

A Report on the Relationship Between the Student Opinion of Instruction Survey  
and the Student Instructional Report

Prepared by the subcommittee:

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The subcommittee would like to acknowledge the work done by the Office of Planning and Institutional Research which prepared many of the figures and performed most of the work needed to complete this report.

The Teaching Effectiveness Committee, in an attempt to determine the validity of the current ECU Student Opinion of Instruction Survey (SOS), had The Student Instructional Report (SIR), published by the Educational Testing Service (ETS), administered along with the regular SOS in the 1991 Fall semester by approximately 300 randomly selected faculty. Because of errors in administration of one or both of the instruments, approximately 285 valid sets of classroom responses were returned. Subsequently, the faculty who were selected to administer the Student Instructional Report (SIR) were requested, by survey, to evaluate both instruments.<sup>1</sup>

Comparison of the SOS and SIR. The analyses which compare data from the student evaluations using SIR vs. SOS are represented in Tables 1 and 2 and in Figures 1, 2 and 3. A very high correlation was obtained between the scores provided by the two instruments (see Table 1). Questions 9 on the SOS and 38 and 39 on the SIR were chosen for comparison because these questions have been shown to be most highly correlated with other measures of learning. The correlation between Question 9 on the SOS ("Overall, the instructor is effective in teaching this course.") and Question 38 on the SIR ("I would rate the overall value of this course to me as...") was .82 ( $p = .0001$ ). An even higher correlation,  $r = .89$  ( $p = .0001$ ) was obtained between Question 9 on the SOS and Question 39 on the SIR ("How would you rate the quality of instruction in this course?"). A comparison of the sum of evaluation questions on the SOS and the SIR resulted in an  $r$  of .85 ( $p = .0001$ ). Clearly, whatever the SIR is measuring is also measured in a similar fashion by the SOS.

ECU Faculty Performance on the SIR. One interesting aspect of the evaluation is the comparison of ECU faculty against the broad national norms provided by the SIR. As seen in Table 2, ECU faculty consistently received high evaluations for most questions. More than 50% of ECU faculty received ratings above the 50th percentile and more than 10% received ratings above the 90th percentile on 22 of 24 of the course evaluation questions on the SIR. More

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<sup>1</sup> Copies of all three instruments, the SOS, SIR, and the follow-up survey, are attached to the back of this report.

than 15% of the faculty received ratings above the 90th percentile for 13 of the 24 questions. This pattern is illustrated in Figure 1 where 67% of ECU faculty scored above the 40th percentile on Question 39. However, ECU faculty did not do as well on Question 38 rating the overall value of the course (see Figure 2). Interestingly, no pattern of differential evaluation (see Figure 3) was observed across course levels (Freshman, Sophomore, Junior, Senior, and Graduate).

ECU Faculty Evaluations of SIR vs. SOS. When asked if either the SIR or the SOS were "...an adequate measure of student opinion to be used as one of several measures of teaching in faculty evaluation" 48% of the faculty answered yes with respect to the SIR and 41% answered yes with respect to the SOS. However, only 13% of the faculty answered no to this item with respect to the SIR as compared to 34% answering no with respect to the SOS. Faculty were asked if the results of the evaluations provided information needed by them to improve their courses. While 58% of the respondents indicated that the SIR provided such information, only 39% indicated that the SOS provided such information. The SOS was more frequently evaluated as providing useless information or containing inappropriate questions. However, the SOS was considered easier to administer and was less likely to be identified as requiring too much class time. The SIR was generally evaluated as providing more useful information than the SOS, but the SOS was considered easier to interpret. In general, the SIR was evaluated as a better instrument that provided more useful and valid information. Figures 4 through 17 further illustrate the faculty's evaluation of the two instruments.

#### Summary and Recommendations:

1. The SOS and SIR have a high correlation indicating that the two instruments are measuring similar constructs. However, given faculty feedback about the SOS, it is recommended that the present form of the SOS should be reviewed and modified to eliminate some questions and to develop new items that offer more useful information to the faculty member for developmental purposes.
2. The University should consider administering the SIR (or other similar standardized

instrument) on an interval basis for comparison to external norms.

3. Evaluations of teaching effectiveness should be based on a variety of data and the overall emphasis on student ratings should be qualified. It is recommended that the University reemphasize its efforts to insure that the evaluation of teaching effectiveness is based on a number of different data sources (Faculty Senate Resolution #91-29). A workshop on the evaluation of teaching effectiveness should be developed for Unit Administrators.
4. ECU faculty collectively should be recognized for their teaching efforts and overall high evaluations on the SIR.
5. Students should be educated about the importance of instructional ratings and how the ratings are used to make decisions about faculty, and the instructions given to students should be revised and made more explicit.
6. The University should provide results of the SOS which are more valuable to the faculty, such as, providing data (means) for academic units, services courses, major courses, elective courses, and other similarly detailed comparison data.

# SIR vs SOS

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- Correlations between total SIR and SOS scores, as well as those for SOS question 9 and SIR questions 38 and 39 relating to overall quality, are high and significant. These results indicate that the present SOS form is at least as valid as the SIR instrument. (Table 1)
- However, SIR scores allowed comparisons on a National level. In questions related to course organization and planning (#s 1, 2, 3, 12, 13, 14, 20) as well as faculty student interactions (#s 4, 5, 8, 9, 11, 19), 60 or more percent of the faculty ranked in the 50 percentile or higher, while 15% or more of the faculty ranked in the 90 percentile or higher. Faculty did not rank as high in question concerning communications (6, 7, 10, 16, 24), lecture (35) and exam (34) quality.
- SIR scores for general questions related to overall quality (#39) and value of course (338) showed that 57% of the faculty ranked in the top half of faculty nationally and 27% in the top 20% nationally. (Figures 1 and 2)
- There were no detectable effects in scores using the SIR or the SOS instruments due to academic status (freshman, sophomore, etc.)

# Faculty Comparison of SIR vs SOS

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- Correlations between total SIR and SOS scores, as well as those for SOS question 9 and SIR questions 38 and 39 relating to overall quality, are high and significant. These results indicate that the present SOS form is at least as valid as the SIR instrument. (Table 1)
- A greater percentage of the faculty (34.3%) believed that the SOS form was not an adequate measure of student opinion to be used in faculty evaluation compared to the SIR for (13%). (Figure 1)
- A greater percentage of the faculty (58%) believed that the SIR form provides information that the faculty needs to improve their courses than the percentage of the faculty (39%) who thought that the SOS form provided such information. (Figure 2)
- Generally the faculty believed that the SIR form provided more information for evaluation and was more useful than the SOS form. However, they also believe the SIR form was not worth the expense.
- It is important to point out that the committee received several letters from faculty describing how either the SIR or SOS form was totally inappropriate for their course. These courses were usually not structured toward lecture classes. Units must consider whether or not an instrument designed to evaluate lecture classes should ever be used to evaluate non-lecture classes. And, if not, what should be used.

Table 1.  
Correlation of SIR and SOS Scores

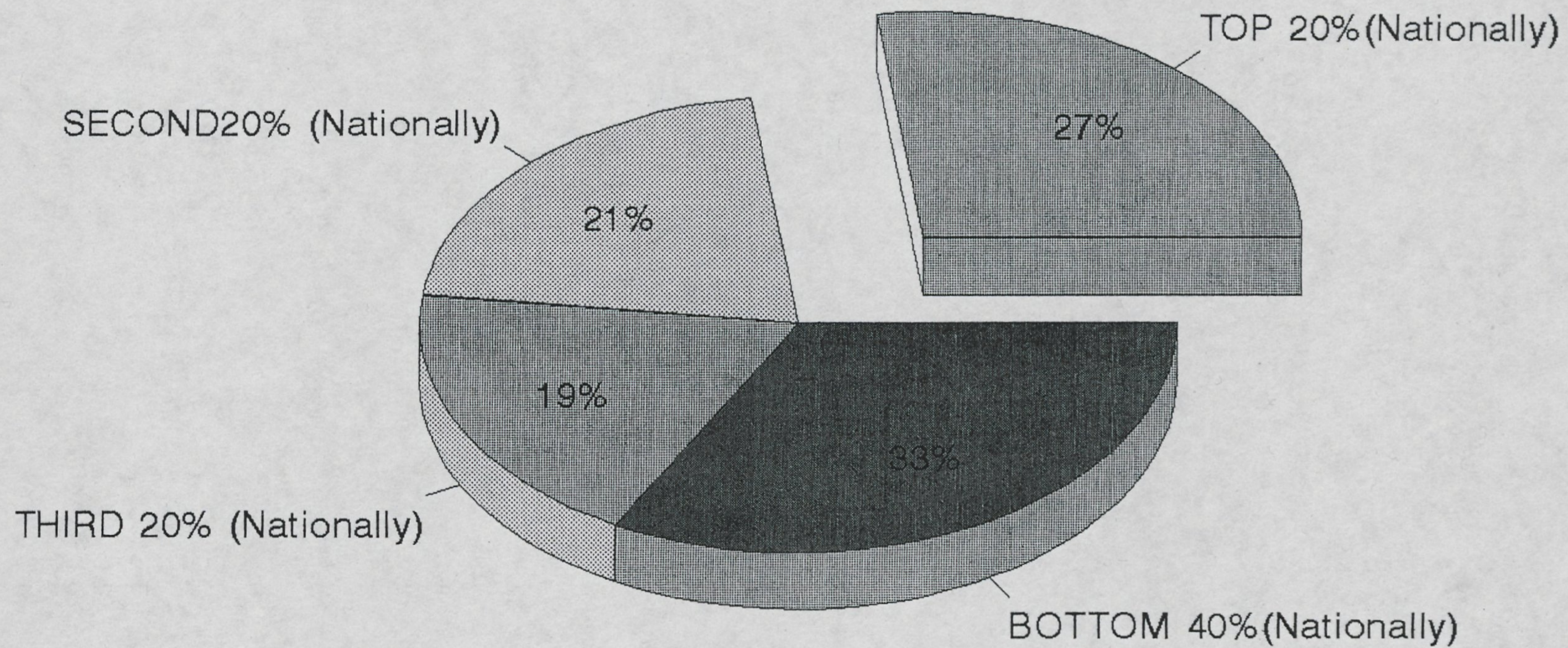
	r	p
SOS9 x SIR38	0.82067	0.0001
SOS9 x SIR39	0.89388	0.0001
Total SIR x Total SOS	0.84794	0.0001

Table 2.  
Percent of Faculty Scoring in Upper  
50 and 90th Percentiles.

