

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

ACADEMIC SENATE
EXECUTIVE COMMITTEE - MEETING
April 29, 1976

Chair, Lezlie Labhard
Vice Chair, David Saveker
Secretary, Charles Jennings

- I. The meeting was called to order by the Chair, Lezlie Labhard, in AG 241 at 3:15 PM.

All members were present except the following: Stan Dundon

Excused absences: Mike Wenzl, William Krupp, Mary Stallard, David Saveker, Hazel Jones.

Guests: Keith Stowe, Geraldine Ellerbrock, Dan Hawthorne, Robert Cichowski, Richard Kranzdorf, John Culver, Lloyd Beecher.

Substitutes: Arthur Duarte for Luther Hughes, Shane Kramer for Hugo Hurtado, Norman Eatough for Anthony Buffa.

- II. The minutes for March 30, 1976 were approved.

III. Business Items

- A. Membership: Barbara Cook for Tim Kersten on the Long Range Planning Committee (Labhard) - Approved.
- B. Records Office Policy Regarding Change of Grades Policy, (Culver) - It was M/S/P (Murphy) that the resolution be made a business item on the agenda of the next Senate meeting.
- C. Faculty Involvement in Student Politics, (Culver) - It was M/S/P (Murphy) that the resolution be made a business item on the agenda of the next Senate meeting.
- D. ASI Student Information Awareness Committee, (Culver) - It was M/S/P (Jorgensen) that the resolution presented by the Student Affairs Committee be forwarded to the ASI. It was M/S/P (Olsen) that the Chair or her designee be directed to write a letter of support of the concept of a student information awareness committee and forward to Mike Hurtado, ASI President.
- E. Reassignment of Department Heads, (Beecher) - It was M/S/P (Beecher) that the proposal be made a business item on the agenda of the next meeting of the Senate.

- F. Naming of Rooms, (Labhard) - It was M/S/P (Jennings) to amend the proposal by adding the words and the office of the Academic Vice President at the end of the first sentence in item C., 2. and following the word President in line two of item C., 2. It was M/S/P (Murphy) that the members of the Executive Committee forward written comments on the proposal to the Chair to be summarized by the Chair and forwarded to the President.
- G. ASI Representative on Information Awareness Committee, (Kranzdorf) It was M/S/P (Murphy) that the resolution be made a business item on the agenda of the next meeting of the Senate.

IV. Discussion Items

- A. Ad Hoc Committee on ACR 70, (Labhard) - It was M/S/P (Jennings) that the Chair be directed to receive names of representatives from each school caucus and from Professional Consultative Services to be appointed to the Ad Hoc Committee on ACR 70.

The meeting was adjourned by the Chair, Lezlie Labhard, at 5:00 PM. The next meeting will be May 6, 1976 at 3:15 PM in Ag 241.

Executive Committee
May 6, 1976

Meeting not held - lack of quorum. Another meeting scheduled for May 18, 1976.

Executive Committee
May 18, 1976

- I. The meeting was called to order by Lezlie Labhard in Ag 241 at 3:15 PM.

All members were present:

Excused absences: Barton Olsen, Mike Wenzl, Dave Saveker, Hazel Jones.

Guests: Richard Kranzdorf, Randall Cruikshanks, John Culver, David Ciano, Geraldine Ellerbrock, Keith Stowe, Michael Cirovic.

Substitutes: Arthur Duarte for Luther Hughes, Shane Kramer for Hugo Hurtado.

II. Reports

- A. Ad Hoc Committee on Student Evaluation of Faculty, (Ellerbrock) (Attachment II-A) - Ms. Ellerbrock reported on the findings and conclusions of the committee. Generally it appears that there are two divergent "camps" of thought at Cal Poly concerning the validity and use of student evaluations of faculty. Several suggestions were made by the members of the Executive Committee regarding the wording and content of the report. The Executive Committee accepted the report and applauded the work of the Ad Hoc Committee. It was M/S/P (Drandell) that the Executive Committee commend the Ad Hoc Committee on Student Evaluation of Faculty for its efforts and presentation (unanimous). The complete report will be filed in the Academic Senate Office.

- B. Ad Hoc Committee on Faculty Sponsorship of Events, (Cruikshanks) - Randall Cruikshanks reported the committee's recommendations. It was M/S/P (Weatherby) to make this a business item on the next agenda of the Academic Senate. The committee was commended for its work and presentation.
- C. Ad Hoc Committee on Information Awareness, (Kranzdorf) - The committee has had five meetings to date and still has much to do. It was the consensus of the Executive Committee that the Ad Hoc Committee continue its work through next year.

III. Business Items

- A. Student Grievance Procedures, (Culver, Ciano) - Mr. David Ciano discussed the proposed revised procedures as distributed to the Executive Committee.

It was originally suggested that the Fairness Board be the Committee to implement the proposed procedures; concern was expressed with the appropriateness of this use of the Fairness Board. The revised procedures suggest that one faculty member serve as the hearing officer.

It was the general consensus of the Executive Committee that the Chair recommend one person from each of the representational areas in the Academic Senate (7 schools and Professional Consultative Services) based on recommendations received from the Executive Committee. The hearing officer will be selected from this panel by lot.

It was M/S/P (Weatherby) that the Executive Committee endorse the revised Title IX Student Grievance procedures including the above recommendations on a trial basis until 10 (ten) cases have been reviewed or earlier if the hearing officers so petition. After ten cases are heard, Dave Ciano will notify the Senate Chair for re-evaluation of the trial procedures by the Academic Senate.

The Executive Committee members were instructed by the Chair to forward their area's nominee for the grievance panel by Monday, May 24, 1976. Names will be held until the procedures are approved by other consulting organizations and implemented.

The Student Affairs Committee and Fairness Board were charged with continuing to study the proposed student grievance procedures.

- B. Library Building Resolution - It was M/S/P (Murphy) that this become a business item for their next meeting of the Academic Senate. Concern was expressed about the effect such a resolution would have on existing priorities (Science and Math building, Faculty Office building).
- C. Resolution Concerning Legal Assistance Course, (Cirovic) - It was M/S/P (Weatherby) that this resolution be scheduled as a business item at the next Academic Senate meeting.

IV. Announcements

- A. The Chair announced that the faculty will be involved in the election of the grievance panel under the new grievance procedures. Further notice will be forthcoming.
- B. It was M/S/P (Duarte) that the Chair write to President Kennedy objecting to the lack of time for consultation on the proposed CAM change regarding the naming of rooms.

