic science years. The overall median rated lectures as a valuable ancillary source. The class of 1966 rated lectures as satisfactory both by the median and the mode. Of the practicing physicians, 44%, the mode, rated lectures as a principal learning source while 43% of the non-practicing physicians felt that lectures were a valuable ancillary source. Turn to Appendix VII for pertinent comments.

26. Ward clerkships

Year	Principal learning source	Valuable ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	33	6	4	2	0	45
1962	37	6	3	1	0	47
1963	38	8	3	1	0	50
1964	33	6	5	0	0	44
1965	26	12	4	0	0	42
1966	22	12	7	0	0	41
1967	15	9	7	2	1	34
1968	0	0	0	0	0	0
Totals	204	59	33	6	1	303
%	67	20	11	2	-	

Ward clerkships are rated as a principal learning source by all classes. Only 2% felt clerkships were less than a satisfactory source of learning.

27. General outpatient clinics

Year	Principal learning source	Valuable ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	25	8	8	5	0	46
1962	18	12	12	5	0	47
1963	23	12	11	4	0	50
1964	15	10	15	4	0	44
1965	8	15	15	3	1	42
1966	10	9	13	6	2	40
1967	4	6	5	3	1	19
1968	0	0	0	0	0	0
Totals	103	72	79	30	4	288
%	36	25	27	10	2	

The all-class mode for this question rated outpatient clinics as a principal learning source and the median graded them as a valuable ancillary source. The only exception, the class of 1966, rated the clinics, both by median and mode, as a satisfactory source. The practising physicians felt that general outpatient clinics were a principal learning source while the non-practising physicians placed their mode in the satisfactory column. A similar discrepancy was noted in comparing the general practitioner to the specialist and in comparing those with all Nebraska training to those with no Nebraska training.

28. Special problem clinics

Year	Principal learning source	Valuable ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	6	14	15	9	2	46
1962	5	12	16	9	4	46
1963	8	16	13	10	2	49
1964	7	7	14	12	3	43
1965	6	12	13	9	1	41
1966	2	10	12	12	4	40
1967	1	9	7	3	2	22
1968	0	00	0	0	0	0
Totals	35	80	90	64	18	287
%	12	28	32	22	6	

In general, special problem clinics were rated as satisfactory. 31% of the practicing physicians felt specialty clinics were a valuable ancillary source while 16% of the non-practicing physicians felt this way. Most (38%) of the non-practicing physicians felt these were only a satisfactory source. Specialists were similarly less favorably disposed to such clinics than G.P.'s.

29. Electives in the clinical years

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	12	20	11	3	0	46
1962	14	17	11	2	0	44
1963	11	20	14	2	0	47
1964	11	19	8	3	1	42
1965	15	9	7	0	0	31
1966	9	19	5	0	0	33
1967	2	1	1	0	0	4
1968	0	0	0	0	0	0
Totals	74	115	57	10	1	257
%	29	45	22	4	-	

Electives were thought to be a valuable ancillary source by both the median and the mode. The mode of the class of 1965 felt that the electives were a principal learning source.

30. Preceptorship

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	13	5	4	2	0	24
1962	8	15	0	0	1	24
1963	15	5	3	0	0	23
1964	10	7	2	2	1	22
1965	8	17	5	1	5	36
1966	7	10	2	1	0	20
1967	1	0	0	0	0	1
1968	0	0	0	0	0	0
Totals	62	59	16	6	7	150
%	41	39	11	4	5	

41% of the physicians and students felt that preceptorships are a principal learning source. 80% felt that the preceptorship was more than a satisfactory source.

31. Assigned texts in the clinical years

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	21	18	5	0	0	44
1962	14	22	8	3	0	47
1963	21	19	7	1	1	49
1964	21	13	10	0	0	44
1965	18	16	8	0	0	42
1966	13	16	10	2	0	41
1967	19	5	6	0	0	30
1968	0	0	0	0	0	0
Totals	127	100	54	6	1	297
%	43	37	18	2	-	

Assigned texts were not graded as highly during the clinical years as during the basic science years. Although the mode felt that the assigned texts were a principal learning source, the median rated the texts as a valuable ancillary source. The class of 1967 who were just beginning their clinical years rated the texts more highly than did the other classes. Specialists rated assigned texts more favorably (49% called them a principal learning source) than G.P.'s who called them a valuable ancillary source.

32. Optional reading in the clinical science years

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	7	25	11	1	0	44
1962	3	20	20	3	0	46
1963	5	28	12	4	0	49
1964	8	17	15	5	0	42
1965	4	28	9	1	0	42
1966	6	22	7	5	1	41
1967	4	16	6	4	1	31
1968	0	0	0	0	0	0
Totals	37	156	80	23	2	298
%	12	52	27	8	1	

Optional reading rated higher in the clinical years than in the basic science years. Both the mode and the median rated this reading as a valuable ancillary source.

33. Discussions with fellow students in the clinical years

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	3	24	9	8	2	46
1962	8	19	14	6	0	47
1963	7	22	14	4	1	48
1964	8	17	15	3	1	44
1965	6	15	19	2	0	42
1966	2	22	13	2	1	40
1967	7	17	7	2	0	33
1968	0	0	0	0	0	0
Totals	41	136	91	27	5	295
%	14	46	31	9	-	

The median and the mode felt that discussions with fellow students were a valuable ancillary source.

34. Individual talks with staff men in the clinical years

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	11	13	13	3	0	40
1962	10	17	11	8	1	47
1963	10	17	16	6	0	49
1964	12	17	11	5	0	45
1965	13	14	10	3	1	41
1966	6	20	11	3	1	41
1967	7	19	4	0	1	31
1968	0	0	0	0	0	0
Totals	69	123	76	28	4	300
%	23	41	25	9	2	

Individual talks with staff men were rated as a valuable ancillary source.

35. Residents advice and supervision

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	16	18	9	3	0	46
1962	16	18	10	3	0	47
1963	16	20	9	5	0	50
1964	20	18	7	0	0	45
1965	14	18	8	0	0	40
1966	9	24	7	1	0	41
1967	13	17	2	1	0	33
1968	0	0	0	0	0	0
Totals	104	133	52	13	0	302
%	34	44	17	5	0	

Resident's advice and supervision was graded as a valuable ancillary source. 41% of the practicing physicians rated residents' advice as a principal learning source while the non-practicing physician was less complimentary.

36. Departmental conferences and seminars in the
clinical years

Year	Principal learning source	Valuable Ancillary source	Satis- factory source	Not Very Helpful	Waste of time	Total
1961	5	13	22	5	1	46
1962	6	18	13	7	2	46
1963	3	15	24	6	2	50
1964	3	10	20	10	2	45
1965	4	14	14	10	0	42
1966	2	11	15	11	2	41
1967	3	3	15	2	7	30
1968	0	0	0	0	0	0
Totals	26	84	123	51	16	300
%	9	28	41	17	5	

Departmental conferences and seminars were rated as
a satisfactory source.

37. CPC's

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	5	13	19	8	1	46
1962	5	18	17	6	1	47
1963	4	10	25	9	2	50
1964	4	16	15	8	2	45
1965	4	13	15	7	2	41
1966	0	7	19	8	4	38
1967	3	1	5	5	1	15
1968	0	0	0	0	0	0
Totals	25	78	115	51	13	282
%	9	28	41	18	4	

The median and the mode evaluated CPC's as satisfactory.

38. Senior thesis

Year	Principal learning source	Valuable Ancillary source	Satisfactory source	Not Very Helpful	Waste of time	Total
1961	2	5	12	16	11	46
1962	1	5	12	15	14	47
1963	0	8	8	19	15	50
1964	3	2	9	14	17	45
1965	2	6	6	11	17	42
1966	0	0	4	3	33	40
1967	0	1	0	1	6	8
1968	0	0	0	0	0	0
Totals	8	27	51	79	113	278
%	3	10	18	28	41	

Although the overall median rated the senior thesis as not very helpful, the mode and the median of the class of 1966 felt this was a waste of time; the majority of this class had not yet completed their theses. The classes of 1961 through 1963 felt slightly better about their senior project. More negative responses were obtained in the answer to this question than in answer to any other item on this questionnaire. The practicing physicians' mode rated senior theses as not very helpful as a learning source while the non-practicing physician, the G.P., the specialist, the Nebraska-trained, and the

non-Nebraska trained agreed that it was a waste of time.

Putting the teaching methods of the clinical years into any meaningful order is quite difficult, but a rough approximation can be made by noting the percentage of responses above satisfactory; ward clerkship, 87%; preceptorships and assigned texts, 80%; residents' advice and supervision, 78%; electives, 74%; lectures, 66%; optional reading, 64%; individual talks with staff men, 64%; general outpatient clinics, 61%; discussions with fellow students, 60%; special problem clinics, 40%; CPC's and departmental conferences, 37%; and senior thesis, 13%.

In your opinion, to what degree do the following departments show active interest in the students as individuals:

39. Anatomy

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	11	24	6	4	1	46
1962	12	16	10	7	0	45
1963	9	19	12	7	2	49
1964	7	16	14	4	0	41
1965	12	9	15	3	1	40
1966	2	15	13	6	2	38
1967	5	16	10	11	3	45
1968	11	16	13	10	2	52
Totals	68	121	105	57	13	364
%	18	33	29	16	4	

40. Biochemistry

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	2	13	22	8	1	46
1962	0	7	19	14	5	45
1963	3	19	16	11	0	49
1964	6	19	12	3	0	40
1965	13	12	15	1	0	41
1966	5	10	12	11	0	38
1967	1	15	23	7	0	46
1968	15	18	16	2	1	52
Totals	45	113	135	57	7	357
%	12	32	38	16	2	

41. Physiology and Pharmacology

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	1	5	16	17	6	45
1962	0	6	5	25	9	45
1963	1	2	12	20	14	49
1964	1	5	11	17	7	41
1965	1	2	10	15	12	40
1966	3	0	8	16	10	37
1967	0	2	12	20	10	44
1968	0	6	25	17	4	52
Totals	7	28	99	147	72	353
%	2	8	28	42	20	

42. Preventive Medicine

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	21	13	8	3	1	46
1962	17	16	12	1	0	46
1963	15	20	11	3	0	49
1964	17	21	5	0	1	44
1965	18	16	6	1	0	41
1966	11	22	4	1	0	38
1967	10	19	12	4	1	46
1968	4	8	19	13	2	46
Totals	113	135	77	28	5	358
%	32	38	21	8	1	

43. Microbiology

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	18	18	6	2	1	45
1962	9	29	7	0	0	45
1963	16	18	13	2	0	49
1964	14	18	8	0	0	40
1965	15	11	14	1	0	41
1966	7	16	11	3	1	38
1967	8	18	13	7	0	46
1968	6	14	25	4	2	51
Totals	93	142	97	19	4	355
%	26	40	27	6	1	

44. Anatomical Pathology

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	8	20	13	5	0	46
1962	7	14	18	5	0	44
1963	5	17	21	4	1	48
1964	9	17	11	5	0	42
1965	10	11	19	1	0	41
1966	1	6	16	9	3	35
1967	2	8	20	13	3	46
1968	0	6	11	8	2	27
Totals	42	99	129	50	9	329
%	13	30	39	15	3	

45. Clinical Pathology

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	7	20	14	5	0	46
1962	2	11	24	7	1	45
1963	5	17	17	8	1	48
1964	5	12	16	11	0	44
1965	3	8	23	7	0	41
1966	1	2	20	12	5	40
1967	3	12	21	8	2	46
1968	1	0	3	2	0	6
Totals	27	82	138	60	9	316
%	8	26	44	19	3	

46. Internal Medicine

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	8	11	12	13	1	45
1962	1	23	14	7	1	46
1963	5	14	15	12	3	49
1964	2	12	21	9	1	45
1965	5	9	13	10	4	41
1966	4	10	18	6	2	40
1967	1	4	11	12	6	34
1968	4	2	6	7	0	19
Totals	30	85	110	76	18	319
%	9	27	34	24	6	