	50%	>90%		50%	>90%
SIR 1	58.8	18.2	SIR 13	57.7	16.5
SIR 2	60.8	15.8	SIR 14	60.6	14.5
SIR 3	63.9	18.6	SIR 15	61.5	19.6
SIR 4	66	18.9	SIR 16	47.8	12.4
SIR 5	60.1	17.2	SIR 17	59.5	14.7
SIR 6	49.8	13.6	SIR 18	57.4	14.4
SIR 7	62.2	19.2	SIR 19	62.4	19.3
SIR 8	57.4	13.7	SIR 20	57	15.5
SIR 9	60.1	16.8	SIR 38	51.6	10.6
SIR 10	58	14.6	SIR 39	55.1	12.4
SIR 11	65.3	22.3	SIR 34	45.9	8.1
SIR 12	63.9	16.8	SIR 35	51.4	3.9

# Figure 1: National Percent Ranking of ECU Faculty

Question 39 SIR: How would you rate the quality of instruction in this course:

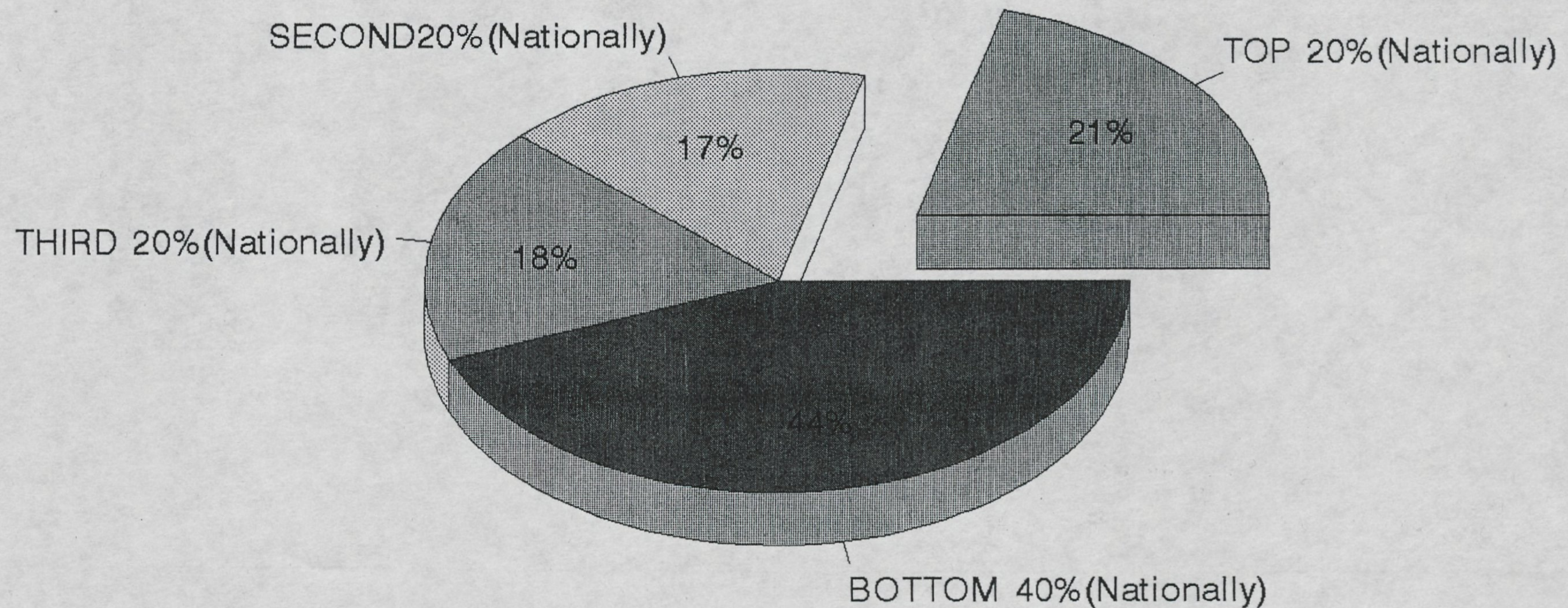


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# Figure 2: National Percent Ranking of ECU Faculty

Question 38 SIR: I would rate the overall value of this course to me as:



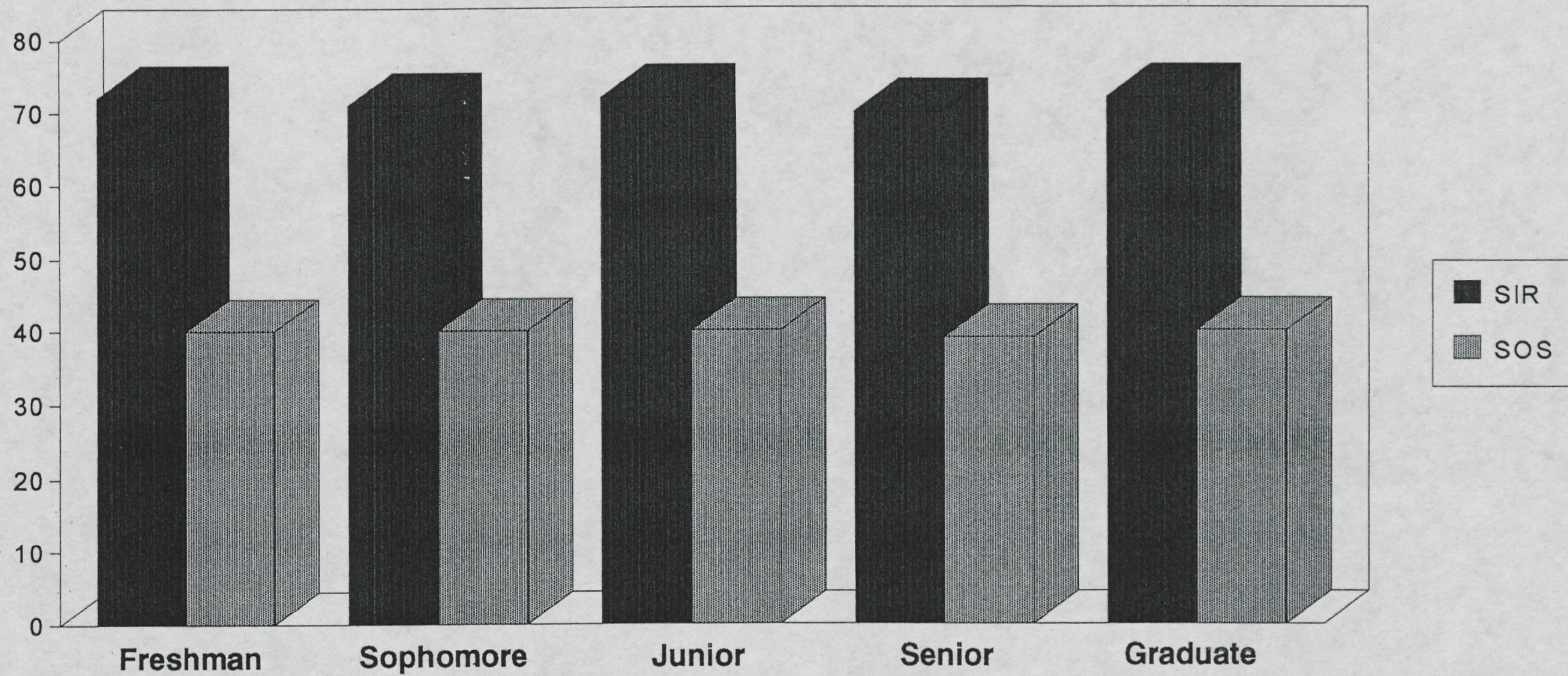
- 10 -

Spring 1992, n=283

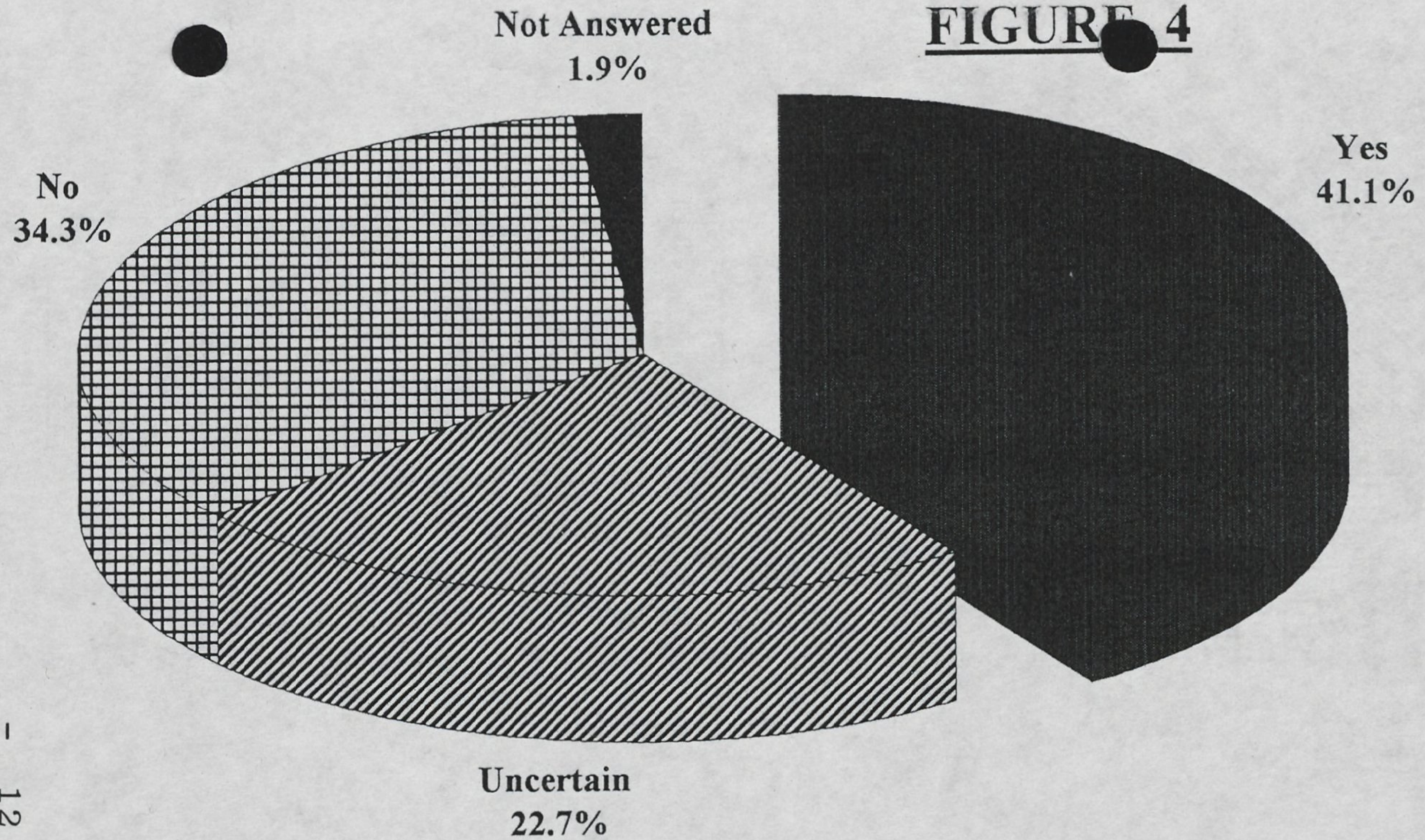
**Figure 3**

# Mean Percent Scores

Course Level



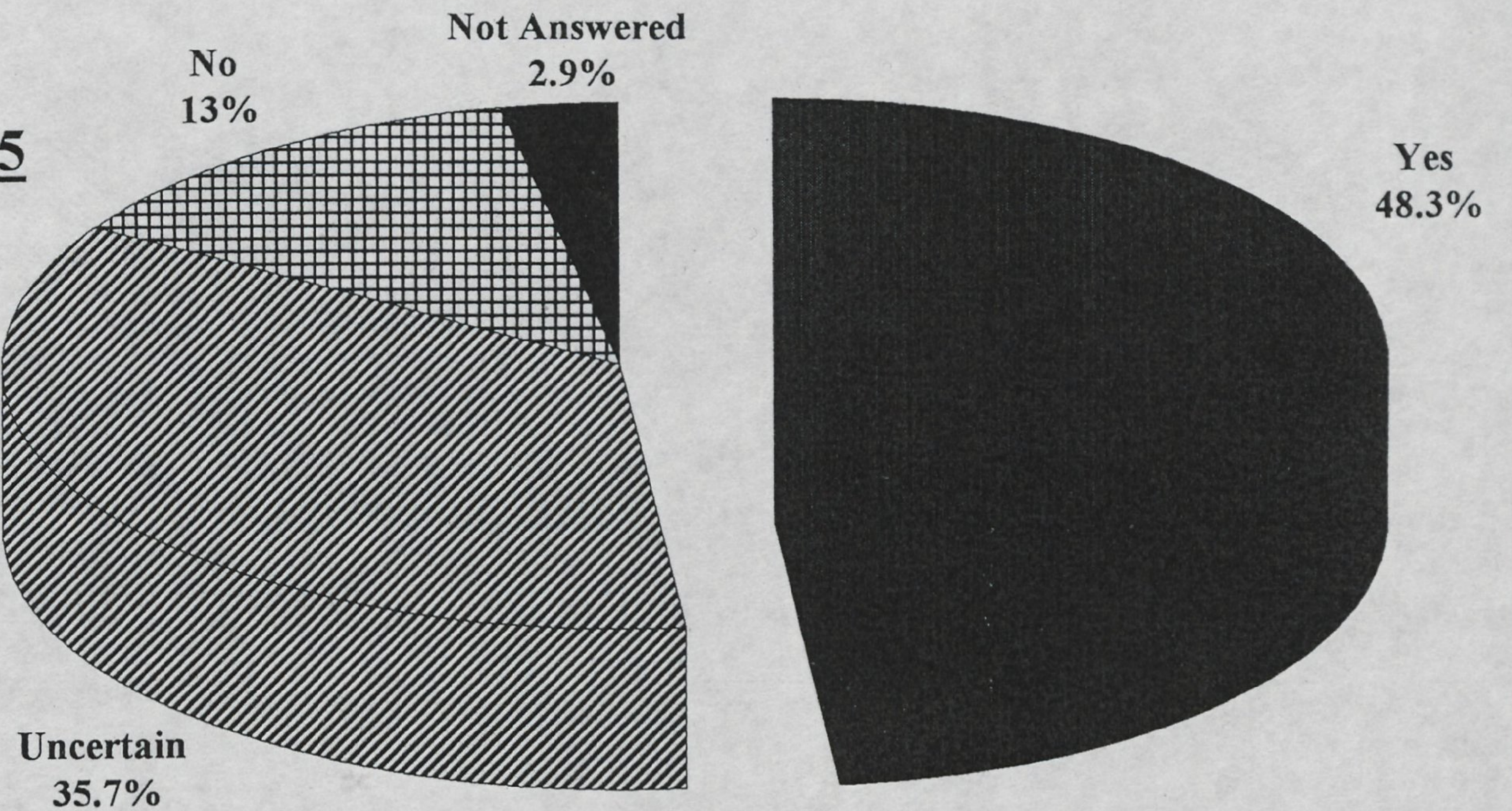
**FIGURE 4**



**Question 1**  
"Is the SOS form an adequate measure of student opinion to be used as one of several measures of teaching in faculty evaluation?"