REPORT TO THE UNIVERSITY ACADEMIC SENATE

From The

AD HOC SENATE COMMITTEE ON STUDENT EVALUATION OF FACULTY

March 1976

Committee Members:
Geraldine Ellerbrock, Chair
Robert Alberti
Herschel Apfelberg
Dan Hawthorne
Walter Mark
Keith Stowe
Mauri Wilks

Att. II-A, Ex.Comm.
Minutes, 5/18/76

STUDENT EVALUATION OF FACULTY

At the request of the Executive Committee, the Personnel Policies Committee reviewed the procedures governing student evaluation in each of the seven schools of the University. As a result of this review, as well as of information provided by interested faculty, the Personnel Policies Committee recommends that the Executive Committee appoint an ad hoc committee on student evaluation composed of both tenured and non-tenured faculty, and chaired by a member of the Academic Senate. The Committee should base its report and appropriate recommendations to the Executive Committee on investigations into such areas as the following:

- a. The conceptual validity of student evaluation as a measure of the quality of instruction 1) in terms of Cal Poly experience and 2) as reported in the literature of higher education.
- b. The ways in which student evaluation might be used to improve instruction;
- c. Soliciting the written views of members of the Faculty and Students of CPSU, SLO concerning student evaluation;
- d. The cost of the current program of student evaluation of faculty;
- e. The effect of the evaluation in standards of instruction;
- f. The use of student evaluation in faculty personnel actions;
- g. The effect of student evaluation on faculty morale.

Exec. Comm. Minutes, 4/8/75

"...evaluation without development may, in fact, be a disservice to the faculty members involved; . . .to tell a person what may be dysfunctional in his or her teaching without offering some help toward improving it is often destructive."

Center for Faculty Evaluation and Development
in Higher Education, Kansas State University
1975

"In addition to substantiating these assumptions (see the IDEA Technical Report), research on the system has shown that:

1. There is no single model of effective instruction, contrary to the assumption made in many student rating programs. The IDEA system provides for a multitude of different models which reflect substantial differences in emphasis (objectives).
2. It is essential that adjustments be made for differences in the motivation level of students as well as for differences in class size to accurately infer instructional effectiveness from student ratings.
3. It is possible for effective instruction to occur even though the instructor employs techniques and procedures which are unsuccessful for the average faculty member. Therefore, effectiveness should be judged less by how the instructor behaves than by how students are effected.

At the same time that this research evidence was accumulating, experience made it clear that a successful instructional assessment program requires more than a technically sound instrument. In particular, it requires acceptance of the program by all groups--the teaching faculty, students, and administrators. These groups share a common concern for improving instruction. Therefore, our experience has suggested the importance of utilizing the results as a beginning point in a program to improve teaching effectiveness."

Center for Faculty Evaluation and
Development in Higher Education,
Kansas State University, 1975

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Review of the Literature on Student Evaluation

A necessary element of a thorough review of student evaluations at Cal Poly is an examination of the statistical success of the evaluation process in other colleges and universities as reported in the research literature of higher education. An analysis of this nature allows the Cal Poly experience with student evaluations to be initially assessed within the more objective boundaries of a methodological framework. For instance, if the research literature points to a serious deficiency in the ability to develop evaluation instruments then the continued use and application of student evaluations at Cal Poly seems unwise and counterproductive. On the other hand, if enough data concerning the utility of student evaluations have been published, cooperative efforts toward the creation of informative and broadly acceptable measuring devices can be more readily justified.

Although literature from a number of disciplines was reviewed, the major portion of the research evidence has been generated by psychology and education and accordingly provides the principal base for this report. The following conclusions are offered then as a summary of the relevant data from these sources.

1. Reliability refers to the stability or consistency of a measurement, e.g., student evaluations, over time. This is a necessary first ingredient for establishing the usefulness of student evaluations since the evaluations must be durable enough to withstand such extraneous factors as mood change, the passage of time and other unsystematic factors impinging on the measurement process.

Of the few studies to report reliability data, all mentioned adequate and in some cases exceptionally high reliability coefficients* ranging from about .70 to .94.

Parenthetically, it should be added that these figures pertain only to the consistency of evaluation instruments and do not guarantee validity, which indicates the extent to which the student evaluations do indeed measure teaching effectiveness. Nevertheless, a valid evaluation form must first be reliable and in the words of one author (Costin et al 1971) "...the evidence concerning the stability of students' ratings argues against the contention... that student opinions of instruction are difficult to interpret since they might be made after a particularly good or bad atypical experience (e.g., a lecture)." (p. 513)

2. When student evaluations have been obtained with carefully designed instruments, they show substantial similarities to evaluations given by colleagues of the instructor. Two common speculations on the reason for the moderate to high correlations (most studies reported correlations of from .30 to .63) were: 1) Since students have observed many hours of teaching performance, they can provide evaluative expertise equal to the peers of the instructor and, 2) since classroom visits by other faculty are infrequent, colleagues are likely to be dependent on student hearsay and instructor reputation.
3. Global assessment techniques such as overall ratings or rankings do not predict criterion behaviors as well as behavioral checklists and/or rating scales with behavioral anchors.

*A reliability coefficient is commonly used to infer reliability and can be understood to mean the similarity which is expected in repeated measurements over time, .00 being no similarity and 1.00 indicating exact replication.

... of an overall rating would be:

Mark (✓) above the number which you feel best describes the quality of instructor's teaching performance for this course.

1	2	3	4	5
poor		average		excellent

Other hand, a scale with a more precise behavioral orientation contains multiple questions - thereby being more reliable - and is specific on the aspects of teaching performance to be evaluated. Some questions (taken in part from McKeachie, 1969) might be:

Does (she) tell students when they have done particularly well?

never				always

Examples or Comments:

Does (she) receptive to student contact outside of class?

never				always

Examples or Comments

Does (she) follow an outline?

not at all				very closely

Examples or Comments

Studies reported sizable correlations between student evaluations and factors which are not under the direct control of the instructor such as required vs. elective course, upper vs. lower division and the department within a department (e.g., teachers of psychological statistics vs. the average, not rated as high as teachers of social psychology).

As used earlier, validity is conceptually defined as the extent to which measuring instrument measures what it is supposed to measure. As a valid student evaluation scale should indeed measure teaching effectiveness of the instructor who is evaluated. Validity is often assessed by calculating the correlation between student evaluations and some criterion of teaching effectiveness. The criterion may be a single behavior or possibly multiple measures, but their definition and measurement are in the end result a judgemental matter and not a statistical one. It is an important point to emphasize for it underscores the importance of having in mind a recognizable and also "quantifiable" criterion (or criteria) of teaching effectiveness before the validity of student evaluations can begin to be assessed.

With the above cautions in mind, and despite the unfortunate inconsistencies among many studies, it appears that well designed evaluations devices can predict a variety of criterion behaviors with acceptable accuracy, such as ratings given by department chairpersons and colleagues, teaching experience, and objective measurable gains in knowledge such as that shown by job samples or standardized tests.

In addition to being able to adequately predict selected criteria, student evaluations must also demonstrate validity by being precise enough so as not to be influenced by changes in extraneous variables. That is, if student evaluations will remain relatively constant while factors such as class size, sex of the evaluator and time of the class vary, then it is more likely that the evaluations are getting closer to being more precise and valid indicators of teaching effectiveness.