47. Surgery

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	7	13	16	10	0	46
1962	0	11	16	16	4	47
1963	2	12	18	13	5	50
1964	3	10	20	10	2	45
1965	5	9	20	7	1	42
1966	2	18	14	4	2	40
1967	1	4	11	9	0	25
1968	-	-	-	-	-	--
Totals	20	77	115	69	14	295
%	7	26	39	23	5	

48. Pediatrics

Year	Maximum Possible	Large Extent	Satis. Amount	Minimal	None	Total
1961	4	8	13	18	2	45
1962	0	7	20	18	2	47
1963	1	5	18	21	5	50
1964	0	12	14	17	2	45
1965	1	3	10	22	5	41
1966	1	8	15	11	4	39
1967	3	6	15	4	2	30
1968	-	-	-	-	-	--
Totals	10	49	105	111	22	297
%	3	17	36	37	7	

49. Psychiatry

Year	Maximum Possible	Large Extent	Satis. Amount	Minimum	None	Total
1961	4	7	15	16	4	46
1962	1	8	20	14	3	46
1963	1	13	21	10	5	50
1964	2	8	12	17	6	45
1965	4	8	22	7	1	42
1966	5	15	14	5	1	40
1967	5	11	8	4	0	28
1968	0	0	7	5	5	17
Totals	22	70	119	78	25	314
%	7	22	38	25	8	

50. Neurology

Year	Maximum Possible	Large Extent	Satis. Amount	Minimum	None	Total
1961	3	3	15	19	5	45
1962	1	2	22	16	5	46
1963	0	8	17	20	5	50
1964	2	4	11	22	6	45
1965	2	6	20	10	4	42
1966	3	7	13	13	4	40
1967	1	7	11	7	0	26
1968	0	0	0	1	1	2
Totals	12	37	109	108	30	296
%	4	12	37	37	10	

51. Ob-Gyn

Year	Maximum Possible	Large Extent	Satis. Amount	Minimum	None	Total
1961	18	17	5	5	1	46
1962	15	21	9	2	0	47
1963	17	22	10	1	0	50
1964	17	19	6	2	0	44
1965	17	14	9	1	1	42
1966	19	14	7	0	0	40
1967	11	11	5	0	0	27
1968	0	1	9	2	0	12
Totals	114	119	60	13	2	308
%	37	39	19	4	1	

Four departments, anatomy, preventive medicine, microbiology, and ob-gyn, were rated as showing active interest in students to a large extent. Biochemistry, anatomical pathology, clinical pathology, internal medicine, surgery, psychiatry, and neurology showed a satisfactory amount, and physiology and pharmacology showed a minimal amount. The interest shown by the department of pediatrics was rated as satisfactory by the median and as minimal by the mode. There is, of course, some variation among different classes. The class of 1968, for instance, rated physiology and

pharmacology higher and preventive medicine and microbiology lower than did the other classes.

50. Neurology

Year	Maximum Possible	Large Extent	Satis. Amount	Minimum	None	Total
1961	3	3	15	19	5	45
1962	1	2	22	16	5	46
1963	0	8	17	20	5	50
1964	2	4	11	22	6	45
1965	2	6	20	10	4	42
1966	3	7	13	13	4	40
1967	1	7	11	7	0	26
1968	0	0	0	1	1	2
Totals	12	37	109	108	30	296
%	4	12	37	37	10	

52. In which pre-medical fields should more emphasis be demanded?

- a. foreign language
- b. English
- c. mathematics
- d. biological and physical sciences
- e. humanities and social sciences

Year	single choices						inc. multiple choices					
	a	b	c	d	e	Total	a	b	c	d	e	Total
1961	1	3	4	2	18	28	1	13	10	8	29	61
1962	1	5	2	3	15	26	3	20	9	11	28	71
1963	1	4	3	4	13	25	3	16	12	11	28	70
1964	2	5	2	3	15	27	4	17	10	6	24	61
1965	0	5	4	4	12	25	0	15	14	6	28	63
1966	1	2	3	7	14	27	2	10	9	13	25	59
1967	1	3	7	3	9	23	2	10	19	7	25	63
1968	0	2	14	5	9	30	3	12	26	11	16	68
Totals	7	29	39	31	105	211	18	113	109	73	173	486
%	3	14	18	15	50		4	23	22	15	36	

In this and the following questions, some respondents checked only one answer and others checked more than one. Therefore, for the remaining questions, we have used one chart to represent the single choices and another to represent both single and multiple choices.

In the above question, 50% of the single choices felt more emphasis should be placed on humanities and social sciences in undergraduate training--though the younger classes leaned toward mathematics. Among the

combined single and multiple responses, humanities and social sciences was still the leader; but English and mathematics also rated well.

53. What was your goal before entering medical school?

- a. specialist
- b. general practitioner
- c. research
- d. academic
- e. other

Year	single choices					Total	inc. multiple choices					Total
	a	b	c	d	e		a	b	c	d	e	
1961	16	24	1	1	1	43	18	25	2	1	1	47
1962	13	30	0	0	2	45	13	30	0	0	2	45
1963	16	29	1	0	0	46	17	29	1	1	0	48
1964	15	23	0	2	1	41	16	24	0	2	1	43
1965	10	22	0	2	4	38	10	22	0	2	4	38
1966	12	21	1	0	3	37	13	21	3	1	3	41
1967	12	25	2	3	2	44	13	25	2	4	2	46
1968	<u>17</u>	<u>22</u>	0	0	8	<u>47</u>	<u>19</u>	<u>23</u>	0	1	8	<u>51</u>
Total	111	196	5	8	13	333	119	199	8	12	21	359
%	33	59	2	2	4		33	56	2	3	6	

Before entering medical school, 59% of the physicians and students planned to be general practitioners; and 33% planned to be specialists.

We find some interesting differences in the appendices. Of those now interested in general practice, 85% had planned to go into that field before entering medical school; and 51% of those now interested in specialization, 42% had planned to be general practitioners before entering medical school.

Before entering medical school, 72% of the practicing physicians and 45% of the non-practicing physicians had planned to become G.P.'s. 63% with all Nebraska training and 45% with no Nebraska training planned to become G.P.'s.

54. Where did you want to practice when you first entered medical school?

- a. Midwest
- b. Nebraska
- c. East
- d. West
- e. South

Year	single choices					Total	inc. multiple choices					Total
	a	b	c	d	e		a	b	c	d	e	
1961	16	10	1	9	0	36	19	10	2	12	0	43
1962	19	15	0	8	0	42	20	16	0	8	0	44
1963	15	18	1	5	0	39	17	20	2	6	0	45
1964	17	13	1	10	1	42	17	13	1	10	1	42
1965	16	12	1	6	1	36	17	13	1	6	1	38
1966	17	11	2	7	0	37	17	11	2	7	0	37
1967	14	17	3	6	1	41	15	18	3	6	1	43
1968	<u>12</u>	<u>14</u>	<u>4</u>	9	1	<u>40</u>	<u>15</u>	18	<u>4</u>	12	1	<u>50</u>
Total	126	110	13	60	4	313	137	119	15	67	4	342
%	40	35	4	19	2		40	35	4	20	1	

Before entering medical school, 40% planned to practice in the Midwest while 35% specified that they planned to practice in Nebraska. About 20% felt they wanted to practice in the West. Greater percentages of the classes of 1963, 1967 and 1968 wished to practice in Nebraska.

Of practicing physicians, 40% wanted to practice in the Midwest, 41% in Nebraska and 18% in the West. Of non-practicing physicians, 42% liked the Midwest; 29%, Nebraska; and 25%, the West. General practitioners

voted as follows: 32%, the Midwest; 50%, Nebraska; and 17%, the West. Specialists preferred the Midwest, 43%; then Nebraska, 26%; followed by the West, 22%. Of those with all Nebraska training, 38% planned to work in the Midwest, 43% in Nebraska and 14% in the West. Of those with only medical school training in Nebraska, 35% liked the West, 30% liked the Midwest, and 22% favored Nebraska.

In summary, groups which indicated the strongest preference for Nebraska include practicing physicians (41%), respondents with all-Nebraska training (43%) and general practitioners (50%). Those indicating the least preference for Nebraska include non-practicing physicians (29%), specialists (26%), and those with only medical school in Nebraska (22%).

This question, however, refers only to the respondents' preference when they first entered medical school. Because of a technical problem, we were not able to collect very detailed data on respondents' present inclinations. Overall, however, 274 respondents indicated "the probable location" in which they will settle (Item F at the front of the questionnaire): Nebraska, 123 (45%); Other Midwest, 71 (25%); West, 66 (24%); East, 7 (3%); and South, 7 (3%).

55. What led you to choose medicine as a career?

- a. liked to associate with people
- b. interested in research
- c. wanted the financial benefits
- d. family influences
- e. desire to teach

Year	single choices					Total	inc. multiple choices					Total
	a	b	c	d	e		a	b	c	d	e	
1961	14	0	1	8	2	25	23	1	6	15	3	48
1962	20	0	1	5	0	26	29	3	8	10	3	53
1963	14	3	0	5	0	22	24	7	8	9	3	51
1964	18	0	0	3	1	22	31	2	8	7	3	51
1965	13	1	0	0	1	15	26	4	10	6	4	50
1966	15	1	1	6	0	23	24	6	21	11	3	65
1967	16	3	3	3	0	25	30	8	15	5	6	64
1968	<u>26</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>30</u>	<u>34</u>	<u>2</u>	<u>10</u>	<u>2</u>	<u>1</u>	<u>49</u>
Total	132	8	10	30	4	184	221	33	86	65	26	431
%	72	4	6	16	2		51	8	20	15	6	

Of those marking only one answer, 72% said they chose medicine as a career because they liked to associate with people; and 16% acknowledged family influences. Of the multiple responses, 51% indicated they liked to associate with people; and 20% indicated financial benefits.

56. What motivated you most in medical school?

- a. get good grades
- b. drive to learn all you could
- c. enthusiasm about the subject matter itself
- d. desire to satisfy your instructors
- e. desire to be a good physician

Year	single choices					Total	inc. multiple choices					Total
	a	b	c	d	e		a	b	c	d	e	
1961	2	3	3	3	16	27	9	8	15	6	30	68
1962	5	3	4	5	20	37	8	6	9	7	29	59
1963	3	0	6	2	19	30	7	5	16	3	28	59
1964	2	2	4	2	19	29	7	6	11	3	28	55
1965	3	1	7	1	19	31	7	2	12	6	29	56
1966	6	2	8	1	17	34	8	3	12	2	21	46
1967	4	3	9	3	16	35	7	5	16	3	23	54
1968	5	3	6	1	24	39	9	5	15	2	31	62
Totals	30	17	47	18	150	262	62	40	106	32	219	459
%	11	7	18	7	57		14	9	23	7	47	

The desire to be a good physician was the single most important motivating factor in all groups. The comments in Appendix VII shed some additional light on this topic.

57. Did you subscribe to any medical journals during medical school?

- a. none
- b. one
- c. two
- d. three
- e. more than three

Year	single choices					Total
	a	b	c	d	e	
1961	12	19	10	4	1	46
1962	8	18	18	2	1	47
1963	7	18	21	3	1	50
1964	9	13	18	3	2	45
1965	4	5	22	9	2	42
1966	5	11	16	5	3	40
1967	5	14	19	5	3	46
1968	5	25	13	5	0	48
Totals	55	123	137	36	13	364
%	15	34	38	10	3	

Over two-thirds of medical students subscribe to either one or two medical journals. We were not able to document a clear, progressive increase in the number of journals subscribed to as classes progressed through medical school.

58. Did you read them?

- a. all of them
- b. most of them
- c. about half of them
- d. seldom
- e. never

Year	single choices					Total
	a	b	c	d	e	
1961	5	18	11	7	0	41
1962	5	14	16	6	0	41
1963	6	21	15	4	1	47
1964	8	12	12	7	3	42
1965	3	16	14	7	0	40
1966	1	15	14	7	1	38
1967	5	10	17	9	1	42
1968	10	13	8	14	1	46
Totals	43	119	107	61	7	337
%	13	35	32	18	2	

Of those subscribing to medical journals, 35% read most of them; and 32% read about half of them. The total number of respondents who say they read medical journals (330) is slightly larger than the number who said they subscribed to such journals (309 from the preceding question). In neither instance were any multiple answers recorded.

