ED 030 428   JC 690 201

This is a brief overview of a study used as an example of how a computerized, longitudinal description and analysis of student responses to questions and statements about the teaching process can help answer the question, "Am I doing a good job of teaching?" Questions and statements for the example were taken primarily from "The University of Washington Survey of Student Opinion of Teaching" and "The Purdue Rating Scale for Instruction," and administered to several classes of students. Responses were grouped by class, semester and subject to show some of the available descriptions of the effects of the teaching process. Appended are the instruments used and some examples of grouped data as compiled by the computer. [Not available in hardcopy due to marginal legibility of original document]. (MC)

A Computerized Method of Longitudinal

Evaluation of Student Performance

Presented to

The Michigan Academy of

Science, Arts, and Letters

The University of Michigan

Ann Arbor, Michigan

Presented by

Jon Gosser

March 29, 1969

A Computerized Method of Longitudinal

Evaluation of Student Performance*

By Jon Gosser**

The most important question to every teacher is, "Am
I doing a good job teaching?"[1] In order to partially answer
the above question the individual teacher needs to define
teaching (independent variable), the effects of good teach-
ing (dependent variable), and the method to measure the
effectiveness of his teaching.

The independent variable (teaching) can be best defined
as a process which consists of the teachers' behavior, the
students' behavior, the physical setting, and the behavior of
the supportive personnel. Thus the teachers' behavior is only
one part of the teaching process. (See Figure 1) However,
the teacher is the formal leader and therefore considered
responsible for the entire teaching process of which he is a
part. In most cases, the individual teacher cannot control to
any significant degree the other parts of the teaching process.

as defined above. Thus our independent variable is an ill-
defined and ambiguous one. The obvious "constant" in this
independent variable is the teacher himself.

Due to the ambiguous and ill-defined nature of our
independent variable the approach described here will not
attempt to ascertain causal relationships as normally defined
in science. What we can do, however, is to precisely measure
and describe the effects of the total process (independent
variable) without being able to contribute these effects to
any particular part of the teaching process. In most cases
the teacher, as formal leader of the teaching process, will
probably be assumed to produce the desirable or undesirable
effects.

The dependent variable (the effects of good teaching) has
been looked upon in such terms as its effects upon the teacher,
the school administration, political beliefs, religious values,
parents, the amount of tax and other monetary support for
education, national survival, and various types of student
behavior. All of the above criteria may be valid and justifi-
able outcomes of the teaching process, but student behaviors
are felt by most individual teachers to be the most important.
We can break most student behavior into four broad types:
(1) student responses to questions and statements about the course
content (achievement), (2) student responses to questions and
statements about the teaching process, recording conditions,
and parts thereof (student opinion of teaching), (3) student
responses to his own and other student responses in 1 and 2

above, and (4) criterion situations outside the educational setting (job performance). (See Figure 2)

Our dependent variable (student behavior) can only be precisely defined by including thousands, if not millions, of specific small responses to specific situations. For example, in student responses to course content in an elementary math class the response to the question $2 + 2 =$ is a different response than $+\underset{=}{2}$, as the student may respond correctly to the one format but incorrectly to the other format. Thus the only conceivable way at present to deal with these thousands, if not millions, of different student responses is through the use of high speed digital computers and appropriate memory devices. Since as teachers we clearly are not primarily interested in the responses of our students in a given semester, but are primarily interested in how our students will respond ten years later and also, we are not primarily interested in how well we have taught in a given semester but whether or not we are teaching more effectively now than we were last year or ten years before. This interest in long term effects and comparisons requires the use of the longitudinal approach.

In essence, what we have said thus far is that teachers, as leaders of the teaching process (independent variable), want to know what effects they and the teaching process are having on student responses to academic content, opinions of teachers, student opinion of other students, and long term retention and transfer of these behaviors. Due to the number of different

student responses, of interest to teachers, and the longitudinal interest in their students' behavior, the use of computerized and longitudinal approach to the problem is necessary.