And it is along this dimension that the validity of student evaluations comes most seriously into question. Besides the fairly consistent relationships found between student evaluations and the variables mentioned in point 4 above, a number of other extraneous factors have shown relationships with student evaluations often enough to cause concern. Some of the more frequently appearing contaminants, for example, were grade received or expected in the course, sex of the evaluator, research productivity of the teacher and certain personality characteristics such as emotional stability and affability. (It should be mentioned, however, that other investigators did not report correlations large enough to be of any statistical or practical significance.

6. Even a thorough review of higher education literature does not produce a sound indicator of the likelihood of the statistical success with student evaluations here at Cal Poly. Rather, the data provide a glimpse of the "state of the art" of the methodology of student evaluations. This inability to draw any immediately applicable conclusions is due to:
 - A. Organizational characteristics vary tremendously among the institutions hosting the research and also between Cal Poly and the majority of the universities which are researching student evaluations of faculty. As just one example, much of the research reported was conducted in universities where teaching is not as singly valued as it is at Cal Poly. Hence, it is possible that both the teaching effort expended and the atmosphere surrounding student evaluations would differ appreciably from Cal Poly to many of the other Universities.
 - B. Research on student evaluations has been conducted on a broad spectrum of dissimilar jobs making a single conclusion difficult to formulate. That is, the job behaviors of instructors in physics, education, economics, agriculture, architecture, etc. are different enough to be of practical importance. Additionally, relevant portions of the research reviewed also indicated that both students and faculty perceive job behavior differences within a given department (e.g., laboratory vs. lecture courses).
 - C. Instruments used to obtain student evaluations were so disparate as to make any general extrapolation as to what would work effectively at Cal Poly inappropriate.

In sum, it appears that the only way to adequately judge the reliability, validity and "useability" of student evaluations at Cal Poly is to conduct carefully designed studies of the process, school by school and department by department.

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RESPONSE TO THE CHARGE.

b.

According to the research literature, it seems that students are more capable of evaluating behavioral characteristics. How a particular set of behavioral characteristics relates to good teaching is a much more elusive question, however. How his/her own knowledge or attitudes have been affected by enrollment in the class may be much more difficult for the student to evaluate, if not impossible.

Department evaluation forms should accentuate those areas in which student evaluations are most reliable, i.e. behavioral characteristics. Since behavioral characteristics can be changed, the evaluation can serve as a guideline for faculty for change or behavior substitution.

c.

In addition to following the questionnaire directions, a number of unsolicited comments were made by faculty. Since they reflect faculty feelings, they have been copied verbatim and included.

d.

(Please see following page.)

RECOMMENDATIONS

Cal Poly faculty members show a desire for improving the quality and effectiveness of teaching. They do not wish to ignore students' feelings or opinions. Yet, there is an element of concern among the faculty that data from student evaluations are used improperly in personnel decisions. Accordingly, the Committee makes these recommendations:

1. A permanent subcommittee of the Personnel Policies Committee of the Academic Senate should be established to continually (i.e. at least annually) review the procedures utilized in applying student evaluations in each department/school and recommend changes. This review should include an evaluation of all forms which report student evaluation data then in turn are utilized in promotion, reappointment and tenure decisions.
2. Student evaluation should be a positive force in improvement of instruction; no faculty member shall fail to be reappointed, promoted, or tenured with student evaluation as the sole determining factor.
3. Students should be clearly informed in advance of the purpose and importance of the Student Evaluation of Faculty Program.
4. Each department head and school dean should be required to report to his/her faculty at least annually what steps he/she has taken to assist them in faculty development.
5. The Academic Senate set up a Faculty Development Program. For example:
 - A Center for Faculty Development that would consider all aspects of faculty development;
 - Reduced teaching loads for faculty with expertise in speech, communication, audio-visual material, computer technology, statistics, etc. to serve as consultant and support in faculty development;
 - Reduced teaching loads to provide opportunities for changes and renovation of courses;
 - Demonstrations of the use of teaching aids;
 - Quarterly luncheon discussion sessions open to all faculty with a rotating panel of faculty responsible for the discussion of teaching and learning.
6. That encouragement be given to faculty members to participate in professional development activities on/off campus. This would generally include efforts in the area of subject expertise and/or teaching effectiveness. (These areas need not be mutually exclusive.)
7. Student evaluation procedures should continue to be differentiated by discipline. Schools and departments should be encouraged to use a combination of subjective and objective data.
8. Student evaluation forms may provide separate--and different as needed--items for presentation to: 1) the faculty member and 2) the Personnel Review Committee (PRC). However, everything that goes to the PRC must go to the faculty member.

9. Validation studies should be conducted on any instrument or procedure used in student evaluation of faculty to determine: 1) statistical validity and reliability of the instrument; 2) relevance of criteria used; 3) correlations between student evaluation and peer evaluations; 4) correlations between student evaluations and extraneous variables such as size of class, required versus elective course, subject matters, etc.
10. Any synthesis of student comments or objective data for validation studies or for inclusion in the personnel file of a faculty member should be done "blind" (without identifying the instructor involved) by someone other than a member of the university administration.
11. Innovative procedures for student evaluation should be encouraged in departments, schools, or university-wide. Examples of programs are:
 - Ask graduating seniors to rate courses and instructors
 - Develop student accountability. Develop a procedure to get responsible feedback from students, but protect them.
 - Ask graduates to evaluate the whole academic program:
 - Are they in the field or area in which they graduated.
 - If not, why?
 - What is the promotion and salary history since graduation.
 - Have there been job changes and why?
 - What has been the value of the course content to their lives?
12. Peer evaluations should be separate from student evaluations. Peer evaluations should be made and written before student evaluations are read. Classroom visitation by responsible tenured faculty should take place with a required format and frequency, established by the Academic Senate. Different teaching methods might, in fact, evoke methods other than visitation to lectures and/or discussion sessions. Similarly, evaluations by the department head should be done independently of the tenured faculty and student evaluations.
13. Departments and schools adopt clearly defined policies of utilizing student evaluations in P.R.T. decisions. These policies should be formulated only with the complete collaboration of all interested faculty in the department or school.
14. Individual departments be allowed to decide the purpose which they want student evaluations to serve. Two possible purposes would be as: 1) measures of student satisfaction or 2) careful assessment of teaching effectiveness. If purpose 2) is selected and if objective, measurable data are sought, the Committee further recommends:
 - a. Behavioral criteria of teaching effectiveness be delineated so that the evaluations can address themselves to these specific points.
 - b. Well designed instruments be constructed and checked for methodological soundness.

Annual Costs of Student Evaluation of Faculty

By far the greatest annual cost involved in student evaluations at Cal Poly is the overhead. Assuming that the primary purpose of the University is to bring students and faculty together in one location for the facilitation of learning, then about 1% of this time is presently being diverted into doing student evaluations. Since the annual operating cost of this campus is about 46 million dollars, the figure given below is 1% of this.

In addition to this general operating cost, there are other costs peculiar to the student evaluation process. That is, they would not be there if the student evaluations were not carried out. These include computer time, computer staff time, department secretarial and clerical time, and special forms and pencils, and altogether they add up to an additional annual cost of about 16 thousand dollars.