59. Should the junior year be devoted mostly to

- a. practical skills
- b. theoretical knowledge
- c. superficial contact with a wide variety of patients
- d. intensive study on a few patients

Year	single choices					inc. multiple choices				
	a	b	c	d	Total	a	b	c	d	Total
1961	10	5	9	11	35	15	10	12	15	52
1962	3	5	12	16	36	9	13	14	24	60
1963	9	3	8	11	31	17	16	12	21	66
1964	4	4	4	14	26	16	13	25	19	73
1965	6	5	7	9	27	13	12	10	20	55
1966	7	5	8	9	29	14	9	12	15	50
1967	10	4	5	4	23	22	7	12	9	50
1968	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>4</u>	<u>1</u>	<u>5</u>	<u>2</u>	<u>12</u>
Totals	50	32	53	75	210	110	81	92	125	408
%	24	15	25	36		27	20	23	30	

The modal response suggests the junior year should be devoted mostly to intensive study on a few patients. However, when multiple choices are also considered, practical skills rate a strong second.

60. Should the senior year be devoted mostly to

- a. practical skills
- b. theoretical knowledge
- c. superficial contact with a wide variety of patients
- d. intensive study on a few patients

Year	single choices					inc. multiple choices				
	a	b	c	d	Total	a	b	c	d	Total
1961	13	2	11	6	32	24	5	14	14	57
1962	17	3	9	1	30	27	7	17	7	58
1963	17	1	5	6	29	28	6	17	9	60
1964	11	0	3	6	20	30	9	16	20	75
1965	10	2	12	2	26	24	5	22	4	55
1966	17	2	7	2	28	25	3	13	10	51
1967	14	0	7	2	23	22	2	11	4	39
1968	0	0	2	2	4	4	0	4	2	10
Totals	109	10	56	27	202	185	37	114	70	406
%	54	5	28	13		46	9	28	17	

Practical skills was the most popular response in both of the above charts, and superficial contact with a wide variety of patients easily rated second.

61. Should more emphasis be placed on electives in the senior year?

- a. Yes
- b. No

<u>Year</u>	<u>Yes</u>	<u>No</u>	<u>Total</u>
1961	16	27	43
1962	14	28	42
1963	25	23	48
1964	17	28	45
1965	21	19	40
1966	8	31	39
1967	13	10	23
1968	<u>7</u>	<u>2</u>	<u>9</u>
Totals	121	168	289
%	42	58	

The majority of respondents, particularly those in the present senior class, did not want more emphasis on electives. When past training is taken into account, Nebraska-trained students did not want more emphasis on electives, while those with no Nebraska training other than medical school wanted more electives (53%).

62. Which hospital provides the best opportunity for student learning?

- a. Douglas County
- b. Veterans
- c. University
- d. Childrens
- e. N.P.I.

Year	single choices						inc. multiple choices					
	a	b	c	d	e	Total	a	b	c	d	e	Total
1961	12	2	21	6	1	42	13	2	23	7	1	46
1962	15	0	25	4	0	44	15	0	25	4	0	44
1963	17	0	19	3	0	39	21	1	24	4	1	51
1964	17	2	17	2	0	38	20	3	20	3	1	47
1965	17	0	20	1	1	39	18	0	21	1	1	41
1966	11	0	22	0	1	34	14	0	26	2	3	45
1967	1	0	11	2	5	19	1	0	11	2	5	19
1968	-	-	-	-	-	--	-	-	-	-	-	--
Totals	90	4	135	18	8	255	102	6	150	23	12	293
%	35	2	53	7	3		35	2	51	8	4	

University was the most popular teaching hospital, and Douglas County easily took second place. The specialized hospitals came in third and fourth, and Veterans Hospital trailed the rest.

Of the practicing physicians, 45% preferred DCH while 40% chose the University. Non-practicing physicians preferred UNH (66%) over County (27%). General practitioners voted for County (42%) over UNH (41%), but specialists liked University (59%) more than County (32%).

The comments in Appendix VII are also interesting.

63. Which single department best fulfills its teaching responsibilities?

- a. Surgery
- b. Internal Medicine
- c. Pediatrics
- d. Ob-Gyn
- e. Neurology and Psychiatry

Year	single choices						inc. multiple choices					
	a	b	c	d	e	Total	a	b	c	d	e	Total
1961	6	8	1	24	3	42	7	10	1	27	3	48
1962	2	6	2	30	1	41	3	7	4	33	3	50
1963	3	6	0	35	1	45	3	7	0	36	1	47
1964	2	5	1	34	1	43	4	5	1	37	2	49
1965	2	4	1	31	1	39	3	4	1	32	1	41
1966	2	0	1	36	0	39	3	0	0	38	2	43
1967	1	0	1	20	2	24	1	0	1	20	2	24
1968	-	-	-	-	-	--	-	-	-	-	-	--
Totals	18	29	7	210	9	273	24	33	8	223	14	302
%	7	10	3	77	3		8	11	2	74	5	

There doesn't seem to be any remarkable difference between the chart with the single choices and the chart with the multiple choices included.

64. How has or had your preparation compared with that of your fellow interns who graduated from other schools?

- a. My clinical preparation was better.
- b. Their clinical preparation was better.
- c. Their theoretical preparation was better.
- d. My theoretical preparation was better.
- e. We were equal.

Year	single choices					Total	inc. multiple choices					Total
	a	b	c	d	e		a	b	c	d	e	
1961	7	9	0	0	14	30	16	9	7	2	14	38
1962	10	2	2	2	16	32	22	4	10	8	17	61
1963	7	5	1	3	13	29	18	6	11	5	13	53
1964	9	1	2	0	23	35	18	1	8	4	24	55
1965	3	4	3	1	13	24	8	5	7	3	13	36
Totals	36	21	8	6	79	150	82	25	43	22	81	253
%	24	14	5	4	53		32	10	17	9	32	

Of those replying with a single choice, 53% felt that they were equal in preparation with their fellow interns who graduated from other schools. When multiple choices are included, 32% felt their clinical preparation was better; and 32% felt their preparation was equal to that of their fellow interns.

The comments in the appendix, generally speaking, are reassuring in this regard.

65. Did you feel you were adequately prepared to assume the responsibilities of an intern?

- a. Yes
- b. No

Year	single choices		Total
	Yes	No	
1961	35	8	43
1962	41	3	44
1963	42	5	47
1964	42	2	44
1965	39	2	41
Totals	199	21	220
%	91	9	

The overwhelming majority of graduates felt adequately prepared for their internship.

66. The following is a comparison of clinical skills in which the respondents noted strengths (S) and deficiencies (D).

	D	S
1. Anesthesia	2	2
2. Art of Medicine	1	8
3. Diagnosis and work-up	16	37
4. Dermatology and Allergy	47	0
5. EKG interpretation	17	2
6. Emergency and acute problems	26	2
7. ENT	26	1
8. Gynecology	8	62
9. History of medicine	1	0
10. Internal Medicine	24	68
11. Patient management and decision making	7	2
12. Neurology	30	4
13. Obstetrics	21	98
14. Ophthalmology	9	2
15. Orthopedics	41	1
16. Out-patient medicine	11	1
17. Pathology	0	2
18. Clinical Pathology	6	2
19. Pediatrics	36	27
20. Clinical Pharmacology	26	2
21. Preventive Medicine	0	2

	D	S
22. Procedures	11	5
23. Psychiatry	9	14
24. Diagnostic Radiology	23	1
25. Surgery (includes minor office)	64	54
26. Surgical subspecialties	6	0
27. Theory and its application	6	2
28. Urology	3	0

There were 487 replies in the area of deficiencies and 382 in the area of strengths. Probably due to the large amount of material covered by these departments, there is some overlapping of responses in surgery, pediatrics, and internal medicine. The following are listed in order of frequency as listed under deficiencies (D): surgery (including minor office procedures), 64; dermatology and allergy, 47; orthopedics, 41; pediatrics, 36; neurology, 30; ENT, 26; clinical pharmacology, 26; and emergency and acute problems, 26. Strengths (S) were listed in the following order: obstetrics, 98; internal medicine, 68; gynecology, 62; surgery (including minor office procedures), 54; diagnosis and work-up, 37; and pediatrics, 27.

To what do you attribute this deficiency?

- a. lack of interest on your part
- b. poor quality of teaching
- c. lack of sufficient time devoted to these subjects

	<u>a</u>	<u>b</u>	<u>c</u>	<u>Total</u>
1961	5	17	24	46
1962	4	16	22	42
1963	4	18	24	46
1964	7	18	17	42
1965	<u>5</u>	<u>17</u>	<u>14</u>	<u>36</u>
Total	25	86	101	212
%	12	40	48	

To what do you attribute this strength?

- a. personal interest
- b. good quality of teaching
- c. clinical experience

	<u>a</u>	<u>b</u>	<u>c</u>	<u>Total</u>
1961	24	25	22	71
1962	24	21	19	64
1963	20	26	19	65
1964	19	19	14	52
1965	<u>17</u>	<u>22</u>	<u>14</u>	<u>53</u>
Total	104	114	88	306
%	34	37	29	

48% felt that their deficiencies were due to a lack of sufficient time devoted to these subjects and 37% felt that their strengths were due to a good quality of teaching.

67. What led you most to your present career plans?

- a. teaching staff at medical school
- b. staff in postgraduate training
- c. local doctor
- d. family influence
- e. other factors

Year	single choices						inc. multiple choices					
	a	b	c	d	e	Total	a	b	c	d	e	Total
1961	3	8	4	2	21	38	5	10	5	2	25	47
1962	6	8	2	0	22	38	7	8	2	0	23	40
1963	6	8	5	2	19	40	9	11	7	3	20	50
1964	10	4	2	1	19	36	15	8	6	3	23	55
1965	4	3	3	0	18	28	18	5	4	2	19	48
Totals	29	31	16	5	99	180	54	42	24	10	110	240
%	16	17	9	3	55		23	17	10	4	46	

Factors we did not list turned out to be most important in determining present career plans, but teaching staff in medical school and post-graduate training also were important. In contradistinction to the results on item #55, family influences were of negligible importance.

68. What influenced your decision in determining where you are now practicing or where you plan to practice?

- a. local people
- b. local practitioner
- c. physician you met in medical school
- d. physician you met in graduate training
- e. other reasons

Year	single choices					Total	inc. multiple choices					Total
	a	b	c	d	e		a	b	c	d	e	
1961	3	1	0	1	22	27	8	4	1	3	24	40
1962	4	1	1	2	26	34	6	3	2	3	26	40
1963	6	7	1	1	22	37	13	9	1	2	28	53
1964	3	2	3	2	28	38	4	2	3	2	30	41
1965	3	0	1	0	22	26	7	1	1	0	25	34
1966	0	1	2	0	15	18	3	1	2	0	18	24
1967	2	1	0	0	8	11	4	3	1	0	10	18
1968	2	0	0	0	8	10	3	1	0	0	8	12
Totals	23	13	8	6	151	201	48	24	11	10	169	262
%	11	6	4	3	76		18	9	4	4	65	

"Other reasons" were the greatest factor in determining place of practice--almost excluding local people, local practitioners, and other physicians.

DISCUSSION

The "Discussion" section of papers such as this usually are careful and thorough evaluations of the data. This discussion avoids that task. The omission, however, is not due to negligence; we prefer to blame practicality, prudence, and perhaps a bit of cowardice. The numerous responses to our numerous questions are justly subject to numerous interpretations. We would not be fair or honest if we submitted only our own impressions; and including all possible and valid interpretations of all our data would be too mammoth a task for us to undertake. Be that as it may, at the end of this report we will outline several conclusions which we feel are inescapable outgrowths of our project. Other than this, we will let the data speak for itself and let the reader draw what inferences he wishes. We firmly believe that the principal value of this report lies in its potential for stimulating informed and thoughtful discussion about the topics we have broached.