METHOD

Since student responses to questions and statements about the teaching process and components thereof are relatively few in number and easy to obtain, we chose student responses to 53 questions about the teaching process. These questions were taken from, "The University of Washington Survey of Student Opinion of Teaching,"[2] and from, "The Purdue Rating Scale for Instruction."[3] In addition, we added some questions and statements of particular relevance to us. Since we used different instructions for the two questionnaires (see Figure 3 and 4), the students responses to these questions were coded in the following ways: (1) a number was assigned to each completed questionnaire for verification of the accuracy of the key punching, (2) the class in which the student filled out the questionnaire, (3) the time of the semester in which he responded to the questionnaire (mid-term, final), (4) the actual date on which he responded, (5) the number of the question to which he responded, and (6) name of the questionnaire. (See Figure 5)

No attempt will be made here to go into the details of how the questionnaires were administered. Neither will we go into the systems and programs necessary to carry out a computerized longitudinal description and analysis of student responses to questions and statements about the teaching process.

RESULTS

The results to date is the ability to describe and analyze student responses to questions and statements about the teaching process. The basic usefulness of these descriptions is that they document, in a reliable and valid fashion, one of the effects of the teaching process. In otherwords, we have generated an objective description of one of the products we as teachers produce. The remainder of the result section will describe and illustrate some nonrandom samples of descriptions and analyses.

In Figure 6, we see that the median response to the question, "Do you think that your instructor should have asked your opinion of this course," was yes, at the end of the semester in the course evaluation when combining all classes in analyzing the results by semester. Figure 7 shows, that the median (MD.) response to the above question was yes, for each of the 31 individual sections which were grouped by semester in Figure 6.

In Figure 8, we see that the median response to the question, "Personal appearance," at the end of the semester in the <u>instructor</u> <u>evaluation</u> was superior for all classes grouped by semester. In Figure 9, we see that looking at the results by class for the "Personal appearance" question that only 26 out of the 31 classes had a median response of superior. Two of the 5 remaining classes had a median rating of competent and the other 3, a median response of outstanding. This shows that the value of being able to look not only at the results summarized by semester but also by section or class.

In Figure 10, we see that the median response at the end of the semester, of general psychology classes only, grouped by semester, to the statement, "Amount of freedom allowed students in the selection of the materials to be studied (considering the subject matter)," was above average for the first 3 semesters. While during the last five semesters the median was either average or below average. This decrease in amount of freedom the students perceived was in agreement with the changes that were made in teaching methods at the start of the fourth semester.

These sample results indicate the type of information presently available on all 53 questions. Tests of significance and other inferential statistical analyses have not at present been integrated into the system. But there would be no necessity for any changes in the data itself to run any statistical tests desired automatically by the computer.

DISCUSSION

We have described student responses to questions and statements about the teaching process grouped by classes, semesters, and subjects. The descriptions could have been grouped in many different ways dependent upon the interest of the individual instructor. Actually, we may organize the data in terms of any of the responses which students can/or did make. For example, the opinions of the males versus all the females, the opinions of all of those who expect to receive an "A", and those who learn things of no practical value and had no opinion on taking another course under the instructor and who were female. Another example might be, how did the students who responded without stating an opinion to the questions

on, "individual goals," respond to, "I am learning things of practical value, some practical value, or no practical value." This system of computerized longitudinal evaluation of student performance can be applied to any and all identifiable and recordable student responses.

The time and money involved in computerized systems can be quite large but with appropriate systems and programming can be considerably reduced. For example, a way to have done the analyses described in the result section would have been to look at each of 3,332 records until you find the first record you want and then to look through all 3,332 records again to find the next record you wanted, etc. This would have required roughly 60 hours of IBM 360-40 computer time or nearly $4,500 for one report. The way this report was generated required less than 2 hours or only $150 worth of computer time. With sufficient changes in the programs the cost can probably be reduced to $50 or less.