<u>item</u>	<u>annual cost in dollars</u>
1. Overhead: (assuming 15 minutes per quarter per 3-unit class)	460,000
2. Computer time: (76 hours per year)	4,600
3. Computer staff time: . (340 hours per year)	1,700
4. Department secretarial and clerical time: (1.6 hours per year per faculty member)	5,300
5. Forms and pencils: (6 dollars per year per faculty member)	4,800
TOTAL	476,400

Items 4 and 5 above have large variations from department to department, the figures used seemed to be good average figures. All the above items vary slightly from year to year.

e.

This seems to be an impossible question to answer. It is doubtful that either the faculty or the students could agree on the "standards." Even if they were in agreement it would be difficult to determine if a single variable or several variables were responsible for the change.

f.

The initial letter and a follow-up letter was sent to each School. Responses were received from these six Schools; Agriculture and Natural Resources, Architecture and Environmental Design, Engineering and Technology, Business and Social Sciences, Human Development and Education, and Science and Mathematics. The communications sent to these schools and their responses are contained in Appendix III.

g.

(Please see section containing data analysis.)

QUESTIONNAIRE CONSTRUCTION

The questionnaire which was utilized as a measure of faculty opinion toward student evaluations was constructed in the following manner:

- A. Items were initially selected which pertained to the attitude areas considered important by the committee. These areas were: 1) the attitudes toward the concept of being evaluated by students, 2) attitudes toward the use of student evaluations by tenured faculty in P.R.T. decisions, 3) attitudes toward the administration's use of student evaluations in P.R.T. decisions and, 4) attitudes toward other issues such as psychometric properties of student evaluation devices and the desired weighting given to student evaluations in P.R.T. decisions. All items were reviewed as to their relevance to the respective attitude area in addition to the item's clarity in wording and intent. Only those items were retained for which there was unanimous agreement among committee members as to the item's suitability.
- B. In order to balance the overall affective tone of the questionnaire as well as to minimize the effects of careless responding, the number of items with positive wording was roughly equal to the number of negatively worded items.
- C. Items were then grouped by attitude area and, together with instructions for responding and a cover sheet explaining the purposes of the survey, constituted the questionnaire package. To assist subsequent data analyses, questionnaires were coded according to the school or work location of the respondent. In addition to the seven instructional divisions of the university, an eighth category of respondents from support facilities such as the counseling center, A-V services, etc. was also created.

Reliability and Validity of the Attitude Scales

- A. Reliability can be said to refer to the stability or consistency of a measuring instrument over time. The reliability of the subscales measuring the three principal attitude areas was determined through the Kuder-Richardson formula which calculates the internal homogeneity of the subscale.

Table I below shows the reliability coefficients for these subscales.

<u>Attitude Area</u>	<u>Reliability Coefficient</u>
1. The concept of student evaluations	.92*
2. Tenured faculty's use of student evaluations	.83*
3. Administration's use of student evaluations	.83

*p < .001 Table I Kuder-Richardson reliability coefficients for three attitude subscales.

As can be seen, the subscales are sufficiently reliable as to indicate that respondents would probably complete the questionnaire in a similar way if they were to fill it out again at a future time.

- B. Validity is defined as the accuracy of a measuring instrument, or the extent to which it measures what it intends to. The preferred way of establishing validity is to correlate the scores of the test, scale, questionnaire, etc., with an accepted criterion measure of the property or trait which is being assessed. If the correlation is high, then a preliminary assumption of validity would be warranted.

As is usually the case with attitude surveys, however, there were no suitable criteria available of the property being measured in this questionnaire, i.e., faculty satisfaction with student evaluation procedures. In one respect this is an obvious fact since if criterion measures of faculty attitudes could be obtained, the present survey would not have been at all necessary. Yet it should also be apparent that the validity of Likert-type attitude scales, such as those used in the committee's questionnaire, is accordingly dependent primarily on the care taken in item selection and on a procedure called item analysis.

Item analysis is the examination of the correlations between individual items of a scale and the total scale score. If the correlations are high then the scale is homogeneous and the items are measuring basically the same thing. Table II shows the item-total correlations for the three subscales in the committee's attitude survey.

<u>Item</u>	<u>Item-Subscale Total Correlation</u>
Concept of Student Evaluation Subscale	
1. When evaluating my teaching ability, students only consider my actual teaching performance.	.41*
2. Students are not capable of adequately judging my effectiveness as a teacher.	-.71*
3. Faculty should not have to be evaluated by students.	-.75*
4. Despite their limitations, student evaluations are one of the better sources of information on teaching effectiveness.	.75*
5. Personally, I see no value at all to having students evaluate my teaching.	-.79*
6. Students are unfair and vindictive when they evaluate teaching ability.	-.63*

(*p<.001) Table II Item-subscale total correlations for three attitude subscales.

- | | |
|--|-------|
| 7. Student evaluations provide valuable feedback to me about my teaching. | .63* |
| 8. Criteria of good teaching are so hard to define that student evaluations are bound to be worthless. | -.77* |
| 9. Students are good judges of my teaching ability. | .78* |
| 10. Students are in a good position to evaluate my teaching effectiveness. | .74* |

<u>Item</u>	<u>Item-Subscale Total Correlation</u>
Tenured Faculty's Use of Student Evaluations	
1. The current Cal Poly requirement that the results of student evaluations must be shared with other faculty in personnel matters is a good policy.	.83*
2. Other faculty at Cal Poly put too much emphasis upon student evaluations when making personnel decisions.	-.76*
3. Compared to classroom visits by other faculty as currently practiced at Cal Poly, student evaluations provide better information for personnel decisions.	.65*
4. Student evaluations are taken out of context and not fairly judged by other faculty at Cal Poly.	-.74*
5. Student input in the form of the student evaluations conducted at Cal Poly is a worthwhile outside source of information for other faculty.	.76*

<u>Item</u>	<u>Item-Subscale Total Correlation</u>
Administration's Use of Student Evaluations	
1. The current Cal Poly requirement that the results of student evaluations must be shared with the administration in personnel matters is a good policy.	.82*
2. The administration at Cal Poly puts too much emphasis on student evaluations when making personnel decisions.	-.76*
3. Compared to classroom visits by the administration, as currently practiced at Cal Poly, student evaluations provide better information for personnel decisions.	.65*
4. Student evaluations are taken out of context and not fairly judged by the administration at Cal Poly.	-.73*
5. Student input, in the form of the student evaluations conducted at Cal Poly is a worthwhile outside source of information for the administration.	.75*

(* p < .001) Table II (continued) Item-subscale total correlations for three attitude subscales.

Since the item-total correlations are, in all cases, very high and in the expected direction, and due to the care taken in the questionnaire preparation, the various subscales are assumed to possess sufficient validity as to conclude that the questionnaire did indeed tap faculty attitudes concerning student evaluations and their use at Cal Poly.