So what is this discussion section all about if it more or less ignores the data? First, before the reader can adequately interpret our results for himself, he should be aware of some of the more important deficiencies of our method. We owe the reader at least a brief evaluation of our data-gathering process. And second, there

are some important things which need to be said about student evaluations of education in general.

In evaluating our questionnaire, we have decided that most of its shortcomings are minor and detract little from the validity of the data. There are, however, some changes we would make if we were to re-draft the survey. It is true, for instance, that the first section (Questions #1 - 11) tends to be wordy; but we doubt that this leads to any serious misunderstandings. The only substantive confusion in this section might arise on Question #7 where we asked for an evaluation of "the effectiveness with which the honor system and/or proctoring prevents cheating on examinations." The answers may have varied somewhat if we had separated "the honor system" from "proctoring." The results to the present question represent general impressions of both systems.

The second section (Questions #12 - 14) is straightforward and warrants little comment. If we had had space, we would have liked to ask "What proportion of your classmates will be physicians to whom you would entrust your wife and children's health problems?"

The third section (Questions #15 - 18) unfortunately only skirts the issue we wished to probe. We really wanted to ask "Does the atmosphere at the College of

Medicine encourage or discourage the free exchange of ideas?"--but we had thought that an oblique approach would be best. As the questions presently stand, we can only draw inferences regarding our topic.

The section reviewing teaching methods (Questions #19 - 38) does present several problems. One is that the column headings do not provide quite the spectrum--from "good" to "bad"--that we wish they did. In retrospect we are particularly disenchanted with the term "valuable ancillary source." But whatever the deficiencies of the column headings, this section has an internal consistency which allows us to make some comparisons of the various teaching methods mentioned. The principal shortcoming of this section is that our respondents are asked to make some very difficult generalizations. The effectiveness of any teaching method varies considerably with the subject being covered and the individual doing the teaching. For any given question (e.g., clinical science lectures), an individual's response may represent a rough average of a hundred different instructors in a dozen different teaching departments. Most of our data in this section is probably of limited usefulness unless it stimulates individual departments to examine their own teaching methods.

The next group of questions (Questions #39 - 51)

contains those which received the most careful planning and the most deliberate phrasing. We wanted our questionnaire to provide a basis for rank-ordering the teaching departments on some important aspect of medical education. But picking the proper criterion for this comparison was by no means an easy task. We discarded "the quality of course content" as a meaningful approach: we agree that students are in a poor position to decide exactly which areas of (e.g.) biochemistry or pathology should be emphasized in a beginning course. Such decisions should be based on the perspective gained from years of experience and a thorough knowledge of the field. Similarly, we discarded "the level of teaching ability:" the proof of teaching excellence rests in what the students learn, and we already have objective criteria (e.g., the National Board Exams) for evaluating student knowledge. In all, we considered and rejected perhaps a dozen different criteria before we arrived at "active interest in the students as individuals." This may not be the single most important characteristic of a teaching department, but interest in the student is one criterion on which instructors may fairly be evaluated by students. The Dean of Faculties at Ohio State University stated the case well: "Too many, too often, in too many places, have ... forgotten that what really matters in higher

education is young people, individual young people, and their individual minds." ⁴ What we intended to get at in our survey is whether or not a department-- as a whole--was concerned about the progress of the individual student. For instance, were instructors available to the individual student? Were the instructors able to sense individual misunderstandings, and did they seek to transform misunderstanding into understanding? Were lectures merely dutiful performances, or did the instructors' zeal for teaching show through? The term "active interest in the students as individuals" probably encompasses a little of all these things and more as well. We stressed "active interest" because we suspect many interested instructors do not impress the students as such. This series of questions measures only the perceptions of the students.

The remainder of the questions all share a common shortcoming: we neglected to state specifically whether we wanted one or more than one response to any given item. Consequently, some respondents tended to make one choice only and others marked multiple choices. On some of these items, our results might have varied significantly if we had been more explicit in our instructions.

In Question #52 ("In which pre-medical fields should more emphasis be required?"), the results might be somewhat different if we had separated "biological and

physical sciences" and "humanities and social sciences" into four distinct categories.

Question #53 asks "What was your goal before entering medical school?" This and several of the following questions require the respondents to remember subjective impressions as many as nine or ten years old. This is a difficult task and perhaps one of limited reliability. However, what our respondents think their feelings were many years ago is still of interest.

Question #54 investigates the area in which respondents wished to settle when they first entered medical school. It is true that Texas could be considered either West or South and Ohio might be called Midwest or East; but the ambiguities of our regional categories should not cause the reader concern. These categories were intended simply as camouflage to hide our principal question: were our respondents planning to settle in Nebraska or elsewhere?

Our next two questions asked why the respondent chose medicine as a career and what motivated him in school. Our answers were limited in number and restricted in scope. We suspect "other factors" may play a large role in answer to both these queries.

Question #57 asks how many medical journals the student subscribed to while in school. In retrospect,

we think it unlikely that respondents subscribed to a constant number throughout their school experience. Some people may have answered on the basis of the average number; others may have used the maximum number. In any case, we did not supply any directions to insure consistency of response. Question #53 likewise calls for a very difficult--though perhaps valid--response.

The following two questions ask where emphasis should be placed during the junior and senior years. The answers admittedly have little absolute value; we simply did not offer the respondents enough choices. But the two questions have an internal consistency which allow us to compare the answers to one question with the answers to the other.

Question #61 investigated whether or not more emphasis should be placed on electives in the senior year. The answers are simple enough, but interpretation poses some problems. School policy concerning such electives has changed considerably in the eight years spanned by the questionnaire; and we do not know whether people answered on the basis of the present policy (if they were aware of it) or on the basis of past policy.

Perhaps it was unfair to compare the specialized hospitals (NPI and Childrens'--in Question #62) with the general medical and surgical hospitals. In addition,

University Hospital also provides training opportunities in pediatrics and Ob-Gyn, which is not true for any of the other hospitals.

Question #63 asks the respondent to pick the best teaching department from a list of five. The last of these, Neurology and Psychiatry, is really two departments; and these should have been evaluated separately. In addition, the answers give no real indication of which department students consider to be "second-best."

Question #64 requires graduates who have interned with students from elsewhere to compare their preparation with that of their fellow interns. If only graduates who had such experience answered this question, the results should be quite meaningful. If we could re-draft the choices, we would change "e" from "We were equal" to "We were about equal."

Question #65 does not require comment.

Our open-ended question (#66), however, does require some comment. The question is stated clearly enough, but recording the answers took some subjective judgment. For the most part, the responses were easily categorized; e.g., "setting fractures" conveniently fit under "orthopedics" and "care of the newborn" was the province of "pediatrics." Many of the respondents simply listed specific specialty fields: e.g., "gynecology." Some

listings of specific skills were so frequent (e.g., "reading EKG's") that we decided to note them apart from any specialty field. Each entry had to be decided on its own merits; we used no rigid formula.

The second half of this question (the reasons for the strengths and deficiencies) and the last two questions all offer somewhat limited choices in response to very broad questions. Our results on these items are therefore not as useful as they might otherwise be.

This concludes the "brief evaluation of our data-gathering process" which we promised earlier. We hope the discussion will prove useful in helping the reader to arrive at his own conclusions. Before submitting our conclusions, we would like to say a few words about student evaluations of education.

Implicit throughout this work is the notion that such student evaluations constitute a provocative and valuable means of improving education. At several universities--including Harvard and the University of California at Berkeley--undergraduate groups print and distribute student appraisals of both the faculty and the courses they teach. A recent news item ⁵ reveals that the Associated Students of the University in Lincoln will soon be publishing a similar guide. And why not? As one writer says, "Why ... should teaching be the

only important function in our society which is not subject either to criticism or the appraisal of the market?"³ We think this is particularly true in a graduate college such as ours, where the students are hopefully mature, serious in intent, thoughtful and responsible. All of the students at the College of Medicine will soon be physicians, to be entrusted with human health, with community leadership and with life itself. We think the College of Medicine can trust us to be honest and responsible in our appraisal of medical education.

SUMMARY AND CONCLUSIONS

This report constitutes a consumers' report on medical education at the University of Nebraska. The data stems from questionnaires mailed to College of Medicine sophomores, juniors, seniors and recent graduates. We have tabulated the data, indicated some of the more interesting results, submitted an evaluation of our data-gathering process, and discussed student appraisals of education in general. The principal conclusions we derived as a result of this project are outlined below:

1. In any unrequested mailing, 62% return is an extraordinary figure. We submit this fact as evidence to demonstrate the deep and widespread interest in medical education which exists among our students and recent graduates.

2. In general, our respondents are pleased with their education at the University of Nebraska College of Medicine--at least as measured by our questionnaire.

3. Cheating on examinations is regarded as a problem in some classes and should be remedied if grades are to depend on exam scores.

4. Respondents feel that, for the most part, their fellow students are seriously oriented in their quest for knowledge and conscientious in their concern for patients.

5. Although students feel comfortable discussing academic problems with faculty, our results suggest that serious problems exist in faculty-student communication. Students do not feel comfortable disagreeing openly with the faculty, and they definitely do not feel comfortable discussing personal problems with the faculty. This breach in communications is not appreciably improved by student government on our campus.

6. Lectures in the basic science years are regarded as the principal learning source, in spite of many unfavorable comments to the contrary. Assigned texts rate almost as highly on our scale and do not provoke as many unfavorable comments.

7. During the clinical years, ward clerkships were clearly the most popular learning source. By the questionnaire's standards, lectures ranked only sixth and were the subject of many derogatory remarks.

8. Preceptorships were popular learning devices with those who took them. According to the results of our survey, preceptorships deserve to be continued.

9. Senior theses were regarded as "not very helpful" or a "waste of time" by 69% of those writing such papers. The senior thesis, as an unbending requirement for all students, should be abolished.

10. The majority of students and graduates feel

more emphasis should be placed on the humanities and social sciences in the pre-medical curriculum.

11. Although a majority of students enter medical school interested in general practice, the majority decide on a specialty practice during the course of their medical training.

12. The majority of students are interested in practicing outside Nebraska when they first enter medical school, and they leave the College of Medicine with essentially the same intention.

13. Of the general medical and surgical hospitals, respondents strongly favor Douglas County and University over Veterans for learning opportunities in general.

14. The Ob-Gyn Department was the single department receiving the most praise--for fulfilling its teaching responsibilities and for showing active interest in the students as individuals. The Preventive Medicine Department also rated very highly in the latter regard.

15. Graduates overwhelmingly feel adequately prepared to assume the responsibilities of their internships.

16. Graduates feel most deficient in dermatology and allergy and the surgical sub-specialties.

17. Formal, unsigned, student evaluations of medical education can supply useful information in improving medical education. Someone--students, faculty or administration--should see to it that such appraisals are continued.

Appendix I
The Questionnaire

(see following pages)

THE UNIVERSITY OF NEBRASKA
COLLEGE OF MEDICINE
OMAHA, NEBRASKA 68105

Dear Colleague,

We need your help. We are deeply interested in the quality of our medical education, in its virtues and its deficiencies. We know that you are interested in these things too, because we've discussed our concerns and our ideas with many of you.

Now we have an opportunity to collectively and forcefully present our opinions to the administration. We are preparing a senior thesis entitled "MEDICAL EDUCATION AT THE UNIVERSITY OF NEBRASKA: AN EVALUATION BY STUDENTS AND RECENT GRADUATES"—and Dean Wittson has kindly consented to be our sponsor and to help us bring the results of our survey to the attention of the faculty. But if our thesis is to reflect *your* views, *you* must respond—and quickly. A stamped return envelope is enclosed for your convenience.

We would like to emphasize two very important points:

1. Your responses are completely anonymous. These questionnaires will not be seen by either the administration or the faculty; only the collected data will be transmitted to them.
2. We ask that you thoughtfully consider each question and answer it as best you can. If you feel you cannot answer a question honestly with the choices provided, DO NOT ANSWER AT ALL.

Please feel free to comment on anything you wish in the space provided at the end of the questionnaire. Then mail it immediately.