SUMMARY

This paper has tried to indicate some of the ways we as teachers can obtain partial answers to the question, "Am I doing a good job in teaching?" In essence, we have said we can presently describe in great detail the effects of the teaching process on student responses. That is, we can keep an inventory of the responses our students make to (1) questions and statements about subject matter, (2) questions and statements on the teaching process, and (3) questions and statements about theirs' and other students' responses, and (4) criterion situations outside of the educational setting.

[1]Lal, Harbans and Gosser, Jon, "Research on Teaching Pharmacy:
The Role of Student Ratings," _American Journal of Pharmaceutical Education_, Vol. 32, November, 1968.

[2]Langen, T. D. F., "Improving College and University Teaching,"
Oregon State University Press, Winter, 1966.

[3]Remmers, H. H. and Elliott, D. N., "Manual, The Purdue Rating
Scale for Instruction," (rev. ed.), Purdue University Book
Store, West Lafayette, Indiana, 1960.

FIGURE 2

STUDENT   PERFORMANCES

Student Responses To:

1. Questions and statements about course content
    (achievement)
    Ex. 1. In an experiment designed to study the
             effect of background music on production in
             a factory, the background music is the:
             1. dependent variable
             2. intervening variable
             3. only relevant variable
             4. independent variable.
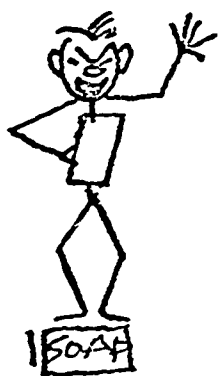
2. Questions and statements about the teaching
    process, recording conditions, and parts
    thereof.
    Ex. 1. The degree to which the objectives of
             the course were clarified and discussed.
             1. excellent   4. Below average
             2. above average   5. extremely poor.
             3. average

3. Criterion situations outside of the
    educational setting.
    Ex. "How many articles have you published?"

4. His own and other student's responses made
    above.
    Ex. How sure are you that your answer
         is correct?
         1. very confident
         2. confident
         3. don't know
         4. not confident
         5. very unconfident
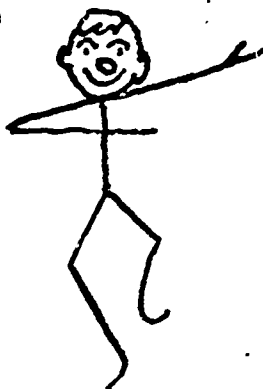
Figure 3
COURSE EVALUATION*

Course_____   Number NONE DESIRED

Date_____   Name   NONE DESIRED

NOTE TO STUDENTS: Following is a list of factors which are important to many courses but over which the instructor often has little control. You are to rate the course on each of the factors by circling one of the numbers at the right of each statement. DO NOT OMIT ITEMS.

Extremely Poor
Below Average
Average
Above Average
Excellent

1. Suitability of the method or methods by which subject matter of the course is presented (recitation, lecture, discussion, etc.)--1 2 3 4 5

2. Suitability of the size of the class (consider the subject matter and type of class--lecture, discussion, lab., etc.)-------------------------1 2 3 4 5

3. Amount of freedom allowed students in the selection of the materials to be studied (considering the subject matter)----------------1 2 3 4 5

4. How the course is fulfilling your needs (consider your long range as well as your short range goals)----------------------------1 2 3 4 5

5. The degree to which the objectives of the course were clarified and discussed-------------1 2 3 4 5

6. The agreement between the announced objectives and rules of the course and what was actually done--1 2 3 4 5

7. Suitability of the reference materials available for the course------------------------------------1 2 3 4 5

8. Suitability of the laboratory facilities available for the course-------------------------1 2 3 4 5

9. Suitability of the assigned textbook------------1 2 3 4 5

10. The use made of tests as aids to learning-------1 2 3 4 5

11. Range of ability in the class (are there too many extremely dull or extremely bright students) -------------------------------------1 2 3 4 5

12. Suitability of the amount and type of assigned outside work--------------------------------------1 2 3 4 5

* These sheets and summaries thereof are a matter of PUBLIC RECORD.