Data Analysis

[Note: Of approximately 900 questionnaires mailed to the Cal Poly faculty and certain segments of the staff, the number of returned, useable questionnaires were:

Communicative Arts & Humanities	49
Counseling, Library, A-V & Health Center Staff	13
Architecture and Environmental Design	34
Agriculture and Natural Resources	94
Engineering and Technology	46
Business and Social Sciences	44
Human Development and Education	47
Science and Mathematics	78
Miscellaneous (individuals who removed the cover sheet of their questionnaire and thus could not be identified by school)	37
Questionnaires received after keypunching and data analysis (approximately)	50
TOTAL	492

The following pages are not an attempt to exhaustively analyze the data obtained from these questionnaires. Rather, they hopefully represent a brief and understandable summary of the points considered important by this committee in the discharge of its appointed task.]

Table III (see next page) lists the means of the three attitude subscales by school. Although the means within any of the subscales do differ from school to school, the differences are not large enough to be of any practical significance. (The exceptions to this statement are the mean levels of satisfaction with the three attitude areas expressed by the small group of support staff and the Human Development and Education faculty. The mean scores for these two groups were consistently higher than for the other faculty groups.) What is significant, however, is that except for the faculty of the School of Architecture and Environmental Design, all respondent groups indicated higher levels of satisfaction with the tenured faculty's use of student

evaluations than the administration's use of the same information in P.R.T. decisions.

<u>SCHOOL</u>	<u>MEAN SCORE</u>		
	Concept	Use by Faculty	Use by Adm.
Communicative Arts & Humanities	31.00	14.67	12.58
Counseling, Library, A-V, Health Center	38.64	16.36	14.27
Architecture & Environmental Design	35.38	13.72	13.86
Agriculture & Natural Resources	32.65	13.87	13.43
Engineering & Technology	32.18	14.47	13.33
Business & Social Sciences	34.43	14.98	13.75
Human Development & Education	37.95	16.82	15.98
Science & Mathematics	32.67	13.49	12.70
TOTAL SAMPLE	33.69	14.53	13.58

Table III School means of three attitude subscales; the concept of student evaluations and use of student evaluations by tenured faculty and administration in P.R.T. decisions.

A second aspect of the general data analysis was to look at the relationships among the three subscales by means of a correlation matrix. When presenting these correlations in Table IV, it is immediately apparent that the three subscales are all strongly related.

	<u>Sat. with Concept</u>	<u>Sat. with use by Faculty</u>	<u>Sat. with use by / adm.</u>
Satisfaction with concept		.75*	.67*
Satisfaction with use by Faculty			.80*
Satisfaction with use by Administrators			

* $p < .001$

Table IV Correlations among three attitude subscales; the concept of student evaluations and use by tenured faculty and administrators in P.R.T. decisions.

Additionally, by examining the substantial correlations between the concept subscale and the other two subscales, it can be concluded that if a faculty member is satisfied with the concept of being evaluated by students, he or she is also likely to be satisfied with its applications. It should be mentioned however, that correlation does not imply causation and any statements concerning the direction of the influence among these variables is speculative. For instance, assuming that the faculty will become happier with the use of student evaluations in P.R.T. decisions if they could be persuaded to feel better about the concept of student evaluations per se, may not be correct. It could just as readily be the case that the direction of causality is reversed and the faculty's attitude toward the concept of student evaluations are determined by their opinions as to how the information will be used by the tenured faculty in their respective departments and the administration.

A third focus of the data analysis was upon the attitudes expressed by the faculty concerning the methodological properties of the evaluation instruments used by their respective departments and the preferred weighting to be given to student evaluation data in P.R.T. decisions.

Responses to the individual items measuring these attitudes are described in a later section of this report. However, the committee also considered an analysis of the relationships among these variables to be important.

Table V shows the correlations among these variables. As indicated

	<u>Sat. w/ meth.</u> <u>properties</u>	<u>Pref. weighting</u> <u>given by Fac.</u>	<u>Pref. weighting</u> <u>given by Adm.</u>
Satisfaction with method- ological properties		-.43 ^{*1}	-.35 [*]
Preferred weighting given by Faculty			.90 [*]
Preferred weighting given by Administrators			

* p < .001

¹ Due to a keypunching error, the scoring direction of the preferred weighting variables was incorrect. Therefore, the negative correlations should be interpreted as increases in preferred weighting of student evaluation data being paired with increases in the second variable.

Table V Correlations between satisfaction with the methodological properties of student evaluation instruments and the preferred weighting given by tenured faculty and administrators in P.R.T. decisions.

in the table, it is clear that as faculty are more satisfied with the methodological properties of evaluation forms, they wish then to have more weight in personnel decisions made by tenured faculty and the administration. Again, caution should be urged in imputing any direction of causality to these data.

A final aspect of the general data analysis was to look at the relationships between the attitude subscales and the variables examined in Table V. The correlations pertaining to this analysis are contained in Table VI. When examining the data, two conclusions seem relevant. First, as the faculty's satisfaction with the methodological properties of evaluation forms increases, so does its satisfaction increase in regards to the concept of being evaluated by students and the uses of student evaluation data in P.R.T. decisions. Second, as the faculty feels better about the concept of student evaluations and use of student evaluations in personnel decisions, they would like them to have more weight in those decisions.

Accordingly, the data in Tables V and VI indicate that the methodological properties of evaluation instruments, e.g., reliability and validity, may be a pivotal factor in the present furor over student evaluations and any efforts toward improving these properties in the future evaluation instruments would likely be rewarded with more positive attitudes toward the evaluation process as a whole.

	<u>Satisfaction with concept</u>	<u>Satisfaction with use by faculty</u>	<u>Satisfaction w/ use by administrators</u>
Satisfaction w/ methodological properties	.55*	.59*	.52*
Preferred weighting given by faculty	-.52 ^{*1}	-.55 ^{*1}	-.52 ^{*1}
Preferred weighting given by administrators	-.51 ^{*1}	-.53 ^{*1}	-.53 ^{*1}

*p<.001

¹See footnote under Table V (page 6)

Table VI Correlations between three attitude subscales, satisfaction with methodological properties of student evaluation instruments and the preferred weighting given to student evaluations by tenured faculty and administrators.

Recognizing the potential importance attached to a large scale survey such as this the committee also considered it necessary to present the answers to each item on the questionnaire, singly. Therefore, the following pages contain histograms describing the responses to each of the questionnaire items. In addition to the number of responses given by the total faculty in each response category, the mean (average) response is indicated as well as the standard deviation. The standard deviation refers to the dispersion or variability of the responses to the particular item.

Although not an exhaustive analysis, the committee mentions the following aspects of the response patterns which appeared to have particular relevance.