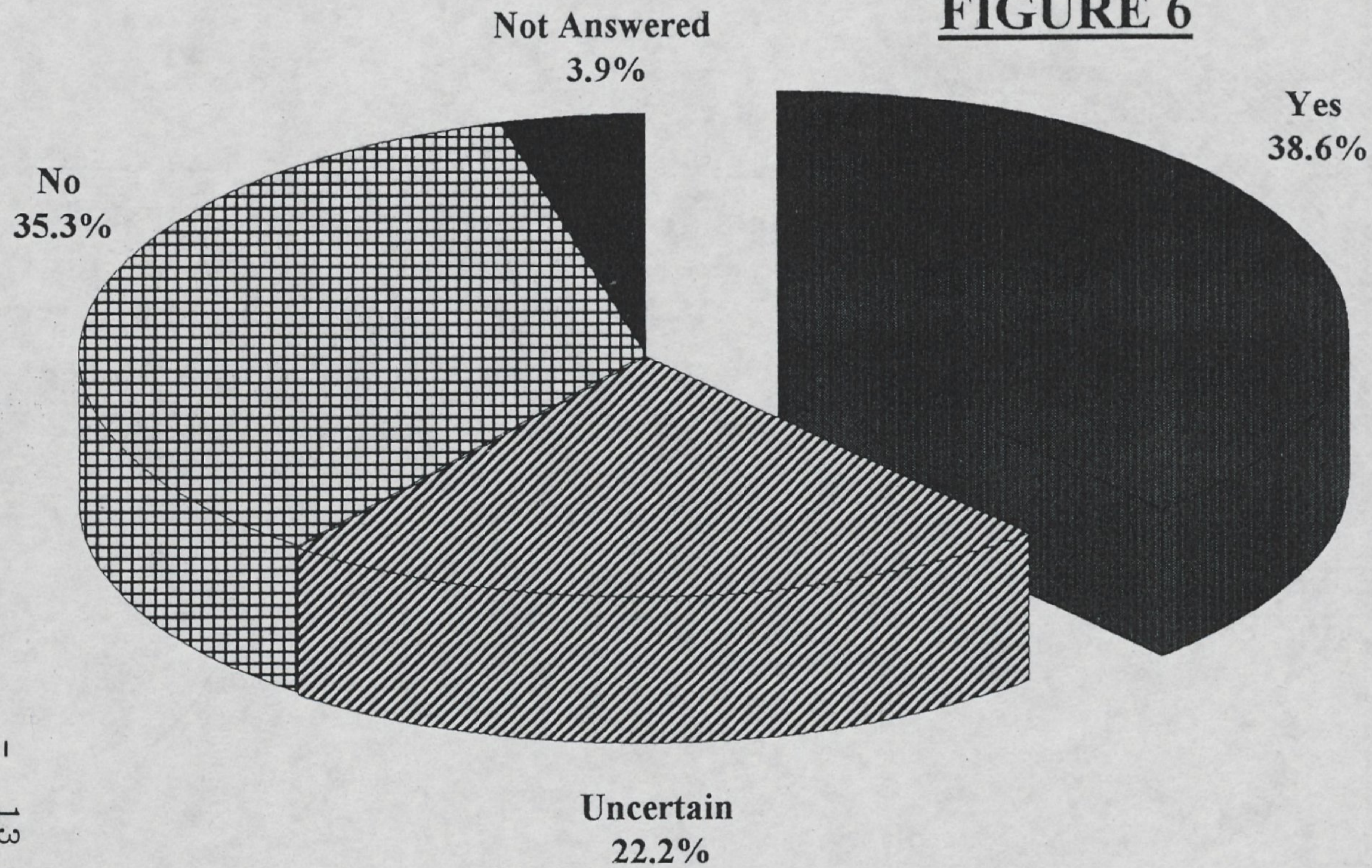
- 12 -

**FIGURE 5**



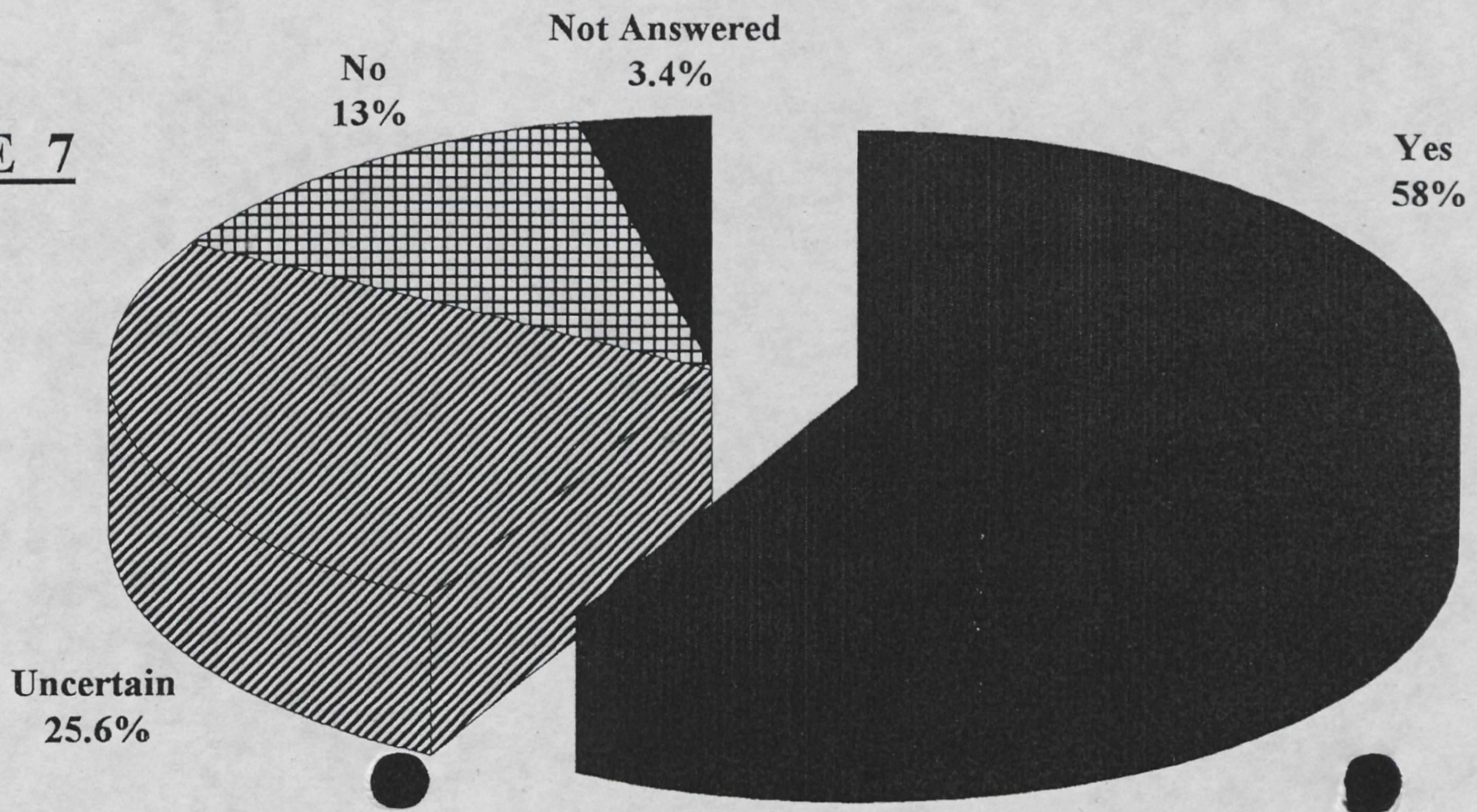
**Question 5**  
"Is the SIR form an adequate measure of student opinion to be used as one of several measures of teaching in faculty evaluation?"

**FIGURE 6**



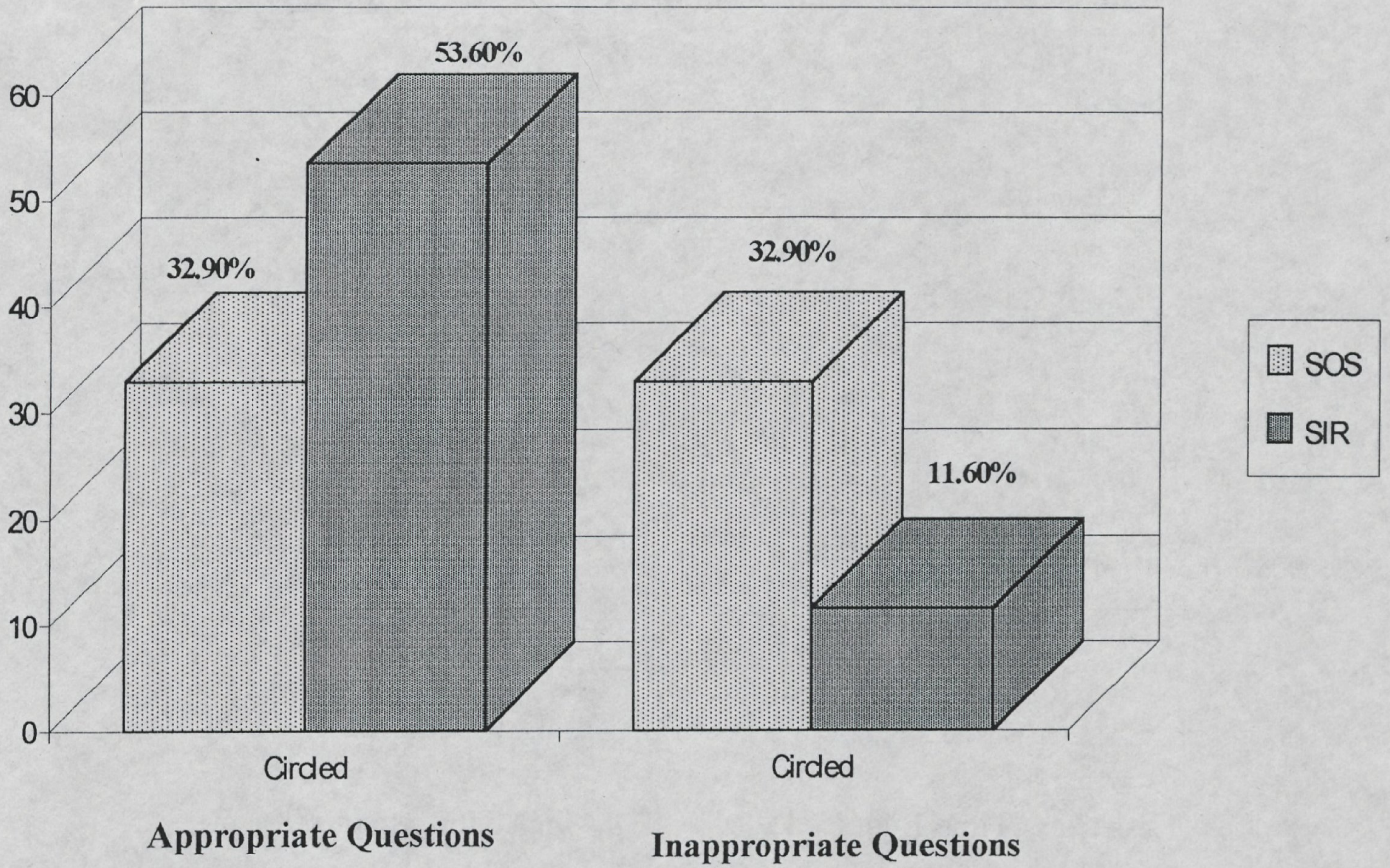
**Question 2**  
"Does the SOS form provide the information that faculty need to improve their courses?"