OVER

13. The weight given to test in determining the
    final grade for the course----------------------1   2   3   4   5

14. Coordination of the tests with the major
    objectives of the course-------------------------1   2   3   4   5

15. Frequency of tests---------------------------------1   2   3   4   5

16. Interest in subject matter-----------------------1   2   3   4   5

17. Suitability of the record requirement-----------1   2   3   4   5

18. Suitability of confidence level estimates-------1   2   3   4   5

19. Suitability of the "CLASS POLICY" paper---------1   2   3   4   5

20. Suitability of the self evaluations-------------1   2   3   4   5

21. Suitability of THE COURSE-----------------------1   2   3   4   5

22. Suitability of the Peer evaluation--------------1   2   3   4   5

23. The OVERALL RATING of the course----------------1   2   3   4   5

SUMMARY of your ratings: # of 1's_____; # of 2's_____; # of 3's ____;

# of 4's_____; # of 5's_____

Mode_____   Mean_____   Median_____

What have you liked especially well about this course?_____

_____

What have you especially disliked about this course?_____

_____

What might be done to improve this course?_____

_____

Circle your answer

24. Amount of time spent on this course

    ABOVE AVERAGE   AVERAGE   BELOW AVERAGE

25. Do you think that your instructor should have asked your opinion
    of this course?

    YES   NO   NO OPINION

26. Sex: MALE   FEMALE

Figure 4
INSTRUCTOR EVALUATION*

Course_____   Number <u>NONE DESIRED</u>

Date _____   Name <u>NONE DESIRED</u>

     Listed below are several qualities which describe aspects of the instructor's behavior. Rate the instructor on each of these items by drawing a circle around the number that best indicates his position in <u>comparison</u> <u>with</u> <u>other</u> <u>teachers</u> you have had. Rate each item as thoughtfully and carefully as possible. DO NOT OMIT ITEMS.

		Outstanding	Superior	Competent	Only Fair	Of Less Value
1.	Interprets abstract ideas and theories clearly.	1	2	3	4	5
2.	Gets me interested in his subject.	1	2	3	4	5
3.	Has increased my skills in thinking.	1	2	3	4	5
4.	Has helped broaden my interest.	1	2	3	4	5
5.	Stresses important material.	1	2	3	4	5
6.	Makes good use of examples and illustrations.	1	2	3	4	5
7.	Has motivated me to do my best work.	1	2	3	4	5
8.	Inspires class confidence in knowledge of subject.	1	2	3	4	5
9.	Has given me new viewpoints or appreciations.	1	2	3	4	5
10.	Is clear and understandable in his explanations.	1	2	3	4	5
11.	His method of teaching.	1	2	3	4	5
12.	Personal appearance.	1	2	3	4	5
13.	Sense of proportion and humor.	1	2	3	4	5
14.	Tells you in detail what to learn.	1	2	3	4	5
15.	Allows for individual goals.	1	2	3	4	5
16.	Fairness in grading.	1	2	3	4	5
17.	Sympathetic attitude toward students.	1	2	3	4	5
18.	Instructor's opinions.	1	2	3	4	5
19.	Speech fluency.	1	2	3	4	5
20.	The OVERALL RATING of the instructor.	1	2	3	4	5

SUMMARY: # of 1's_____; # of 2's_____; # of 3's_____; # of 4's_____;

# of 5's_____; Median_____; Mode_____; Mean_____;

*These sheets and summaries thereof are a matter of PUBLIC RECORD.