1. There are two rather clear "camps" regarding student evaluations, as evidenced by the large standard deviations and the common bimodal distributions. (See items 1,2,3,4,6,11, 12,19,20,21)
2. Faculty members do consider students to have some worthwhile contribution to make in evaluating teaching. (see items 2,4,6,7,9,10)
3. Faculty members tend to believe in the concept of student evaluation. (see items 3,5,8)
4. Faculty members place limits on the "completeness" of student evaluations. (see item 1 and bimodal distributions on items 2,3,4,6,15,16)
5. In some instances faculty members are not satisfied with the application of student evaluation data in P.R.T. decisions at Cal Poly. (see items 11,12,14,18)

As explanatory notes, the histograms on the following pages pertain to the responses of the total university sample. School by school information is contained in Appendix A. Additionally, a number of unsolicited comments were made by faculty on their returned questionnaires. These comments are contained in Appendix B. Finally, for questions 1-21, the response categories were as follows:

1. = Strongly disagree
2. = Mildly disagree
3. = No opinion or neutral
4. = Mildly agree
5. = Strongly agree

For questions 22 and 23:

1. = 80 - 100%
2. = 60 - 79%
3. = 40 - 59%
4. = 20 - 39%
5. = 0 - 19%

For the following questions please indicate the extent to which you agree or disagree with the question by circling the number which best corresponds to your opinion:

1= STRONGLY DISAGREE

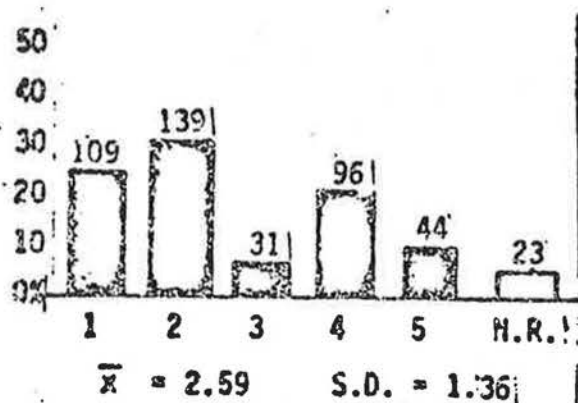
2= MILDLY DISAGREE

3= NO OPINION

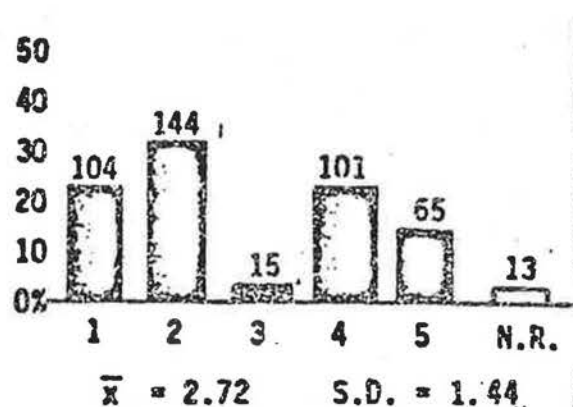
4= MILDLY AGREE

5= STRONGLY AGREE

1. When evaluating my teaching ability, students only consider my actual teaching performance.

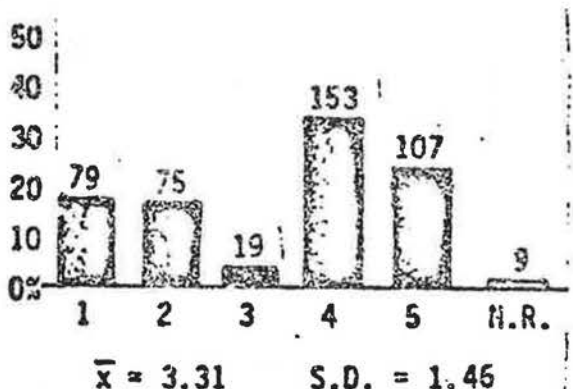
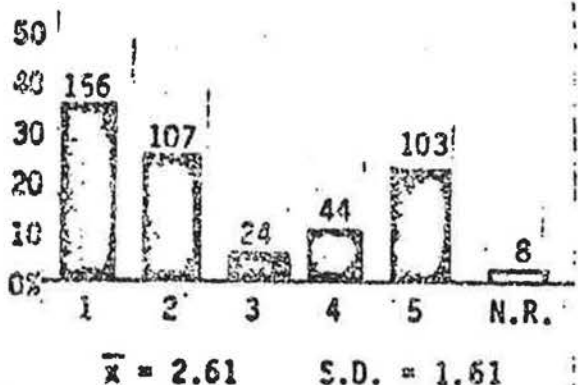


2. Students are not capable of adequately judging my effectiveness as a teacher.



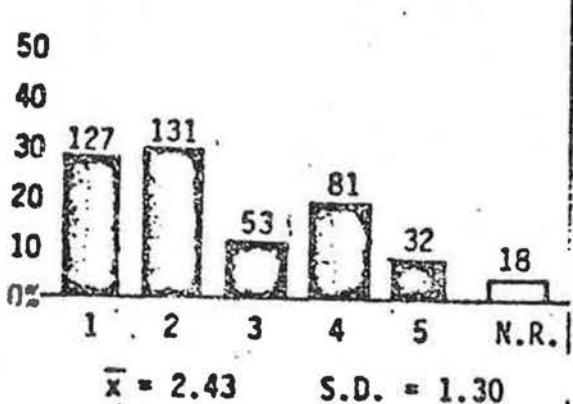
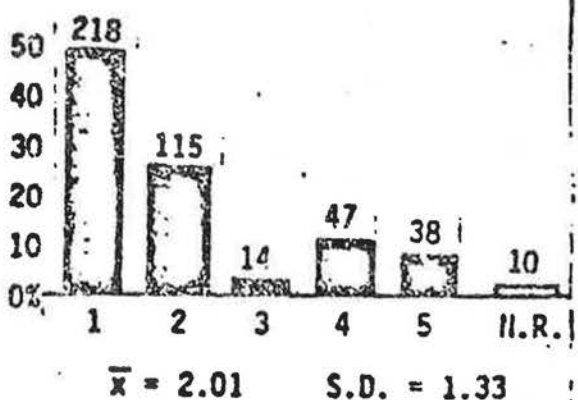
3. Faculty should not have to be evaluated by students.

4. Despite their limitations, student evaluations are one of the better sources of information on teaching effectiveness.

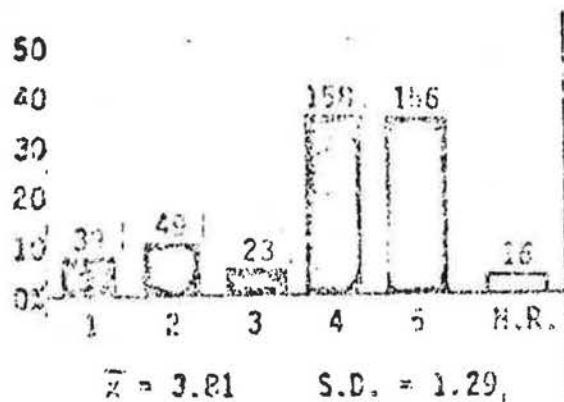


5. Personally, I see no value at all to having students evaluate my teaching.

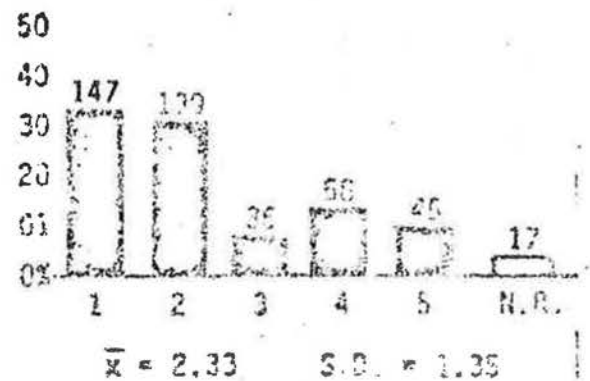
6. Students are unfair and vindictive when they evaluate teaching ability.