**FIGURE 7**

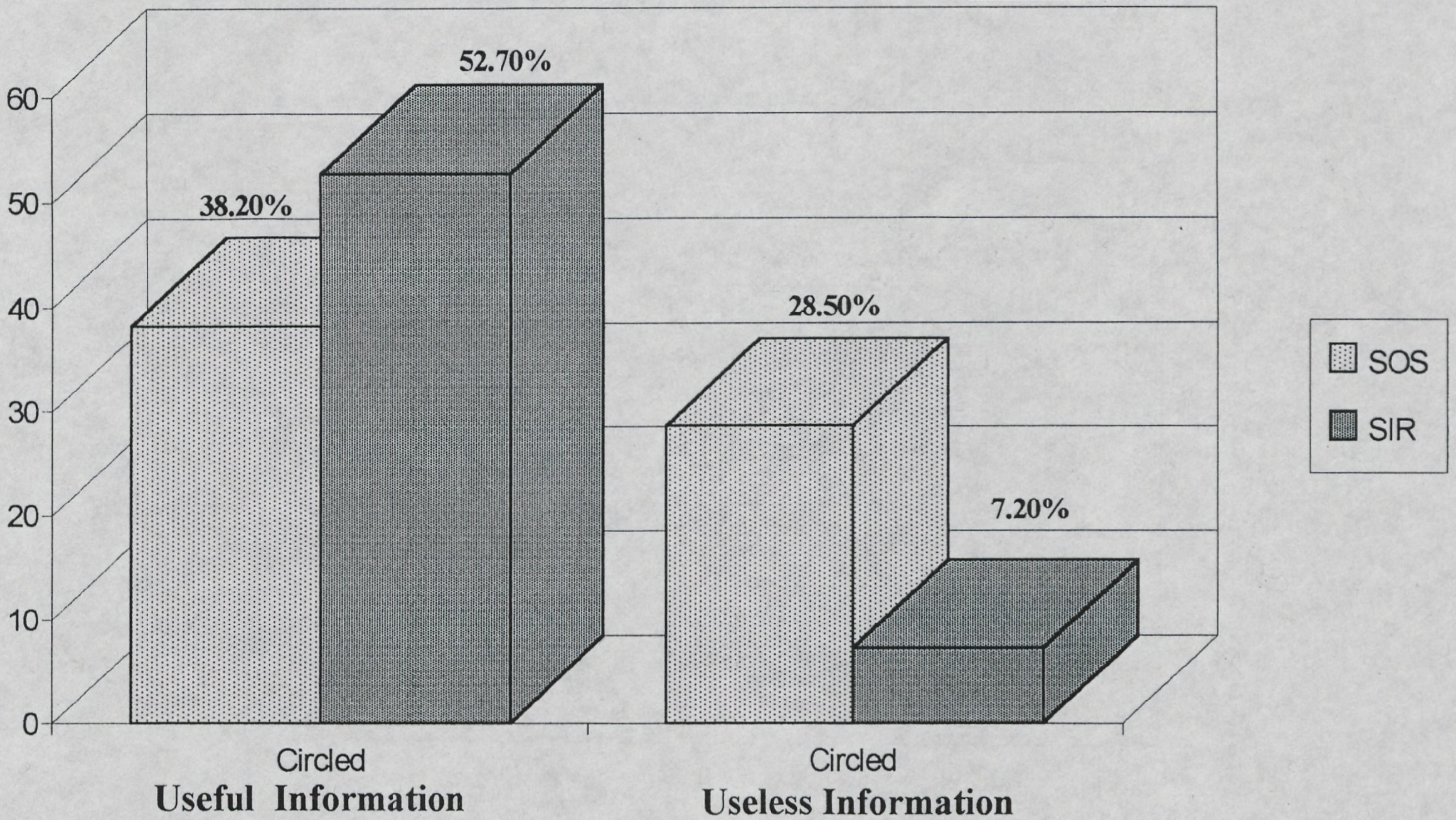


**Question 6**  
"Does the SIR form provide the information that faculty need to improve their courses?"

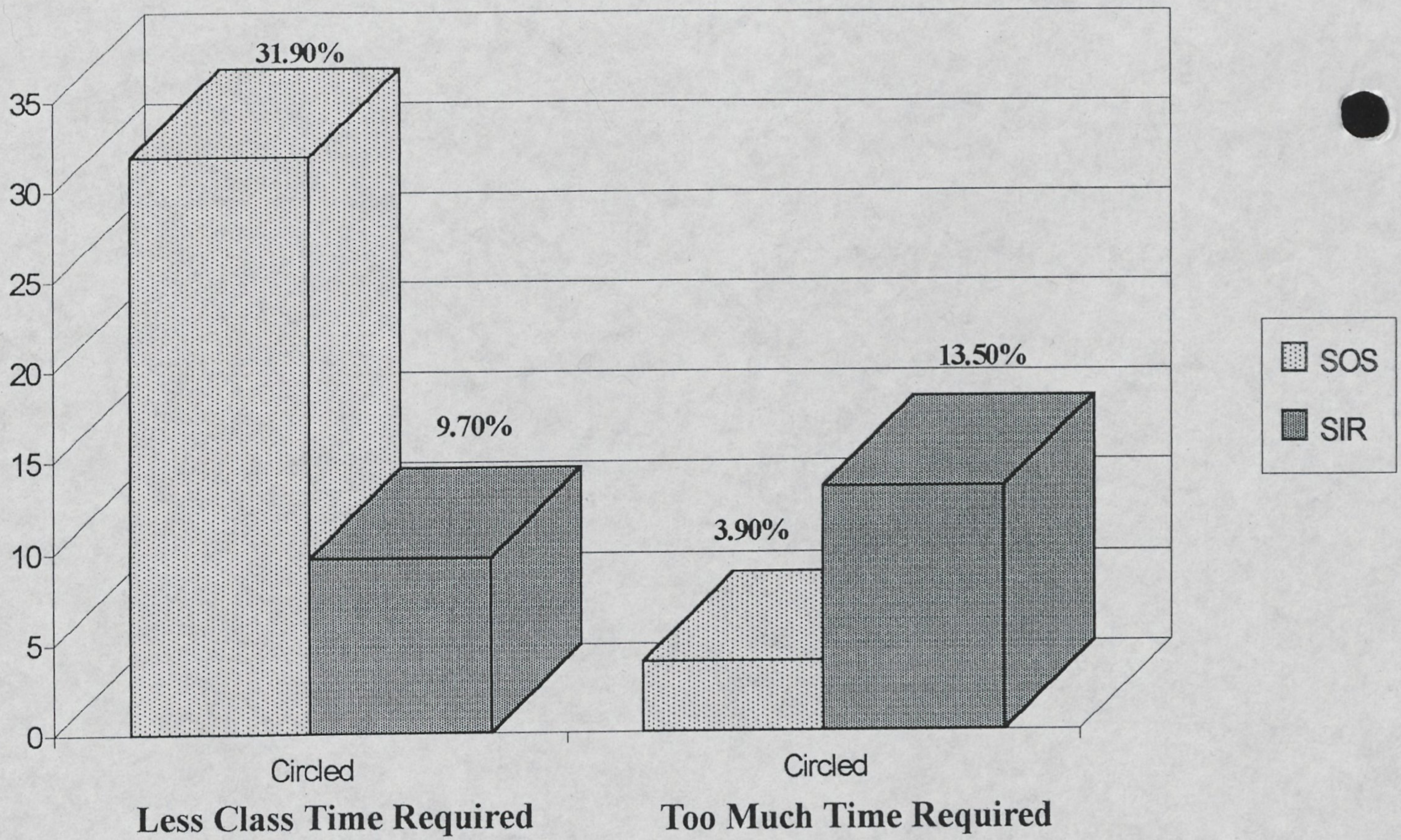
**FIGURE 8**



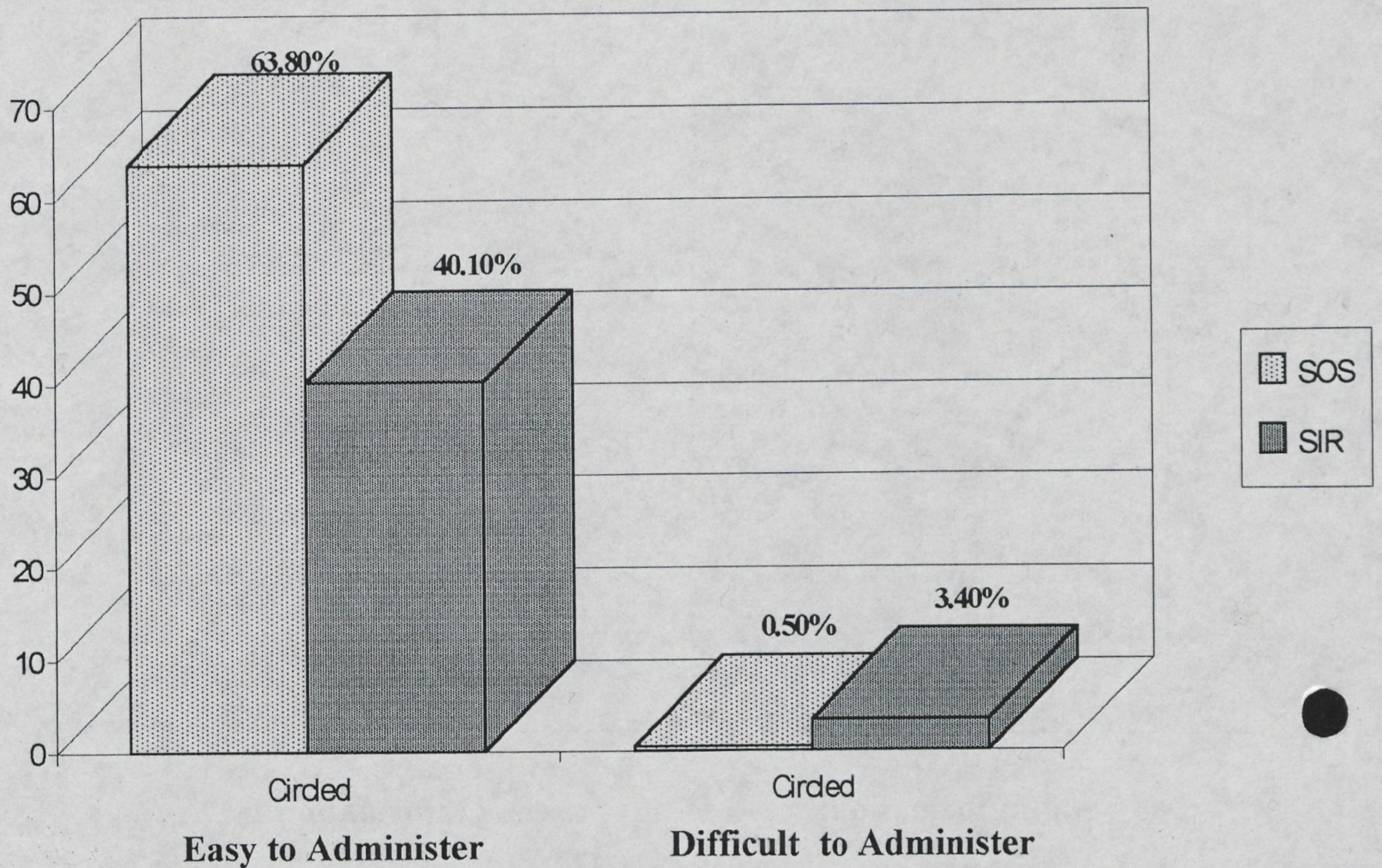
**FIGURE 9**



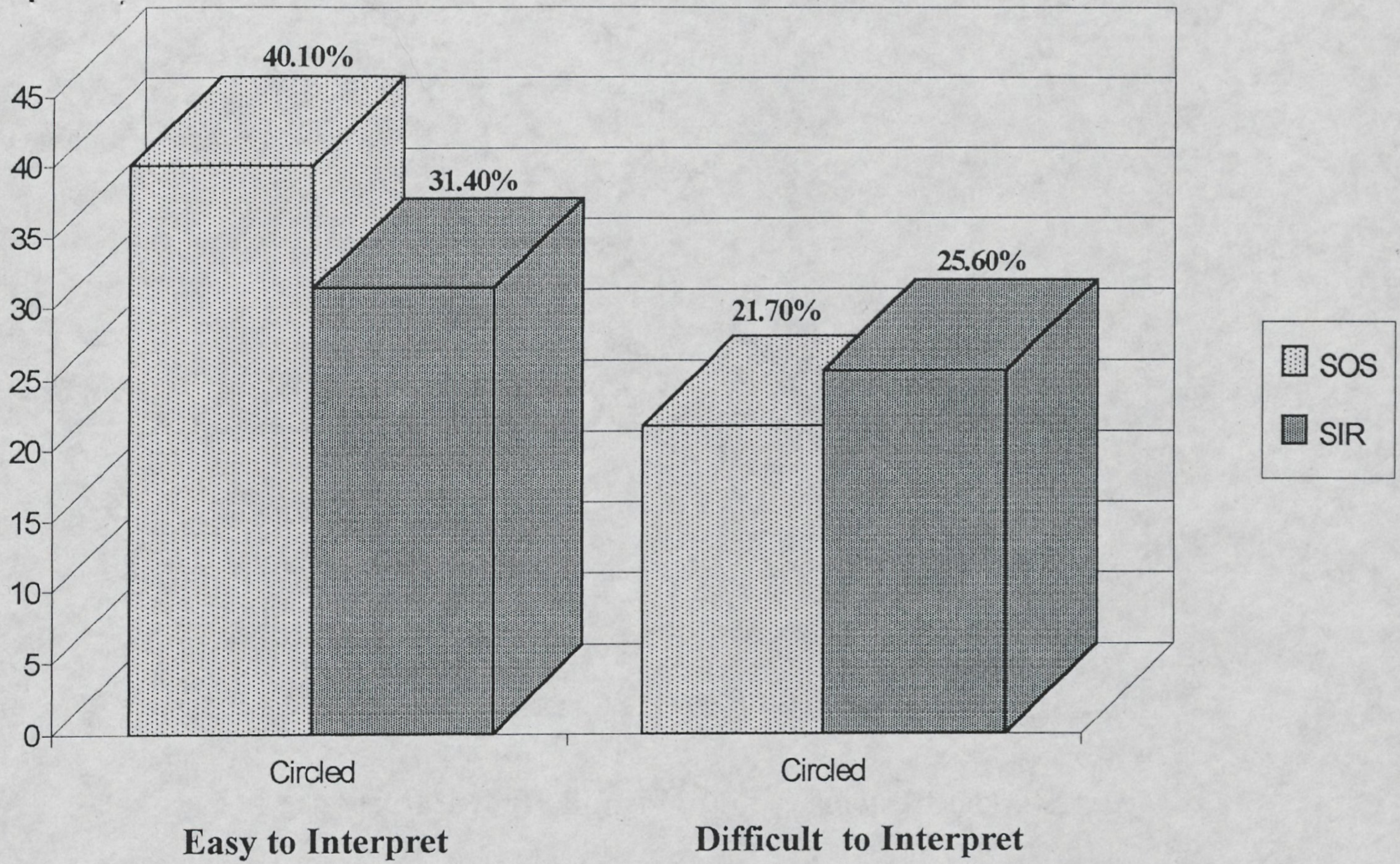
**FIGURE 10**



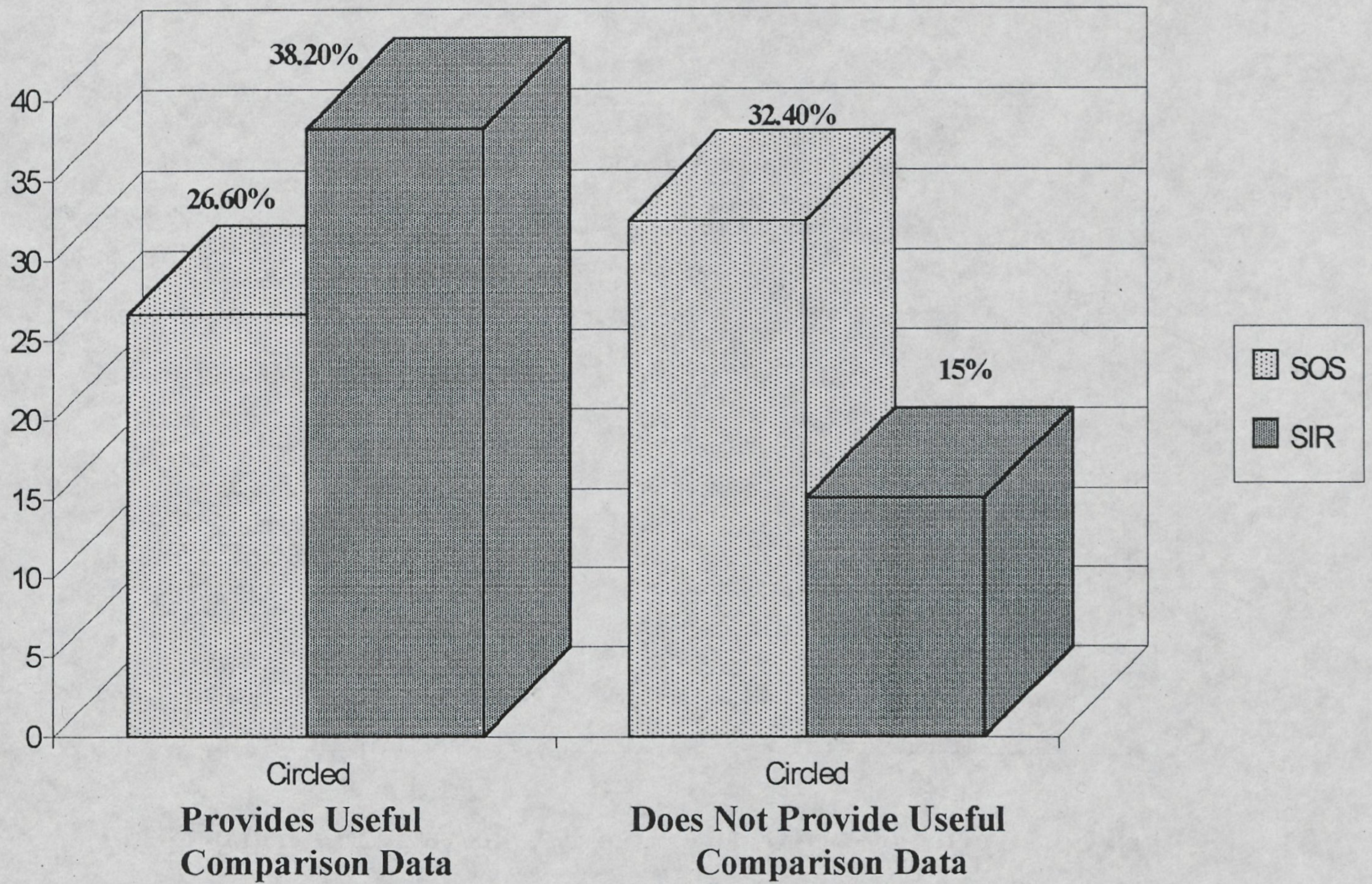
**FIGURE 11**



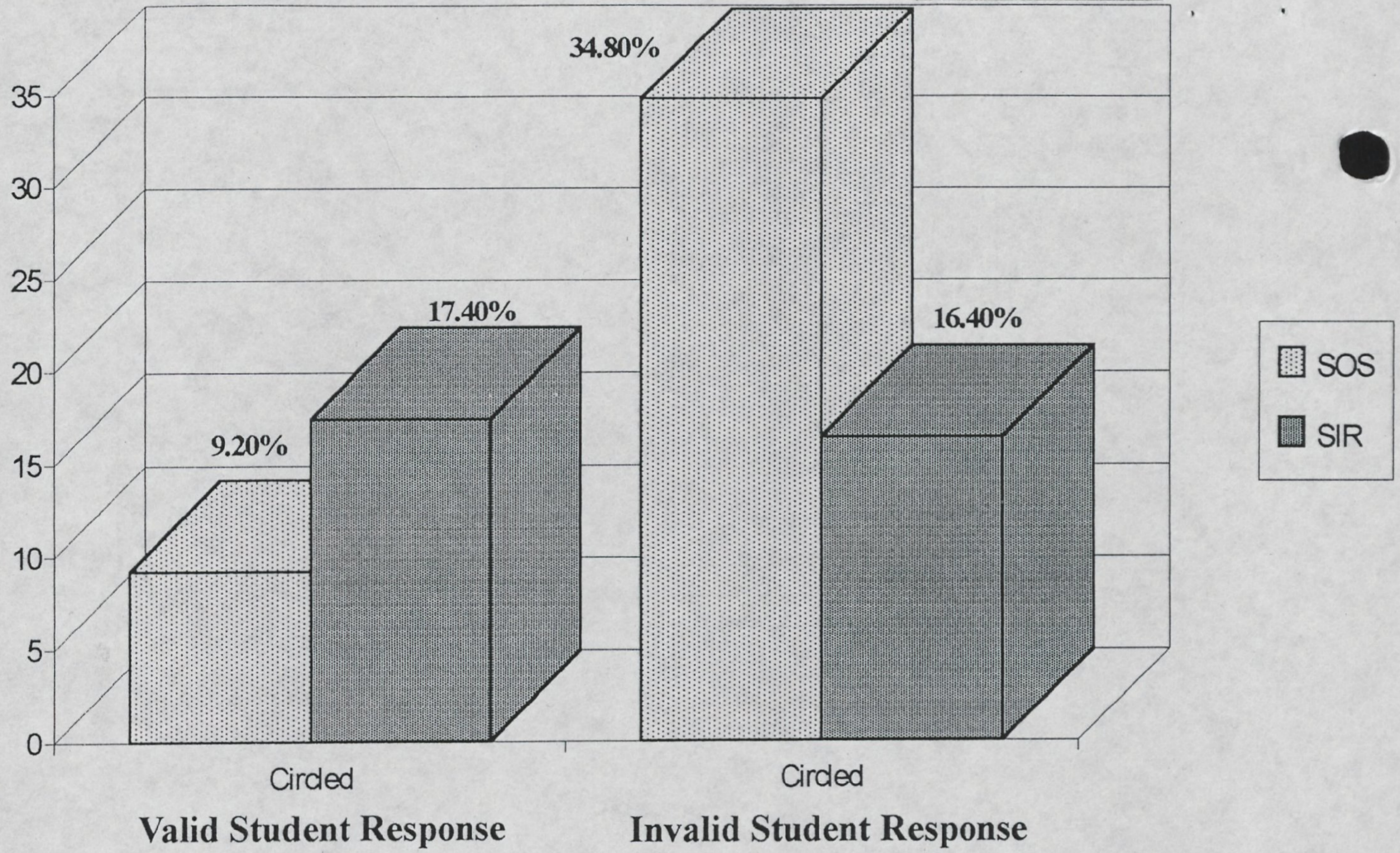
**FIGURE 12**



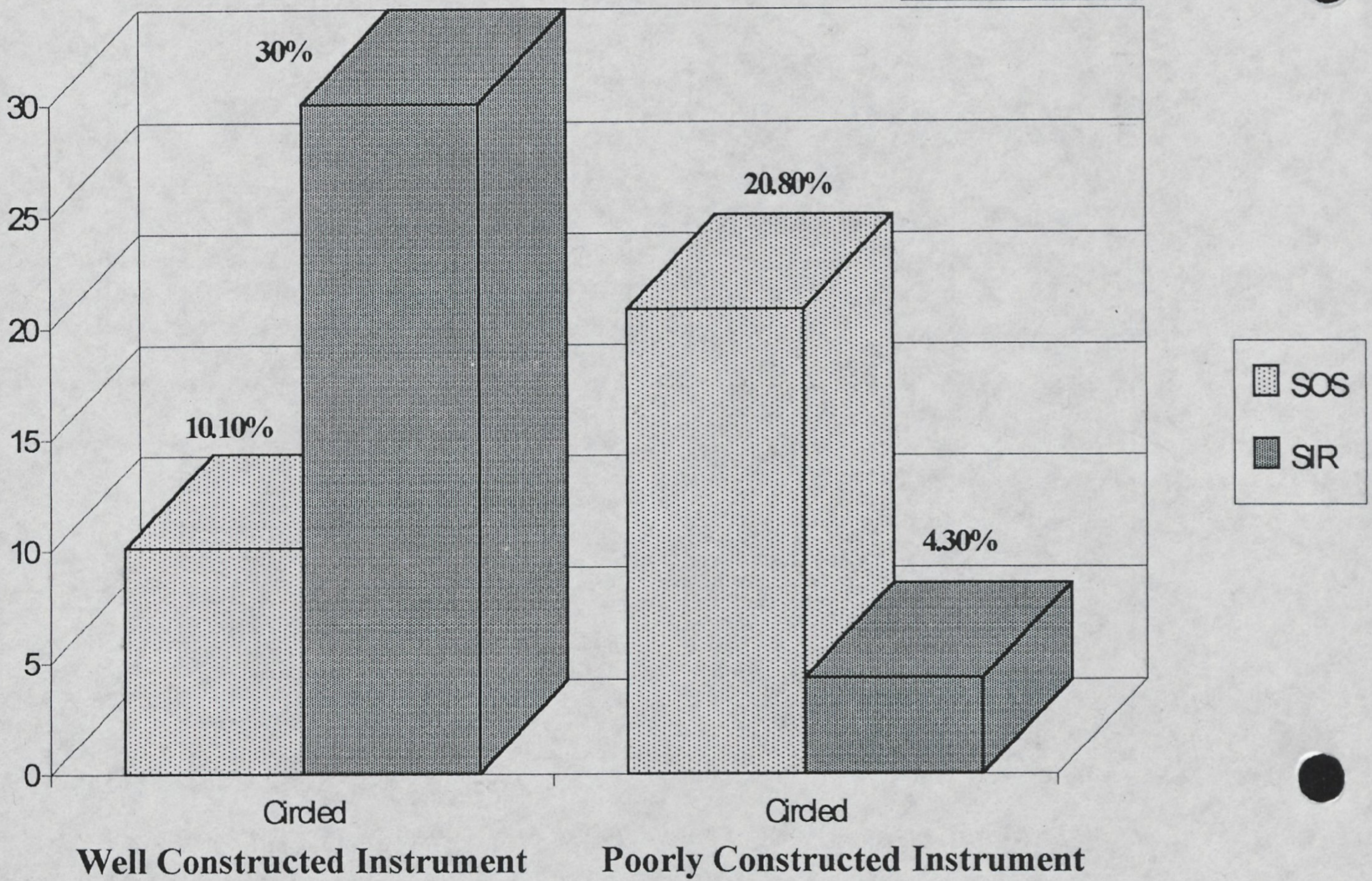
**FIGURE 13**



**FIGURE 14**

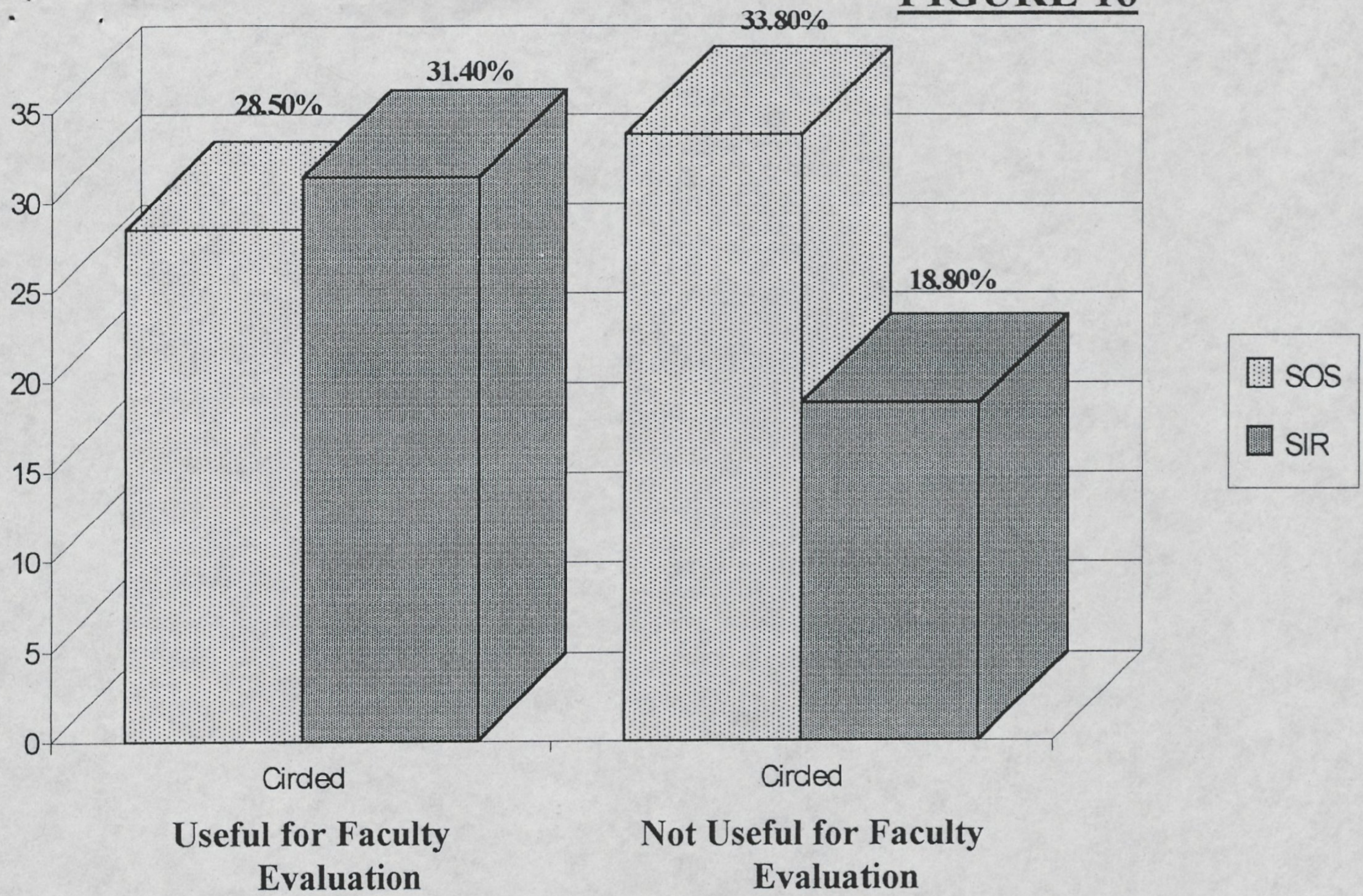


**FIGURE 15**

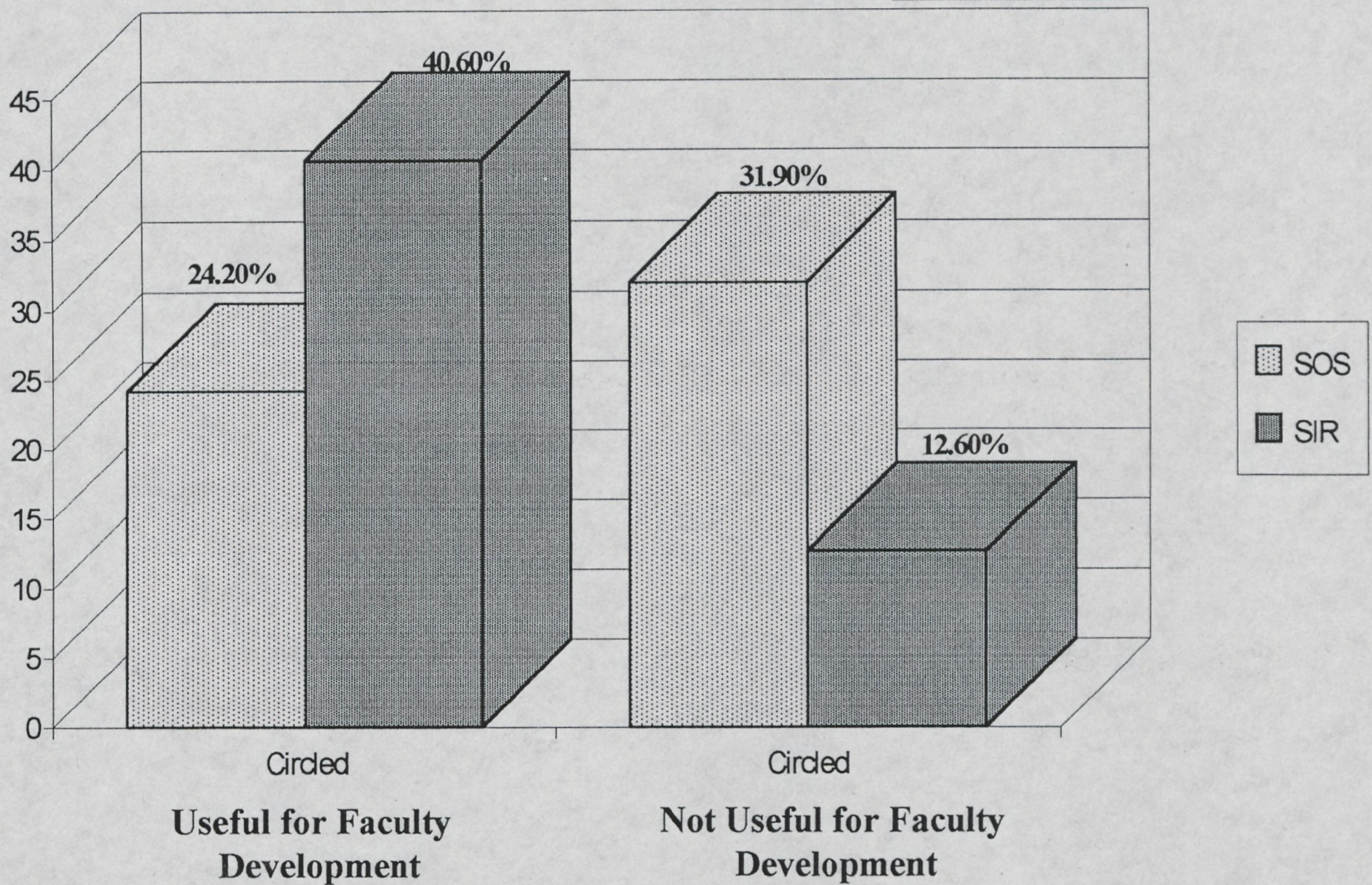




**FIGURE 16**



**FIGURE 17**



## Student Opinion of Instruction Survey

Highest Possible Rating					Lowest Possible Rating
5	4	3	2	1	

1. The instructor is reliable in meeting classes as scheduled.
2. The instructor returns tests and assignments in a timely manner.
3. The instructor reliably keeps office hours and appointments.
4. The instructor has made the goals of the course clear.
5. The instructor makes assignments and utilizes activities that are relevant to the course goals.
6. The instructor has created an atmosphere of respect.
7. The instructor has created an atmosphere of fairness.
8. The instructor has created an atmosphere of helpfulness.
9. Overall, the instructor is effective in teaching this course.
10. The instructor's speech is clear and audible.
11. The instructor's presentations cause me to think about this subject.