What specific thing did the instructor do especially well in

his teaching of this course?_____

_____

What specific thing did the instructor do worst in his teaching

of this course:_____

_____

What specific things do you beleive might be done to improve

his teaching of this course?_____ ___

_____

_____

CIRCLE YOUR ANSWERS

21. Do you want to return to a "Traditional" approach (multiple
guess, true-false, etc. questions; and lectures):

     YES   NO   NO OPINION

22. Would you rehire the instructor?

     YES   NO   NO OPINION

23. I am learning things of:

     PRACTICAL VLAUE   SOME PRACTICAL VALUE   NO PRACTICAL
                                 VALUE

24. I expect to receive a grade of:

     A   B   C   D   F   I   W

25. Would you like to take a course under this instructor again?

     GLADLY   NO OPINION   WITH HESITATION   NEVER

26. Do you think your instructor should have asked your opinion
of his teaching?

     YES   NO   NO OPINION

27. MALE   FEMALE

COMMENTS:

FIGURE 5

CODING SYSTEM

REFERENCE

NO RESPONSE

DATE

TIME OF SEMESTER
TYPE OF TEST
CLASS

DATA ONE STUDENT

12-14-67

QUESTION

DATE

TIME OF
SEMESTER
TYPE OF TEST
CLASS

DATA SUMMARY

07-22-98

FIGURE 6

PAGE · 25

ALL SUBJECTS---BY SEMESTER

DATE COMPLIED   03-20-69

STUDENT EVALUATIONS OF JON GOSSER

BY ALL STUDENTS AS QUALIFIED BELOW

PART OF SEMESTER----END
NAME OF EVALUATION--COURSE EVALUATION

DIRECTIONS

COURSE   NUMBER   NONE DESIRED

DATE   NAME   NONE DESIRED

    NOTE TO STUDENTS FOLLOWING IS A LIST OF FACTORS WHICH ARE
IMPORTANT TO MANY COURSES BUT OVER WHICH THE INSTRUCTOR OFTEN HAS
LITTLE CONTROL. .YOU ARE TO RATE THE COURSE ON EACH OF THE FACTORS
BY CIRCLING ONE OF THE NUMBERS AT THE RIGHT OF EACH STATEMENT.
DO NOT OMIT ITEMS.

                        CIRCLE YOUR ANSWER
25. DO YOU THINK·THAT YOUR INSTRUCTOR SHOULD HAVE ASKED YOUR
     OPINION OF THIS COURSE

             YES   NO   NO OPINION

     1=YES, 2=NO, 3=NO OPINION

MONTH/YEAR TO MONTH/YEAR	SCHOOL	NO. OF SEC.	NO. OF STUD.	WT. MEAN	MEDIAN	1	2	3	4	5	OTHER
09/66-01/67	KCKCJC	7	204	1.5	1.0	72	10	15	0	0	3
01/67-06-67	KCKCJC	2	20	1.3	1.0	85	5	10	0	0	0
06/67-08/67	DELTA	1	14	1.1	1.0	93	0	7	0	0	0
09/67-12/67	DELTA	8	123	1.5	1.0	78	2	19	0	0	2
01/68-04/68	DELTA	4	51	1.3	1.0	86	4	8	0	0	2
04/68-06/68	DELTA	1	16	1.4	1.0	75	6	19	0	0	0
06/68-08/68	DELTA	3	49	1.4	1.0	80	4	14	0	0	2
09/68-12/68	DELTA	5	64	1.4	1.0	78	5	17	0	0	0