Thank you for your help,

Martin Lipp & Bernard Bloom

PLEASE MARK THE APPROPRIATE RESPONSES

- A. Circle your year of graduation from medical school
- | | | | |
|------|------|------|------|
| 1961 | 1962 | 1963 | 1964 |
| 1965 | 1966 | 1967 | 1968 |
- B. Circle your present principal career objective
- general practice
 - specialty practice
 - research
 - academic medicine
 - other or undecided

MARK the location of training completed or in progress	NEBRASKA	OTHER MIDWEST	WEST	EAST	SOUTH
C. Majority of undergraduate training					
D. Internship					
E. Residency					
F. MARK the probable location in which you will eventually settle					
G. Are you presently a practicing physician?		YES	NO		
H. If you are a practicing private physician, in how large a town do you practice?	LESS THAN 1,000	1,000 TO 10,000	10,000 TO 50,000	50,000 TO 250,000	GREATER THAN 250,000
Please evaluate the quality of each of the following, to the best of your memory:	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY UNSATISFACTORY
1. the EFFECTIVENESS with which basic science instructors prepare students to cope with clinical problems.					
2. the EFFECTIVENESS with which clinical science instructors relate their material to basic science knowledge.					
3. the EFFECTIVENESS with which clinical science instructors teach the humanitarian art of medicine.					
4. the BASIS which students are given FOR CONTINUING their STUDY after graduation.					
5. the FAIRNESS and objectivity with which the faculty evaluated your performance.					
6. the FAIRNESS and objectivity with which the faculty evaluated your fellow students' performance.					
7. the EFFECTIVENESS with which the honor system and/or proctoring prevents cheating on examinations.					
8. the SCHOOL ADMINISTRATION'S CONCERN for the student--as opposed to concern for the clerical staff and employees.					
9. NOTIFICATION of students by the administration of important events, schedule changes, etc.					
10. Student Government's REPRESENTATION of student opinions and complaints to the administration.					
SCHOOL SPIRIT and pride in the College of Medicine among students.					

In your opinion, what proportion of your classmates:	ALL OR ALMOST ALL	ABOUT $\frac{2}{3}$	ABOUT $\frac{1}{2}$	ABOUT $\frac{1}{3}$	VERY FEW OR NONE
12. have been interested in learning as much as they could while in medical school?					
13. have been genuinely concerned about their patients welfare?					
14. will be physicians to whom you would entrust your own health problems?					
As best you can, please evaluate the atmosphere at the College of Medicine with regard to the following:	ALWAYS	USUALLY	ABOUT $\frac{1}{2}$ THE TIME	SELDOM	NEVER
15. How often were you likely to feel comfortable disagreeing openly with faculty members?					
16. How often did you find the College atmosphere to be intellectually stimulating?					
17. How often were you likely to feel comfortable discussing an academic problem with the appropriate faculty member?					
18. How often were you likely to feel comfortable discussing a personal problem with a faculty member?					
Please evaluate the relative importance of the following in your medical education. EVALUATE ONLY THOSE TEACHING METHODS WITH WHICH YOU HAVE ALREADY HAD EXPERIENCE.	A PRINCIPAL LEARNING SOURCE	VALUABLE ANCILLARY SOURCE	SATISFACTORY SOURCE	NOT VERY HELPFUL	WASTE OF TIME
Basic Science Years in general:					
19. Lectures					
20. Laboratories					
21. Assigned texts					
22. Optional reading (books, journals, etc.)					
23. Discussions with fellow students					
24. Individual instructor-student talks					
Clinical Science years in general:					
25. Lectures					
26. Ward clerkships					
27. General outpatient clinics					
28. Special problem clinics (allergy, cardiac, etc.)					
29. Electives					
30. Preceptorship					
31. Assigned texts					
32. Optional reading (books, journals, etc.)					
33. Discussions with fellow students					
34. Individual talks with staff men					
35. Resident's advice and supervision					
36. Departmental conferences and seminars					
37. CPC's					
38. Senior thesis					

In your opinion, to what degree do the following departments show <i>active interest</i> in the students as individuals:	MAXIMUM POSSIBLE	LARGE EXTENT	SATISFACTORY AMOUNT	MINIMAL	NONE
39. Anatomy					
40. Biochemistry					
41. Physiology and Pharmacology					
42. Preventive Medicine					
43. Microbiology					
44. Anatomical pathology					
45. Clinical pathology					
46. Internal medicine					
47. Surgery					
48. Pediatrics					
49. Psychiatry					
50. Neurology					
51. Ob-Gyn					

	a	b	c	d	e
52. In which pre-medical fields should more emphasis be demanded? a. foreign language b. English c. mathematics d. Biological and physical sciences e. Humanities and social sciences					
53. What was your goal before entering medical school? a. specialist b. general practitioner c. research d. academic e. other					
54. Where did you want to practice when you first entered medical school? a. Midwest b. Nebraska c. East d. West e. South					
55. What led you to choose medicine as a career? a. liked to associate with people b. interested in research c. wanted the financial benefits d. family influences e. desire to teach					
56. What motivated you most in medical school? a. get good grades b. drive to learn all you could c. enthusiasm about the subject matter itself d. desire to satisfy your instructors e. desire to be a good physician					

	a	b	c	d	e
57. Did you subscribe to any medical journals during medical school? a. none b. one c. two d. three e. more than three					
58. Did you read them? a. all of them b. most of them c. about half of them d. seldom e. never					
59. Should the junior year be devoted mostly to a. practical skills b. theoretical knowledge c. superficial contact with a wide variety of patients d. intensive study on a few patients					
60. Should the senior year be devoted mostly to a. practical skills b. theoretical knowledge c. superficial contact with a wide variety of patients d. intensive study on a few patients					
61. Should more emphasis be placed on electives in the senior year? a. Yes b. No					
62. Which hospital provides the best opportunity for student learning? a. Douglas County b. Veterans c. University d. Childrens e. N.P.I.					
63. Which single department best fulfills its teaching responsibilities? a. Surgery b. Internal Medicine c. Pediatrics d. Ob-Gyn e. Neurology and Psychiatry					
64. How has or had your preparation compared with that of your fellow interns who graduated from other schools? a. My clinical preparation was better. b. Their clinical preparation was better. c. Their theoretical preparation was better. d. My theoretical preparation was better. e. We were equal.					
65. Do you feel that you were adequately prepared to assume the responsibilities of an intern? a. Yes b. No					
66. In what clinical skills did you feel deficient? a. b. c.					

	a	b	c	d	e
To what do you attribute this deficiency? a. lack of interest on your part b. poor quality of teaching c. lack of sufficient time devoted to these subjects					
In what clinical skills do you feel particularly strong? a. b. c.					
To what do you attribute this strength? a. personal interest b. good quality of teaching c. clinical experience.					
67. What led you most to your present career plans? a. teaching staff at med school b. staff in postgraduate training c. local doctor d. family influence e. other factors					
68. What influenced your decision in determining where you are now practicing or where you plan to practice? a. local people b. local practitioner c. physician you met in med school d. physician you met in graduate training e. other reasons					

Comments

Thank You for Your Cooperation.

Appendix II
Career Categories

	General Practice (130)					Specialty Practice (168)					Academic or Research (14)				
Question:															
#1.	23	33	44	9	4	17	74	52	15	0	0	4	7	3	0
2.	14	54	35	13	0	11	77	53	15	0	0	7	7	0	0
3.	5	24	46	40	2	10	50	57	31	5	3	4	4	2	0
4.	13	49	36	11	1	14	62	49	17	0	2	7	3	2	1
5.	17	38	50	16	4	12	74	49	21	4	3	3	6	1	1
6.	12	43	44	23	4	10	65	53	30	4	3	0	8	2	1
7.	13	34	39	25	17	14	44	47	43	13	1	1	5	3	4
8.	13	36	43	28	5	14	51	60	29	7	2	4	3	2	2
9.	17	43	39	22	6	15	59	57	24	8	1	7	4	0	2
10.	5	18	51	38	10	4	29	57	52	17	1	1	4	2	5
11.	13	43	38	26	3	10	62	52	42	1	0	2	5	6	1
12.	34	46	35	10	2	24	56	49	29	8	1	2	5	5	1
13.	40	39	25	9	1	53	68	21	8	4	4	5	3	2	0
14.	19	47	32	27	0	22	65	30	40	8	0	4	4	4	2
15.	1	33	18	60	16	2	47	38	66	14	1	7	1	3	2
16.	4	66	40	16	1	7	65	70	21	3	0	3	6	5	2
17.	10	66	25	23	3	22	71	43	24	5	4	5	2	3	0
18.	3	28	14	51	28	4	31	22	62	31	2	4	3	2	3
19.	65	31	23	4	1	98	34	23	5	2	5	6	0	2	1
20.	22	27	38	29	7	15	58	40	36	13	3	4	2	4	0
21.	59	34	31	1	0	85	50	26	1	2	9	2	3	0	0
22.	5	41	33	36	8	9	59	37	49	4	2	8	1	3	0
23.	19	54	33	18	2	14	78	45	24	1	0	4	6	4	0
24.	21	37	35	24	2	23	42	48	36	0	3	4	3	2	0
25.	42	35	23	6	2	50	51	29	15	3	3	4	4	2	1
26.	75	20	13	0	0	97	27	15	5	1	10	1	1	1	0
27.	51	27	21	4	0	38	36	44	19	3	2	3	6	1	0
28.	15	35	32	18	4	12	33	47	37	9	2	2	5	3	0
29.	27	41	22	4	0	35	60	27	4	0	3	5	1	2	0
30.	29	25	5	0	0	24	26	10	6	6	1	0	1	0	0
31.	37	43	21	3	1	71	48	23	3	0	4	5	3	0	0
32.	6	54	34	8	2	18	79	37	10	0	4	7	2	1	0
33.	18	47	29	11	1	18	66	49	12	1	0	5	6	0	2
34.	26	43	23	13	2	30	62	41	11	0	5	4	3	1	0
35.	34	47	21	3	0	50	62	26	8	0	6	5	3	0	0
36.	7	31	37	24	7	17	38	66	17	6	1	5	5	2	0
37.	8	26	42	20	6	11	39	58	23	5	3	3	3	3	1
38.	2	8	14	31	45	4	15	24	42	51	1	1	5	1	4
39.	26	42	35	15	4	28	66	40	35	4	4	3	3	3	1
40.	15	42	43	21	3	20	49	67	25	2	0	4	7	3	0
41.	2	11	33	48	25	3	10	46	70	34	0	3	2	6	3

General Practice

Specialty Practice

Academic or
Research

Question:

42.	45	48	23	6	1	47	72	33	12	1	3	4	3	2	2
43.	31	47	35	9	1	41	70	41	8	2	5	6	2	1	0
44.	12	39	41	18	4	20	41	66	25	3	2	6	4	2	0
45.	7	32	51	19	3	12	34	67	32	5	1	5	5	3	0
46.	9	24	42	28	5	15	44	54	35	9	0	5	5	2	0
47.	6	29	38	26	7	13	33	56	39	4	0	6	6	0	1
48.	7	20	42	37	4	4	18	50	55	16	1	3	1	9	0
49.	7	26	40	33	9	4	31	66	36	10	1	3	4	3	2
50.	4	10	40	46	10	4	18	52	51	16	1	2	5	4	1
51.	40	49	16	4	1	55	51	38	6	1	6	5	1	2	0
52.	1	7	14	11	39	2	16	11	12	50	1	2	3	2	2
53.	17	104	1	0	0	81	66	3	1	7	1	4	1	5	1
54.	35	55	2	19	0	62	37	10	32	2	5	1	1	2	1
56.	9	7	8	4	66	16	6	27	9	59	1	1	2	1	5
57.	15	57	49	6	0	32	47	60	20	8	3	2	5	1	3
58.	12	46	40	17	4	20	50	48	31	2	3	4	3	3	0
61.	40	62				63	79				2	10			
62.	37	1	36	11	2	41	1	75	6	5	3	2	7	0	0
63.	6	6	1	81	0	10	18	5	96	7	0	2	0	8	2
65.	74	9				107	12				8	0			