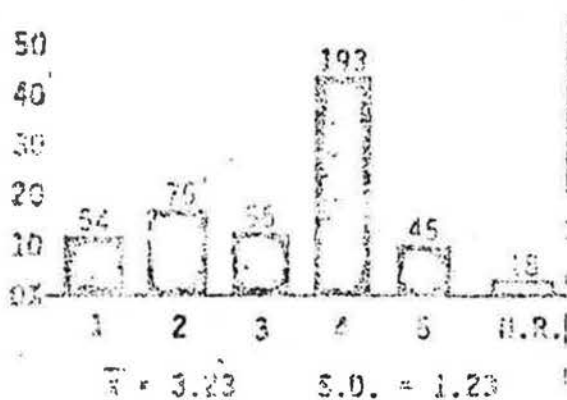
7. Student evaluations provide valuable feedback to me about my teaching.



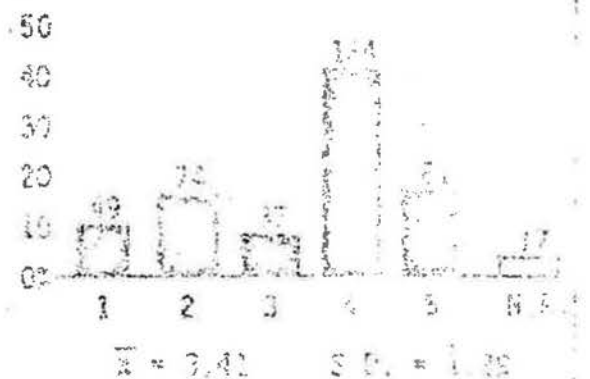
8. Criteria of good teaching are so hard to define that student evaluation are bound to be worthless.



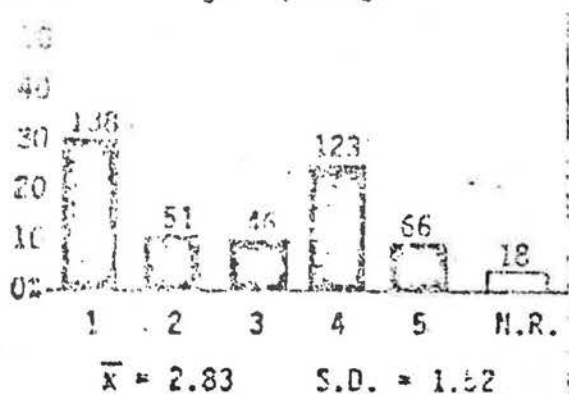
9. Students are good judges of my teaching ability.



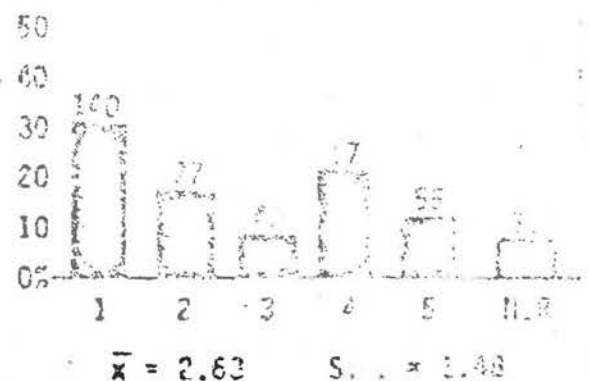
10. Students are in a good position to evaluate my teaching effectiveness.



11. The current Cal Poly requirement that the results of student evaluations must be shared with other faculty in personnel matters is a good policy.



12. The current Cal Poly requirement that the results of student evaluations will be shared with the administrative personnel matters is a good policy.

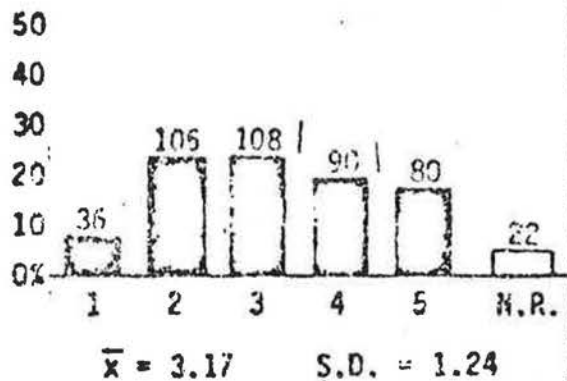


N.R. = no response

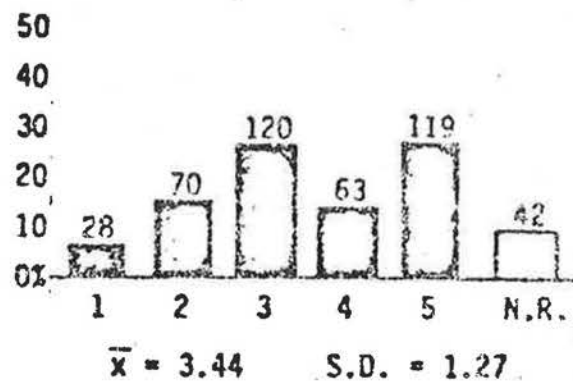
\bar{x} = Mean

S.D. = Standard Deviation

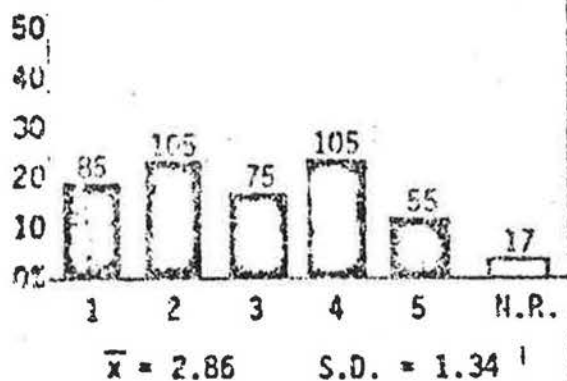
13. Other faculty at Cal Poly put too much emphasis upon student evaluations when making personnel decisions