PERCENT AT EACH RATING

FIGURE 7

PAGE 25

Q. NO.	WT. MEAN	MD.	NO.	PERCENT AT						NUMBER AT						DATE	TEST	CLASS
				1	2	3	4	5	6	1	2	3	4	5	6			
25.	1.5	1.0	35	77	9	9	0	0	6	27	3	3	0	0	2	01-17-67	FC	01
25.	1.3	1.0	29	79	10	10	0	0	0	23	3	3	0	0	0	01-17-67	FC	02
25.	1.9	1.0	25	60	4	32	0	0	4	15	1	?	0	0	1	01-18-67	FC	03
25.	1.4	1.0	32	75	13	13	0	0	0	24	4	4	0	0	0	01-17-67	FC	04
25.	1.8	1.0	29	66	14	14	0	0	7	19	4	4	0	0	2	01-19-67	FC	05
25.	1.6	1.0	36	67	14	17	0	0	3	24	5	6	0	0	1	01-17-67	FC	06
25.	1.3	1.0	18	83	6	11	0	0	0	15	1	2	0	0	0	01-14-67	FC	07
25.	1.5	1.0	10	70	10	20	0	0	0	7	1	2	0	0	0	05-25-67	FC	08
25.	1.0	1.0	10	100	0	0	0	0	0	10	0	0	0	0	0	05-23-67	FC	09
25.	1.1	1.0	14	93	0	7	0	0	0	13	0	1	0	0	0	08-07-67	FC	10
25.	1.0	1.0	13	100	0	0	0	0	0	13	0	0	0	0	0	12-15-67	FC	11
25.	1.5	1.0	21	81	0	14	0	0	5	17	0	3	0	0	1	12-14-67	FC	12
25.	1.2	1.0	10	90	0	10	0	0	0	9	0	1	0	0	0	12-13-67	FC	13
25.	1.4	1.0	5	80	0	20	0	0	0	4	0	1	0	0	0	12-13-67	FC	14
25.	1.2	1.0	14	86	7	7	0	0	0	12	1	1	0	0	0	12-14-67	FC	15
25.	1.6	1.0	27	67	4	30	0	0	0	18	1	8	0	0	0	12-14-67	FC	16
25.	1.5	1.0	13	77	0	23	0	0	0	10	0	3	0	0	0	12-14-67	FC	17
25.	1.8	1.0	20	65	0	30	0	0	5	13	0	6	0	0	1	12-15-67	FC	18
25.	1.4	1.0	14	86	7	0	0	0	7	12	1	0	0	0	1	04-11-68	FC	19
25.	1.3	1.0	7	86	0	14	0	0	0	6	0	1	0	0	0	04-11-68	FC	20
25.	1.4	1.0	17	76	6	18	0	0	0	13	1	3	0	0	0	04-16-68	FC	21
25.	1.0	1.0	13	100	0	0	0	0	0	13	0	0	0	0	0	04-12-68	FC	22
25.	1.4	1.0	16	75	6	19	0	0	0	12	1	3	0	0	0	06-18-68	FC	23
25.	1.6	1.0	17	76	0	18	0	0	6	13	0	3	0	0	1	08-12-68	FC	24
25.	1.2	1.0	18	89	0	11	0	0	0	16	0	2	0	0	0	08-12-68	FC	25
25.	1.4	1.0	14	71	14	14	0	0	0	10	2	2	0	0	0	08-14-68	FC	26
25.	1.4	1.0	15	80	0	20	0	0	0	12	0	3	0	0	0	12-09-68	FC	27
25.	1.4	1.0	17	76	6	18	0	0	0	13	1	3	0	0	0	12-09-68	FC	28
25.	1.3	1.0	3	67	33	0	0	0	0	2	1	0	0	0	0	12-09-68	FC	29
25.	1.3	1.0	14	86	0	14	0	0	0	12	0	2	0	0	0	12-09-68	FC	30
25.	1.5	1.0	15	73	7	20	0	0	0	11	1	3	0	0	0	12-09-68	FC	31

FIGURE 8

PAGE   38

ALL SUBJECTS---BY SEMESTER

DATE COMPLIED   03-20-69

STUDENT EVALUATIONS OF JON GOSSER

BY ALL STUDENTS AS QUALIFIED BELOW

PART OF SEMESTER----END
NAME OF EVALUATION--INSTRUCTOR EVALUATION

DIRECTIONS

COURSE   NUMBER   NONE DESIRED
        ==========
DATE   NAME   NONE DESIRED
        =========

     LISTED BELOW ARE SEVERAL QUALITIES WHICH DESCRIBE ASPECTS OF
THE INSTRUCTOR'S BEHAVIOR. RATE THE INSTRUCTOR ON EACH OF THESE
ITEMS BY DRAWING A CIRCLE AROUND THE NUMBER THAT BEST INDICATES
HIS POSITION IN COMPARISON WITH OTHER TEACHERS YOU HAVE HAD.
        ============== ===== ======= ============
RATE EACH ITEM AS THOUGHTFULLY AND CAREFULLY AS POSSIBLE. DO NOT
OMIT ITEMS.