Appendix III
Location of Training

All Nebraska Training (178)						No Nebraska Training Except Medical School (59)				
Question:										
#1.	16	54	65	15	2	4	17	20	3	2
2.	14	67	49	15	0	0	28	16	5	0
3.	10	39	48	44	2	2	14	18	12	2
4.	14	60	45	13	2	1	21	17	5	0
5.	14	53	69	29	6	3	22	19	6	2
6.	6	52	68	40	6	4	19	17	10	3
7.	16	33	52	45	25	3	21	14	12	8
8.	13	44	67	41	10	7	16	22	8	2
9.	17	50	63	32	11	4	21	15	11	5
10.	5	20	64	58	19	2	7	17	19	6
11.	14	54	52	51	6	5	16	19	13	2
12.	35	58	48	27	7	7	15	21	10	2
13.	51	46	32	10	2	13	23	5	6	1
14.	22	60	40	41	7	7	17	13	16	3
15.	1	40	32	77	27	1	12	13	26	4
16.	8	78	54	34	2	3	17	27	6	1
17.	18	74	40	38	6	8	25	15	7	0
18.	5	32	15	67	48	1	12	6	20	8
19.	92	40	35	6	1	24	16	7	2	3
20.	16	35	45	59	18	2	19	16	8	6
21.	89	50	38	1	0	26	11	11	2	3
22.	11	58	41	49	8	2	16	9	19	5
23.	21	76	44	28	6	4	25	15	8	0
24.	27	53	48	32	2	7	16	10	12	2
25.	38	35	40	11	5	12	16	8	7	1
26.	79	29	16	1	1	27	7	8	2	0
27.	44	27	27	12	3	10	9	16	5	1
28.	14	30	37	24	11	5	13	8	10	3
29.	26	45	25	1	0	13	17	6	1	0
30.	25	21	6	2	3	5	11	2	0	2
31.	49	45	27	0	1	18	15	9	2	0
32.	14	66	32	11	1	4	23	9	5	1
33.	21	52	37	13	3	5	20	15	1	0
34.	32	47	36	9	2	6	21	10	3	1
35.	39	62	23	2	0	14	19	5	5	0
36.	11	33	47	25	9	2	8	23	6	3
37.	9	28	35	32	7	4	12	20	2	3
38.	3	8	13	26	57	1	4	11	7	17
39.	36	57	46	30	6	7	19	16	7	2
40.	28	52	65	27	4	6	22	17	6	1
41.	3	9	55	69	37	2	7	12	21	10
42.	51	61	39	17	4	12	24	13	5	0
43.	41	67	54	10	3	9	20	19	4	0

All Nebraska Training

No Nebraska Training
Except Medical School

Question:

44.	15	43	58	28	7	4	9	23	9	2
45.	12	30	59	29	8	2	11	22	12	0
46.	12	27	49	35	13	7	12	14	13	4
47.	7	27	52	26	10	4	14	13	9	1
48.	5	15	44	47	10	2	13	11	12	4
49.	13	31	49	33	12	2	11	14	14	3
50.	6	15	41	51	12	2	8	12	12	5
51.	54	47	24	4	1	12	17	13	2	0
52.	3	12	26	18	41	2	7	5	8	14
53.	46	103	3	3	8	17	22	1	1	8
54.	57	65	6	21	2	14	10	4	16	2
56.	16	12	25	6	80	7	1	9	2	18
57.	20	64	68	14	6	7	19	18	12	2
58.	21	57	47	36	3	8	15	18	9	2
61.	49	70				24	21			
62.	35	2	54	8	5	16	0	19	4	1
63.	6	6	2	97	3	3	3	1	30	1
65.	71	11				25	3			

Appendix IV
Practicing Versus Non-Practicing Physicians

	Practicing Physicians (102)					Non-Practicing Physicians (79)				
Question:										
#1.	21	35	33	5	1	12	30	26	9	1
2.	12	50	32	5	0	6	39	24	9	0
3.	8	22	36	31	3	7	29	27	11	2
4.	14	39	29	10	0	9	30	26	8	1
5.	21	39	32	4	2	9	42	21	6	0
6.	17	44	31	6	2	7	36	27	9	0
7.	12	33	32	20	4	5	23	27	18	4
8.	12	31	28	24	3	5	25	27	14	6
9.	14	43	32	9	0	5	35	25	9	3
10.	5	21	41	26	5	3	16	26	24	7
11.	14	44	31	12	0	6	31	20	22	0
12.	26	40	30	4	1	12	27	17	20	2
13.	39	36	19	6	0	26	35	13	4	1
14.	16	43	27	15	0	5	35	11	22	5
15.	0	34	14	49	4	2	26	25	19	7
16.	6	59	27	8	0	3	27	36	12	1
17.	10	57	20	12	1	12	36	20	9	1
18.	2	26	14	36	18	5	15	13	26	14
19.	61	24	12	2	0	46	17	9	4	1
20.	24	35	28	10	1	10	29	23	13	2
21.	49	29	20	0	0	36	27	15	0	0
22.	2	41	25	28	2	9	27	17	21	1
23.	13	50	17	17	1	8	27	26	16	1
24.	20	26	31	17	2	12	18	21	22	0
25.	44	37	17	1	1	21	34	16	7	1
26.	77	13	8	2	0	57	12	7	2	0
27.	56	18	22	5	0	20	21	24	13	0
28.	16	31	28	21	5	9	14	29	17	6
29.	29	38	24	6	0	17	35	18	4	1
30.	30	16	8	0	1	15	15	1	4	1
31.	39	38	20	1	1	34	31	10	3	6
32.	10	48	36	5	0	13	38	20	8	0
33.	14	48	25	11	1	9	29	27	10	3
34.	24	43	24	9	1	18	26	21	13	0
35.	41	35	20	5	0	23	38	13	5	0
36.	11	28	40	19	3	2	25	35	9	3
37.	13	28	43	13	4	4	29	31	14	1
38.	1	10	22	40	28	4	9	18	21	27
39.	23	43	18	12	1	15	28	23	9	2
40.	5	32	37	19	3	5	24	29	16	3
41.	1	11	23	44	17	1	7	21	30	18
42.	43	32	21	2	1	22	37	13	5	1
43.	31	46	16	2	1	22	37	16	2	0

Practicing Physicians

Non-Practicing Physicians

Question:

44.	15	38	34	9	0
45.	9	38	39	12	1
46.	9	26	36	25	3
47.	7	21	44	26	3
48.	5	20	35	40	1
49.	5	20	35	33	8
50.	5	7	37	45	7
51.	44	38	11	6	1
52.	4	7	6	6	38
53.	23	68	2	0	2
54.	33	34	1	15	0
56.	6	5	6	6	41
57.	18	37	38	7	1
58.	12	35	31	10	2
61.	40	54			
62.	40	2	35	11	0
63.	6	13	2	67	2
65.	84	10			

13	27	26	10	1
8	20	30	18	1
7	31	22	16	2
5	24	25	19	6
0	11	25	33	9
3	12	30	22	10
1	8	24	32	12
20	38	17	4	0
1	10	5	6	19
36	33	0	2	2
29	20	2	17	1
4	3	11	6	30
17	28	25	5	4
12	28	18	13	2
30	46			
18	2	45	3	0
7	11	2	49	4
70	6			

Appendix V
Size of Town

	Less Than 1000 (10)				Between 1000 and 10,000 (36)				Between 50,000 and 250,000 (17)						
Question:															
#1.	0	6	2	0	0	11	8	12	1	1	5	5	5	1	0
2.	1	3	5	1	0	6	20	9	0	0	2	7	4	3	0
3.	0	0	3	6	1	1	9	10	14	0	3	2	7	3	2
4.	0	3	4	2	0	6	15	7	3	0	2	7	6	1	0
5.	3	2	5	0	0	5	13	13	3	0	3	9	4	1	0
6.	3	2	5	0	0	4	13	13	4	0	1	12	3	1	0
7.	3	1	2	3	1	2	13	10	8	2	2	8	5	2	0
8.	1	3	2	4	0	3	11	9	11	1	5	2	7	2	1
9.	2	5	2	1	0	6	11	13	5	0	3	8	4	1	0
10.	0	3	2	2	2	1	6	15	11	2	3	3	5	5	1
11.	1	4	2	3	0	4	16	10	5	0	5	5	5	2	0
12.	2	3	3	2	0	8	15	11	0	1	4	8	4	1	0
13.	2	3	3	2	0	14	10	10	1	0	5	8	1	2	0
14.	2	2	4	2	0	5	18	7	5	0	2	8	4	3	0
15.	0	3	0	6	1	0	12	4	16	3	0	4	6	7	0
16.	1	6	2	1	0	3	22	8	2	0	1	9	6	1	0
17.	0	7	0	3	0	4	21	5	3	1	4	6	6	1	0
18.	0	3	0	5	2	0	11	2	15	6	1	3	3	6	3
19.	5	1	3	1	0	24	6	4	0	0	9	5	3	0	0
20.	3	1	4	2	0	11	11	6	5	1	2	6	8	1	0
21.	4	1	4	0	0	15	12	7	0	0	11	2	4	0	0
22.	0	6	0	4	0	1	12	10	9	2	0	9	4	4	0
23.	3	4	2	1	0	7	15	8	3	1	2	8	2	5	0
24.	1	1	5	2	0	8	12	6	6	1	5	5	5	2	0
25.	6	1	3	0	0	11	18	4	1	1	9	4	4	0	0
26.	7	2	1	0	0	29	4	2	0	0	13	0	2	1	0
27.	6	2	2	0	0	21	5	8	1	0	10	2	3	2	0
28.	0	3	3	3	1	6	9	12	8	0	4	5	3	3	2
29.	1	6	2	1	0	12	12	7	3	0	5	7	4	1	0
30.	4	2	0	0	0	13	5	1	0	0	4	3	1	0	0
31.	4	2	4	0	0	13	11	8	1	1	5	8	4	0	0
32.	0	6	2	1	0	3	17	14	0	0	1	9	5	2	0
33.	3	4	1	2	0	8	17	5	3	1	2	7	7	1	0
34.	2	5	2	1	0	9	15	6	4	1	4	4	7	2	0
35.	3	3	4	0	0	16	14	4	1	0	5	6	4	2	0
36.	2	2	3	2	1	3	7	11	13	1	2	4	9	1	1
37.	2	2	3	2	1	3	11	12	6	3	3	6	7	1	0
38.	0	1	2	2	5	1	2	2	15	15	0	2	3	8	4
39.	1	4	3	1	1	13	10	6	4	0	2	9	4	1	0
40.	0	3	5	2	0	4	9	10	7	3	1	6	8	1	0
41.	0	3	3	3	1	1	3	7	14	7	0	2	5	7	2

Less Than
1000

Between 1000
and 10,000

Between 50,000
and 250,000

Question:

44.	1	4	5	0	0	4	13	13	2	0	2	6	2	4	0
45.	0	4	5	1	0	2	10	16	4	1	2	10	3	2	0
46.	0	4	4	1	1	1	9	14	9	1	4	2	5	5	0
47.	1	1	3	5	0	0	12	14	7	2	3	3	5	5	0
48.	1	4	3	2	0	1	5	14	15	0	1	4	4	8	0
49.	1	3	4	1	1	0	5	9	17	4	2	5	5	4	1
50.	1	2	5	2	0	0	1	8	23	3	2	0	8	4	2
51.	4	5	1	0	0	14	14	4	2	0	9	5	2	1	0
52.	0	2	0	0	3	0	1	2	4	13	0	2	1	0	7
53.	2	7	0	0	0	5	28	1	0	0	2	13	0	0	0
54.	3	5	0	0	0	12	14	1	5	0	6	4	0	0	0
56.	0	2	0	0	4	2	1	2	3	17	2	0	1	0	9
57.	0	5	4	1	0	6	18	11	0	0	3	6	4	4	0
58.	4	4	2	0	0	2	17	8	3	2	1	4	7	4	0
61.	3	7				15	16				6	11			
62.	4	0	3	0	0	17	1	11	2	0	7	0	3	6	0
63.	0	0	1	8	0	2	2	0	28	0	0	4	0	10	0
65.	9	1				28	4				14	3			