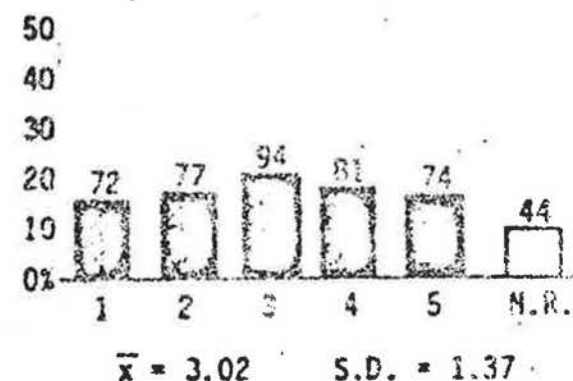
14. The administration at Cal Poly put too much emphasis upon student evaluations when making personnel decisions



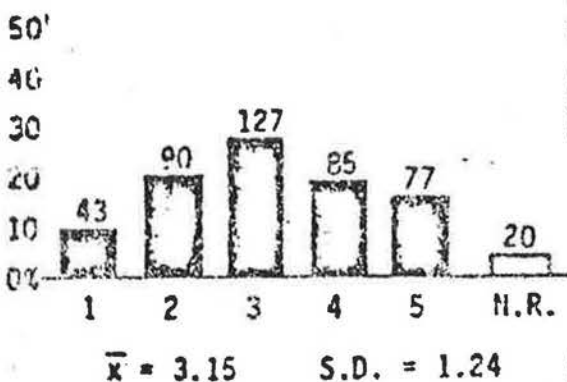
15. Compared to classroom visits by other faculty as currently practiced at Cal Poly, student evaluations provide better information for personnel decisions.



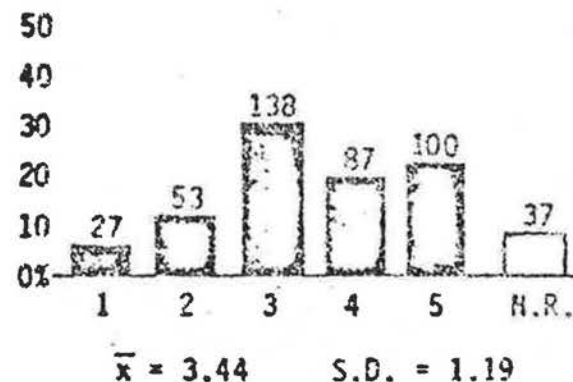
16. Compared to classroom visits by the administration as currently practiced at Cal Poly, student evaluations provide better information for personnel decisions.



17. Student evaluations are taken out of context and not fairly judged by other faculty at Cal Poly.



18. Student evaluations are taken out of context and not fairly judged by the administration at Cal Poly.

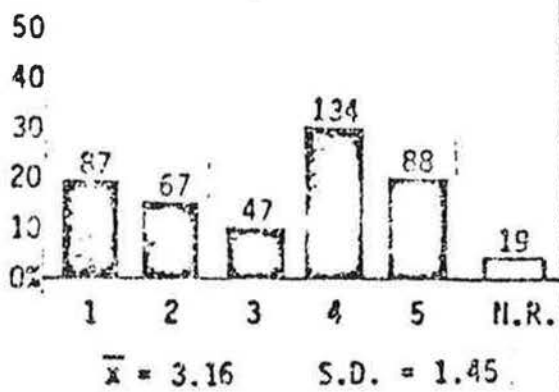


N.R. = no response

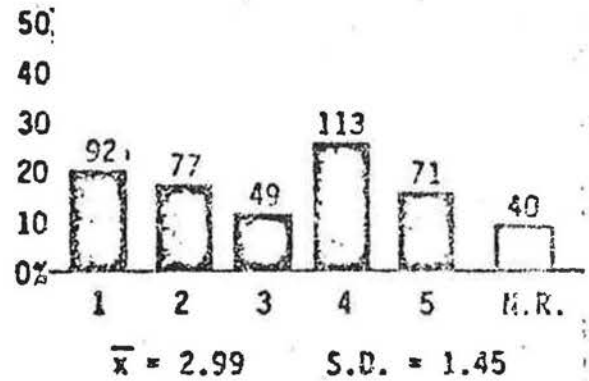
\bar{x} = Mean

S.D. = Standard Deviation

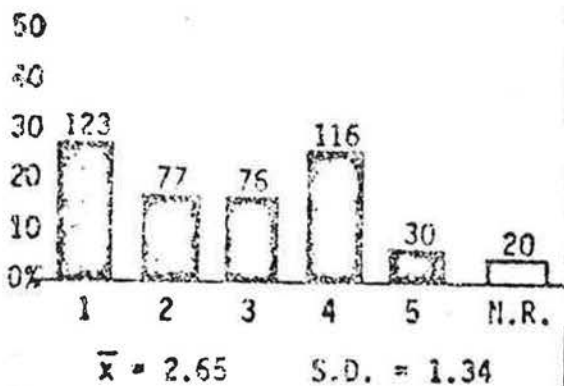
19. Student input, in the form of the student evaluations conducted at Cal Poly is a worthwhile outside source of information for other faculty.



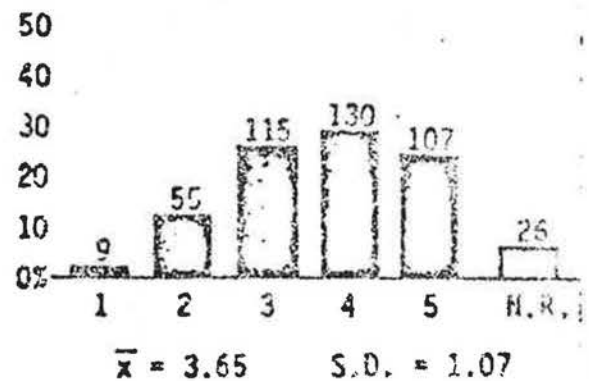
20. Student input, in the form of the student evaluations conducted at Cal Poly is worthwhile outside source of information for the administration.



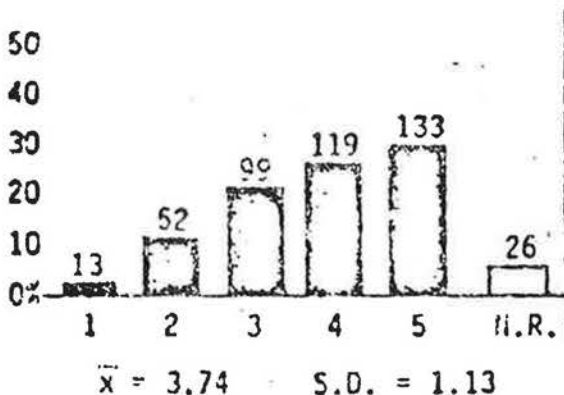
21. The Student Evaluation instrument used by my department at Cal Poly is valid and reliable.



22. Assuming that a statistically sound instrument could be developed which could measure your effectiveness as a teacher as seen by students, how much weight would you like student evaluations to have in personnel decisions which are made by other faculty members in your department.



23. Assuming that a statistically sound instrument could be developed which could measure your effectiveness as a teacher as seen by students, how much weight would you like student evaluations to have in personnel decisions which are made by administrators in your department.



N.R. = no response

\bar{x} = Mean

S.D. = Standard Deviation