                    CIRCLE YOUR ANSWER
 12.   PERSONAL APPEARANCE===1 2 3 4 5

     1= OUTSTANDING, 2= SUPERIOR, 3= COMPETENT, 4= ONLY FAIR
     5= OF LESS VALUE

MONTH/YEAR TO MONTH/YEAR	SCHOOL	NO. OF SEC.	NO. OF STUD.	WT. MEAN	MEDIAN	PERCENT AT EACH RATING 1	2	3	4	5	OTHER
09/66-01/67	KCKCJC	7	204	2.0	2.0	34	36	24	5	0	0
01/67-06-67	KCKCJC	2	20	2.0	2.0	30	40	30	0	0	0
06/67-08/67	DELTA	1	8	1.9	2.0	38	38	25	0	0	0
09/67-12/67	DELTA	8	123	2.2	2.0	24	33	39	3	0	0
01/68-04/68	DELTA	4	51	1.8	2.0	37	45	16	2	0	0
04/68-06/68	DELTA	1	16	2.1	2.0	31	31	38	0	0	0
06/68-08/68	DELTA	3	49	1.9	2.0	43	31	24	0	2	0
09/68-12/68	DELTA	5	64	2.2	2.0	23	38	33	6	0	0

Q. NC:	WT. MEAN	MD.	NO.	PERCENT AT 1	2	3	4	5	6	NUMBER AT 1	2	3	4	5	6	DATE	TEST	CLASS
12.	2.0	2.0	33	30	39	30	0	0	0	10	13	10	0	0	0	01-17-67	FI	01
12.	2.3	2.0	30	23	40	23	13	0	0	7	12	7	4	0	0	01-17-67	FI	02
12.	1.8	2.0	25	40	40	20	0	0	0	10	10	5	0	0	0	01-18-67	FI	03
12.	2.2	2.0	32	22	41	34	3	0	0	7	13	11	1	0	0	01-17-67	FI	04
12.	2.1	2.0	30	47	17	27	3	3	3	14	5	8	1	1	1	01-19-67	FI	05
12.	1.9	2.0	36	36	42	14	8	0	0	13	15	5	3	0	0	01-17-67	FI	06
12.	1.9	2.0	18	44	28	17	11	0	0	8	5	3	2	0	0	01-14-67	FI	07
12.	2.0	2.0	10	20	60	20	0	0	0	2	6	2	0	0	0	05-25-67	FI	08
12.	2.0	2.0	10	40	20	40	0	0	0	4	2	4	0	0	0	05-23-67	FI	09
12.	1.9	2.0	8	38	38	25	0	0	0	3	3	2	0	0	0	08-07-67	FI	10
12.	2.5	2.0	13	0	54	46	0	0	0	0	7	6	0	0	0	12-15-67	FI	11
12.	2.1	2.0	21	33	24	43	0	0	0	7	5	9	0	0	0	12-14-67	FI	12
12.	2.0	2.0	10	20	60	20	0	0	0	2	6	2	0	0	0	12-13-67	FI	13
12.	1.8	2.0	5	40	40	20	0	0	0	2	2	1	0	0	0	12-13-67	FI	14
12.	2.0	2.0	14	36	29	36	0	0	0	5	4	5	0	0	0	12-14-67	FI	15
12.	2.4	2.0	27	22	33	30	15	0	0	6	9	8	4	0	0	12-14-67	FI	16
12.	2.1	2.0	14	36	21	43	0	0	0	5	3	6	0	0	0	12-14-67	FI	17
12.	2.4	3.0	19	16	26	58	0	0	0	3	5	11	0	0	0	12-15-67	FI	18
12.	2.2	2.0	14	7	64	29	0	0	0	1	9	4	0	0	0	04-11-68	FI	19
12.	1.6	1.0	7	57	29	14	0	0	0	4	2	1	0	0	0	04-11-68	FI	20
12.	1.5	1.0	17	65	24	6	6	0	0	11	4	1	1	0	0	04-16-68	FI	21
12.	1.9	2.0	13	23	62	15	0	0	0	3	8	2	0	0	0	04-12-68	FI	22
12.	2.1	2.0	16	31	31	38	0	0	0	5	5	6	0	0	0	06-18-68	FI	23
12.	2.2	2.0	17	29	35	29	0	6	0	5	6	5	0	1	0	08-12-68	FI	24
12.	1.7	1.0	18	56	22	22	0	0	0	10	4	4	0	0	0	08-12-68	FI	25
12.	1.8	2.0	14	43	36	21	0	0	0	6	5	3	0	0	0	08-14-68	FI	26
12.	2.3	2.0	15	13	47	40	0	0	0	2	7	6	0	0	0	12-09-68	FI	27
12.	2.7	3.0	17	6	29	53	12	0	0	1	5	9	2	0	0	12-09-68	FI	28
12.	1.7	2.0	3	33	67	0	0	0	0	1	2	0	0	0	0	12-09-68	FI	29
12.	2.1	2.0	14	36	36	14	14	0	0	5	5	2	2	0	0	12-09-68	FI	30
12.	1.9	2.0	15	40	33	27	0	0	0	6	5	4	0	0	0	12-09-68	FI	31