Appendix VI
The Satisfaction Quotient

Classification and Number	Column					Total	Satisfaction Quotient
	1	2	3	4	5		
All (#372)	2595	5344	4747	2875	800	17007	2.62
1961 (#46)	533	785	568	344	71	2301	2.41
1962 (#47)	405	814	658	344	80	2333	2.51
1963 (#50)	404	851	704	417	96	2472	2.59
1964 (#46)	400	708	626	368	84	2186	2.57
1965 (#42)	387	662	599	327	107	2082	2.57
1966 (#41)	371	718	660	462	201	2412	2.75
1967 (#48)	238	529	592	379	135	1873	2.80
1968 (#52)	175	381	426	282	84	1348	2.79
G.P. (#130)	1031	1870	1663	1014	274	5852	2.59
Specialist (#168)	1253	2550	2250	1351	346	7750	2.61
Academic & Research (#14)	119	201	191	119	46	676	2.67
All Nebr. (#178)	1222	2232	2180	1427	453	7514	2.69
Non-Nebr. (#59)	337	808	707	432	134	2418	2.69
Non-Practicing (#79)	632	1343	1093	673	168	3909	2.58
Practicing (#102)	1025	1704	1364	769	142	5004	2.45

Classification and Number	Column					Total	Satisfaction Quotient
	1	2	3	4	5		
Practicing city 1000 (#10)	94	159	142	85	19	499	2.55
City 1000- 10,000 (#36)	336	578	429	240	66	1699	2.51
City 10,000- 50,000 (#6)	57	99	96	40	8	300	2.45
City 50,000- 250,000 (#17)	190	277	235	124	19	845	2.42
City 250,000 (#7)	55	120	109	63	3	350	2.54

We determined the Satisfaction Quotients by the method outlined at the beginning of this paper. In order to evaluate the significance of the resultant figures, we used the methods advocated by Snedecor and Worcester⁷ (i.e., the analysis of the variance of multiple means):

The variance of the means is equal to:

$$S_M^2 = \sum_{i=1}^k \frac{n_i (\bar{x}_i - \bar{x})^2}{k-1}$$

$$= \sum_{i=1}^k \frac{\frac{T_i^2}{n_i} - \frac{T_{++}^2}{N}}{k-1}$$

where k = the number of classes

n_i = the number of responses in each or in the "i"th class

\bar{x} = the grand mean

\bar{x}_i = mean of the "i"th class

T_{++} = total of all observations

N = total number of all observations

T_i^+ = total of all observations in the "i"th class

$$S_M^2 = \frac{\frac{T_{c1}^2}{n_{c1}} + \frac{T_{c2}^2}{n_{c2}} + \frac{T_{c3}^2}{n_{c3}} + \frac{T_{c4}^2}{n_{c4}} + \frac{T_{c5}^2}{n_{c5}} + \frac{T_{c6}^2}{n_{c6}} + \frac{T_{c7}^2}{n_{c7}} + \frac{T_{c8}^2}{n_{c8}}}{k-1}$$

The variance within the classes is equal to:

$$S_P^2 = \frac{\sum \sum (x_{ii})^2 - \sum \left(\frac{T_i^+}{n} \right)^2}{\sum n_i - k}$$

The ratio of the variances then equals:

$$F = \frac{\text{LARGER VARIANCE}}{\text{SMALLER VARIANCE}}$$

By using the above method, we determined that the ratio of the variances for the Satisfaction Quotients segregated by year of graduation was 26.8 (i.e., $F = 26.8$). This figure indicates that the progressive increase in satisfaction from the classes now in school to the class graduated longest ago is highly significant.

In comparing the standard error of the difference between the means of the specialist and the generalist, we calculated a relative deviate of one. This is not highly significant and indicates a variance which could be expected in sampling two groups in a homogeneous population.

Obviously, location of training caused no difference in satisfaction which we were able to measure.

The relative deviate tabulated by comparing the practicing with the non-practicing physician equaled 6.5. This verifies that our data for these groups are highly significant--and that, by our measurements, the practicing physician is significantly more satisfied with his education than is his non-practicing classmate.

Appendix VII
Questionnaire Spontaneous Comments

Editors' note: Comments have been divided and placed under the question to which they most closely relate.

Please evaluate the quality of each of the following:

1. the effectiveness with which basic science instructors prepare students to cope with clinical problems

"...basic sciences too academic...should be clinically oriented." class 1967

"Some patient contact in the freshman year would drive home important points." class 1968

3. the effectiveness with which clinical science instructors teach the humanitarian art of medicine

"...a notorious failing at most university medical centers according to my other intern colleagues." class 1965

5. the fairness and objectivity with which the faculty evaluated your performance

"Tests have very few really practical questions." 1967

"I do not think the grading system at the "U" is a fair judge of one's work. I believe the faculty puts one in a place in the class and continues to use past rank as present grade." 1967

"I do not believe written examinations are necessary in the senior year except, perhaps, for a comprehensive final. If a student reaches the senior year, there should be enough student-faculty contact for an adequate evaluation." 1966

"There is a lack of feedback concerning the degree or progress of personal performance." 1968

6. the fairness and objectivity with which the faculty evaluated your fellow students

"Have students on clinical clerkships evaluate performances of other members in their group since instructors do not realize who is putting in the work."

"I severely resent the fact that the bottom 10-15 students have continually been boosted up to pass. It seems too bad that some students in our class with 'connections' could miss 7-8 weeks straight of a junior service and still pass--reportedly with a grade of 87. Equal and fair treatment could make this a new and better school." 1966

"Fortunately, my relations with faculty members has always been at least cordial. But one of my colleagues has been mercilessly singled out for criticism by one department. He is competent and diligent, but he started his sophomore year in disfavor and has never been able to rid himself of that burden." 1966

"I think that many students do not realize, as I didn't until I became a resident...that most departments bend over backwards to give the student a good break...and many times they have been too fair." 1963

7. the effectiveness with which the honor system and/or proctoring prevents cheating on examinations

"...freshman class of 1958 proposed honor system...refused by administration" 1962

"Cheating in our class is quite great especially." 1967

"Considerable amounts of cheating go unrecognized or ignored--predominately among the members of the upper part of the class." 1967

"At times, the cheating and other discrepancies made one feel foolish and naive in an attempt to be honest." 1967

"Those who wanted to cheat did so, with or without proctors, and with impunity."
1965

"One department encouraged cheating on a major exam and then had the nerve to flunk six people--presumably students who hadn't cheated. When this injustice was brought to the attention of the department head by four students who had passed the exam, the whole class was required to retake the exam and the 'steal pigeons' were ridiculed publicly by the faculty members involved. Does this produce an intellectually stimulating atmosphere? How can we have pride in our school when faculty members conduct themselves so childishly?" 1966

8. the school administration's concern for the student-- as opposed to concern for the clerical staff and employees

"UNH is more interested in research than in the majority of students." 1967

"...more interested in building up the C of M than in sincerely aiding the students in becoming competent future M.D.'s." 1968

9. notification of students by the administration of important events, schedule changes, etc.

"Most information seemed to come via the 'grapevine.' The administration's insistence upon keeping the student in the dark was the source of much student dissatisfaction and discontent." 1965

"The freshman year was especially horrible in this regard. News of a pending exam was 'leaked' to one and spread capriciously. Being informed was simply a matter of luck--and the

constant fear that you weren't breded much anxiety." 1966

"The school should keep a list of current research projects so people know what is going on." 1967

"The administration should present a formal statement on the requirements and consequences of state and National Boards--and the use of the latter for course grading." 1967

"(An) unsatisfactory aspect is the poor communication between the college of medicine and the remainder of the college in Lincoln." 1964 G.P.

10. student government's representation of student opinions and complaints to the administration

"As far as a representative body is concerned, the only opinions the student government expressed must have been their own." 1965

"The University of Nebraska College of Medicine has no student government." 1966

11. school spirit and pride in the College of Medicine among students

"...has improved since Devaney." 1961

"As a result of this hard core of mediocrity (of the faculty), I believe U of N students can never have much pride in their school. Within my own experience, in more than one department, I knew of experiences where instructors have made conscious attempts to encourage shoddy work, incomplete learning, and even cheating by students who otherwise want to learn as much as possible. This plus the fact that for the most part, the underclass students are treated as though they were high school kids with no sense of responsibility...

contributes heavily to the lack of 'school spirit' or pride in the college." 1968

"Though generally pessimistic, I want to say that most departments at Nebraska have one or more really superlative instructors. I would not want to discourage them." 1963 academic

"...high, when comparing ourselves to Creighton, but I am sure that many of us wondered if we were getting the same quality of education as we would have in the East. (Note: After my education, I met and conversed with men educated elsewhere, and I have no doubt that our education at least equalled if not surpassed theirs.) 1965

13. What proportion of your fellow classmates have been genuinely concerned about their patients' welfare?

"Most are quite diligent in this regard, but it is unfortunate that the faculty never seems to discover the few who just don't give a darn about anyone save themselves." 1966

15. How often were you likely to feel comfortable disagreeing openly with faculty members?

"Early in my clinical years, our group of four was on a private hospital service. When asked for constructive criticism, I made the mistake of thinking the (physician was on the level). I made some suggestions. Although my written grade tied with the highest, my clerkship total was barely passing. I learned that if I wanted to be a doctor, I would 'play the game' while in the private hospitals." 1961 G.P.

"Certain instructors present a pose of lefty, aloof unapproachability which makes the student afraid to ask questions out of fear of intimidation." 1967

"The most unsatisfactory aspect of U. of N. C. of M. is lack of communication between the faculty and student body."
1964 G.P.

"The atmosphere at the University wasn't one to encourage disagreement. I never felt that the instructors or residents were confident enough of their own knowledge to encourage such challenge." 1965

"At one hospital on a junior service, our group had several really unpleasant incidents in which we asked staff men to consider diagnoses other than the admitting ones. The abuse--verbal and grade-wise--we received for such 'insolence' taught us that an inquiring mind may be great for philosophy students, but a med. student must learn to keep his mouth shut if he is to graduate." 1966

"As far as attitudes (are concerned), it has been 'believe anything you want--just be sure it doesn't contradict any of my beliefs!" 1968

"I believe the major complaint of myself and my classmates is the poor quality of the bulk of the faculty. With the exception of a few people, the instructors show no interest in their job or in the students who are forced to listen to them." 1968

16. How often did you find the college atmosphere to be intellectually stimulating?

"The attitude toward learning was not what one would expect in a professional school." 1967

"...too much emphasis on busy work." 1966

"The atmosphere was intellectually stimulating if one chose to make it such." 1965

"Training should be less 'spoon-fed', since this dampens an inquiring mind."
1964 specialist

17. How often were you likely to feel comfortable discussing an academic problem with a faculty member?

"The attitude of several staff men seems to be one of looking for things to criticize rather than a balance of constructive criticism and positive encouragement." 1966

"Teaching in this institution is teaching by trauma--instructors make little or no effort to provide an atmosphere of mutual respect and informality." 1967

18. How often were you likely to feel comfortable discussing a personal problem with a faculty member?

"A few (faculty members) seem to show a basic distrust of the student and his abilities." 1966

"I'm convinced that some of my friends flunked out simply because they didn't trust any faculty member enough to expose their personal problems." 1966

Evaluation of the basic science:

19. Lectures

"...smattering of very poor teachers... always offset by better members of the dept. involved...I have often wondered why the more outstanding cases (of poor teaching) were allowed to remain." 1968

"My primary complaint is the amount of my valuable, potential learning time that is wasted in dull lectures that either regurgitate material that is in the book or that ramble over purposeless material that might interest some professors. If this time were given to study of the text--to which the student usually returns anyway--more information might be gained with less waste of valuable time. No wonder this school is

notoriously poor on National Boards with
all the time wasted in pointless lectures..."
1968

"...most are worthless...liked NPI mimeo
system." 1967

"...general lack of quality lectures."
1964 specialist

"...too many (in number) and too many...
are worthless. (Could) be an exciting
thing, but always it is turned into a dull
grind by the instructors attitude of hurry,
hurry. (Commonly,) long and boring...
whose only function is to fill extra time
and satisfy the instructors' ego." 1968

"All departments seem eager to give (the
interested, motivated student) every chance
to satisfy his curiosity. A major source
of misunderstanding surrounds, on one hand,
the lecturer who wants to give the student
a glimpse of some intellectually stimulating
(though minor) segments of his field; and
on the other, that particularly vocal group
who demand to spoon-feed an education." 1968

"...most were straight from the book, not
very infermative and quite boring." 1967

"One-fourth to one-third were terrible.
The excuse is often that 'we don't want
to spoon-feed you.' Good instructors
never worry about it; they present the
material in a logical, sensible way and
if that's spoon-feeding, my classmates and
I would like more of it." 1968

"Most students simply skip (the poor)
lectures and read the text...and why not?
It's of much more benefit." 1968

"Hire a lecture correlator for the inter-
departmental lectures; presently boring
and repetitious." 1968

"(Should be) more M.D. oriented and less
Ph.D. oriented...(I'm) not a researcher
working on the reactions of the African
Gooney Bird to sunflower extract."