GENERAL PSYCHCLOGY ONLY----BY SEMESTER

DATE COMPLIED   03-20-69

STUDENT EVALUATIONS OF JON GOSSER

BY ALL STUDENTS AS QUALIFIED BELOW

PART CF SEMESTER----END
NAME OF EVALUATION--COURSE EVALUATION

DIRECTIONS

COURSE	NUMBER NONE DESIRED
DATE	NAME NONE DESIRED

NOTE TO STUDENTS   FOLLOWING IS A LIST OF FACTORS WHICH ARE IMPORTANT TO MANY COURSES BUT OVER WHICH THE INSTRUCTOR OFTEN HAS LITTLE CONTROL.   YOU ARE TO RATE THE COURSE ON EACH OF THE FACTORS BY CIRCLING ONE OF THE NUMBERS AT THE RIGHT OF EACH STATEMENT. DO NOT OMIT ITEMS.

3. AMOUNT OF FREEDOM ALLOWED STUDENTS IN THE SELECTION OF THE MATERIALS TO BE STUDIED (CONSIDERING THE SUBJECT MATTER)---1 2 3 4 5

1=EXCELLENT, 2=ABOVE AVERAGE, 3=AVERAGE, 4=BELOW AVERAGE 5=EXTREMELY POOR

MONTH/YEAR TO MONTH/YEAR	SCHOOL	NO. OF SEC.	NO. OF STUD.	WT. MEAN	MEDIAN	1	2	3	4	5	OTHE
09/66-01/67	KCKCJC	2	54	1.8	2.0	44	39	11	0	6	0
01/67-06-67	KCKCJC	1	10	1.8	2.0	40	40	20	0	0	0
06/67-08/67	DELTA	1	14	2.1	2.0	36	29	21	14	0	0
09/67-12/67	DELTA	5	94	3.1	3.0	15	14	29	33	10	0
01/68-04/68	DELTA	1	17	3.3	4.0	18	6	24	35	18	0
04/68-06/68	DELTA	1	16	3.1	3.0	6	13	63	13	0	6
06/68-08/68	DELTA	3	49	2.4	3.0	24	20	47	4	4	0
09/68-12/68	DELTA	5	64	3.1	3.0	9	16	41	23	8	3