20. Laboratories

"properly conducted...could be a principal learning source." 1968

"too often filled with busy work..." 1968

"definite deficiency in laboratory assistance" 1963 G.P.

"If we are trying to establish a graduate school atmosphere, let's begin by treating our students as adults, not like high school kids. Learning is difficult enough without wasting time copying busy-work." 1967

"too much time spent in ridiculous 'cook-book' laboratories." 1968

24. Individual instructor-student talks

"Too few instructors who really know how to teach in a palatable and digestible form. We need more instructors and especially those vitally interested in seeing that their students learn what they teach." 1967

Evaluation of the clinical science:

25. Lectures

"...much is totally worthless." 1965

"Some departments refuse to give lectures on those subjects which we as students feel would be particularly helpful." 1967

"...should tend to 'nuggetize'...allowing students to turn to books for frills rather than to a basic text to (make) amends for another poor lecture." 1966

"...general lack of quality of lectures..." 1963 specialist

"Most lectures by voluntary faculty were

poor; if they showed up at all, many were more interested in telling jokes and being 'buddy-buddy' than in teaching." 1961

"We had to put up with disorganized and inconsistent lectures by the local physicians, apparently to get the title of 'Associate Professor of ...' as well as relieve (full time staff) of their responsibilities." 1963 G.P.

"The (part-time staff) lectures vary widely in quality: some are careful to cover their assigned material; others should have been alone in the lecture hall. Especially in some departments this variation is marked and reliance on full time staff disproportionately small." 1963 academic

"Dean Wittson should occasionally audit lectures--to shake up instructors whose lectures are less than inspiring and hardly educational." 1963 G.P.

27. General outpatient clinics

"Clinics...are of value only to the house staff in the sense that students do most of the work and learn next to nothing from the experience." 1965

"...too rushed." 1961 specialist

"...supervision spotty,...; most patients had very little teaching value." 1961

"All except one were of negligible value. To be effective, patients would have to be screened for teaching value." 1965

28. Special problem clinics

(Editors' note: Several specialty clinics were repeatedly mentioned specifically as a waste of time.)

31. Assigned texts

"...usually the most comprehensive but, not the most efficient and useful for the student." 1967

32. Optional reading

"I would recommend...more emphasis on journals than on texts. This has, however, the danger of lacking comprehensive coverage of the subject in general...a faultteasily rectified by carefully planned bibliographies selecting concise, readable and sufficiently comprehensive articles." 1963 academic

33. Discussions with fellow students

"Few of my fellow classmates ever discuss medicine, once off the wards. Even though I'm in the middle of my class academically, most of them add little to what I already know in the few discussions we do have. Nobody wants to 'one up' anyone else." 1966

34. Individual talks with staff men

"The general ability of most clinical instructors to interpret a medical student's gaps in understanding and teach on a useful level could be improved." 1962 G.P.

35. Resident's advice and supervision

"...interested and knowledgeable staff or residents are the most important sources of knowledge...in the last two years. Unfortunately, these teachers are not too common." 1961

36. Departmental conferences and seminars

"Very few (of these) are directed toward the student. If the department heads had

the courage to make attendance really voluntary, they would quickly find out which ones are thought to be worthwhile and which are a waste of time." 1966

"More organized small group teaching sessions would be helpful in the clinical years." 1967

37. CPC's

"...most were a waste of time because of lack of effort in preparation by the person presenting the case." 1963 G.P.

"CPC's are the single most over-rated learning device in medicine."

38. Senior thesis

"The subject matter of the thesis is immaterial; however, compiling a thesis teaches one to evaluate articles from a critical point of view...I know of no other means of accomplishing this."
1963 G.P.

"...biggest waste of time and effort during four years of medical school." 1966

"No doubt (it) is a valuable learning source in an isolated field; but it is also a very, very uneconomical method of learning. So much time and effort expended for the return of knowledge."
1965

"The senior thesis should be made elective for those interested in such an endeavor, and should be credited as one or more elective units. In many cases, at present, it merely detracts from time more profitably spent on other aspects of our education." 1966

52. In which pre-medical fields should more emphasis be demanded?

"I strongly feel that the vast majority of my fellow students are not well versed in the humanitarian aspect of medical science. There is little or no interest in anything other than pure science. Humanities should be emphasized in undergraduate school in order to produce a well versed and versatile individual physician." 1968

"Most medical students are characterized by their scientific intelligence--and that is all!" 1968

(Editors' note: One 1961 graduate who did not feel greater emphasis in English was necessary answered our "Thank you for your cooperation" with "Your very welcolm.")

56. What motivated you most in medical school?

"When I graduated from medical school two-and-one-half years ago, I thought Nebraska was a good, average school. Having practiced...I have found some glaring deficiencies in the faculty and curriculum. The greatest deficiency in my opinion is that the faculty approaches the students with a continual threat of low grades and with dismissal from school. This results in motivating the student by grades and fear rather than a sincere interest and quest for knowledge as partners in the art and science of medicine." 1963 G.P.

"I found the trauma of the freshman year was a great hinderance to learning. Grades are ridiculous in medical school (and I received good ones). More emphasis should be placed on learning for learning's sake." 1968

"Constant reminders by some of the instructors that the class could fail as easily as pass are not necessary." 1967

"The first year and ten weeks...have been too traumatic and not enough educational.

I hope that in the (clinical) years we are taught medicine...and not treated as children." 1967

"It seems to me the whole school would benefit if the practices of instilling anxiety and paranoia were abolished. No one would be hurt by a little more confidence and desire to learn." 1968

59. Should the junior year be devoted mostly to:

"...long form H & P's not helpful." 1966

62. Which hospital provides the best opportunity for student learning?

"V.A. Hospital greatly detracts from the teaching program...disinterested staff." 1967

"All of the services I had at private hospitals were terrible." 1961 specialist

"...do not have clerkships at OVAH unless better staff men become available as instructors." 1966

"Ten weeks at OVAH clerkship is the maximum any physician-to-be needs." 1967

"My major complaints (include) my not being assigned to University and my spending too much time at Vets." 1964 specialist

"...private hospitals in my opinion very poor." 1962 G.P.

"The most valuable parts of training were the externships available at private hospitals during the junior and senior years." 1963 G.P.

"The time spent on our clerkships in a private hospital was nearly worthless. Our most important function there was to serve as a whipping boy for the local doctor." 1961 G.P.

"Very poor use of the talents of part-time faculty and the private hospitals."
1961

64. How has or had your preparation compared with that of your fellow interns who graduated from other schools?

"...medical education equal or better than that of my colleagues." 1965 intern in the West

"...interns from fifteen other schools... my practical background better; but in several schools, theoretical preparation slightly better." 1961 specialist

"In general, the medical education I obtained at the University of Nebraska was superior to most school's interns or residents I encountered." 1961 specialist

"...large charity hospital with ten other schools represented and was the best prepared of any of my fellow interns..."
1964 specialist

"...in general NU grads well prepared..."
1965 intern in Nebraska

"...stacked up well against that of graduates of some of the 'name' schools I've been associated with." 1961 intern and resident in Nebraska

"I have had moderate contact with students from other schools. In retrospect, I feel that I was equal to them in over-all medical school practical and theoretical knowledge." 1961

"During internship and G.P. residency (both in the West) I noted that I did not have the wide theoretical knowledge of fellows from other schools, but I had more actual patient treating background than most of them. I think this is the most important factor in Nebraska's reputation for turning out physicians ready to practice." 1961

"Generally proud to be part of University of Nebraska." 1961 specialist

"Overall I find that many of the harsh judgements I rendered while in medical school have been tempered by time. Comparisons with interns from other schools have convinced me that my education was the equal if not better than most of theirs. The problems which we had are universal rather than singular. In other words, they bitched about the same things we did." 1965

66. In what clinical skills did you feel deficient?
In what clinical skills did you feel particularly strong?

To what do you attribute this deficiency?

To what do you attribute this strength?

"It appears that the instructors' ability to teach is almost never questioned... this school could benefit from some sort of teacher evaluation." 1966

"...too much experimental data...the majority of us are here to be practicing physicians." 1966

"Get rid of poor instructors regardless of tenure." 1966

"Seniors should be given more responsibility in treating medical emergencies on the floor in preparation for internship." 1963 specialist

"...assisting in surgery often a waste of time...surgeon should even spoon-feed a student in many instances." 1961

"It is criminal not to have a full-time orthopedics surgery staff at a major medical school. G.P.'s facing law suits over orthopedics malpractice should be allowed to file counter suits (against) the U of N for this void in medical education."

"...deficient in knowledge of frequent causes of certain signs and symptoms... not merely the dangerous ones." 1965

"I felt my training in the four main fields was comparable to or above that of others I have worked with--internship (West) and Army. My training was particularly weak in surgical subspecialties." 1964

"...does not teach common, everyday medicine--too much time on exotic and rare conditions...want the student to run before he can walk."

"Part-time staff cooperation is generally less than satisfactory and the number of full-time instructors is insufficient to adequately train the student in the finer points of medical practice." 1963 specialist

"Mediocrity of education at the University of Nebraska medical school is due to not enough full-time staff and to paucity of clinical material." 1962 specialist

"Too much stress on the bizarre and not enough stress on such common disorders as congestive heart failure."

"...unable to cope with the whole patient problem." 1962

"Many are completely lost and baffled on their emergency room service." 1964 G.P.

(Editors' note: Many comments went into great detail about a variety of 'impractical' pet-peeves, including the formula for chondroitin sulfate (1962 G.P.), the details of cellular metabolism, Tsutsugamuchi fever (1962 specialist), the ten millimeter pig and life cycle of gnats (1961 G.P.))

67. What led you most to your present career plans?

"Nebraska should be training G.P.'s (which) is contrary to the aims of the clinical instructors." 1962 specialist

"Plan to do general practice...certainly was not the attitude of the staff which led me to this decision." 1965

"N.U.'s general orientation is toward academic or specialty practice." 1964 G.P.

"N.U. has lost sight of the fact that the general public needs G.P.'s." 1962 G.P.

"...college not geared to producing G.P.'s." 1962 G.P.

"As long as N.U. continues to place emphasis on the training of the practicing physician but leaves room for the satisfaction of the interests of those who are research oriented, it will be one of the finest training centers in the country." 1961 academic

"I graduated with a feeling of inferiority because I wanted (to enter) general practice." 1965

"...College of Medicine not stressing practice..." 1964 G.P.

"I think that the school makes a good attempt to make the students into qualified practitioners who will practice medicine in small Nebraska towns. This is what medicine is all about in that state and that school, and they do a good job. It is only in preparation for academic medicine and stimulation of better students who want more than a 'practical answer' that the school fails...It seems sad that the University continues to use the money at its disposal to stack bricks in little rectangles instead of trying to fill the existing space with excellent people. I know that a portion of this approach stems from the way government (money) is granted, but I think that a larger part stems from an 'edifice complex' which obscures the crying need for excellent people."
1962 academic and research

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