12. The instructor provides the opportunity to ask questions.
13. The instructor presents course content so that I can understand it.
14. The instructor is prepared for class.
15. The instructor shows interest in my learning.
16. The instructor provides useful feedback on student progress (identifying strengths and weakness).
17. The instructor is available to give me help outside of class.
18. The assignments contribute to my understanding of the subject.
19. The course requirements (projects, papers, exams, etc.) have been explained clearly.
20. The methods (papers, tests, projects, etc.) for evaluating my work are reasonable.
21. The course is well organized.
22. The course objectives are clear.
23. The goals of the course are being achieved.
24. I am more competent in this subject as a result of this course.

## Student Instructional Report

Not Applicable or Don't Know 0	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
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1. The instructor's objectives for the course have been made clear.
2. There was considerable agreement between the announced objectives of the course and what was actually taught.
3. The instructor used class time well.
4. The instructor was readily available for consultation with students.
5. The instructor seemed to know when students didn't understand the material.
6. Lectures were too repetitive of what was in the textbook(s).
7. The instructor encouraged students to think for themselves.
8. The instructor seemed genuinely concerned with students' progress and was actively helpful.
9. The instructor made helpful comments on papers or exams.
10. The instructor raised challenging questions or problems for discussion.
11. In this class I felt free to ask questions or express my opinions.
12. The instructor was well prepared for each class.
13. The instructor told students how they would be evaluated in the course.
14. The instructor summarized or emphasized major points in lectures or discussions.
15. My interest in the subject area has been stimulated by this course.
16. The scope of the course has been too limited; not enough material has been covered.
17. Examinations reflected the important aspects of the course.
18. I have been putting a good deal of effort into this course.
19. The instructor was open to other viewpoints.
20. In my opinion, the instructor has accomplished (is accomplishing) his or her objectives for the course.

Not Applicable or Don't Know 0	Excellent 5	Good 4	Satisfactory 3	Fair 2	Poor 1
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34. Overall, I would rate the quality of the exams:
35. I would rate the general quality of the lectures:
38. I would rate the overall value of this course to me as:
39. How would you rate the quality of instruction in this course? (Try to set aside your feelings about the course itself.) Fill in one response:

Excellent ⑤	Good ④	About Average ③	Fair ②	Poor ①
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EAST CAROLINA UNIVERSITY  
Teaching Effectiveness Committee

Last fall, you participated in an experiment to evaluate alternative ways of collecting student opinion of classes. You administered two surveys to one of your classes, the Student Opinion Survey (SOS), which has 9 required questions and has been administered on this campus for many years and the Student Instructional Report (SIR), which was developed by the Educational Testing Service.

Now we need to know how you evaluate the two surveys. Since surveys of student opinion serve two different purposes, there will be questions on both faculty evaluation and faculty development. Faculty evaluation refers to decisions on merit pay, tenure and promotion where this survey should serve as one of several kinds of information collected on teaching. Faculty development refers to activities where faculty work to improve their courses. *Please take a few minutes and complete the following questions.*

First let us consider the SOS form that has traditionally been used at ECU.

1. Is the SOS form an adequate measure of student opinion to be used as one of several measures of teaching in faculty evaluation?

1. YES
2. UNCERTAIN
3. NO

2. Does the SOS form provide the information that faculty need to improve their courses?

1. YES
2. UNCERTAIN
3. NO

3. What are the advantages of the SOS form? (CIRCLE ALL ANSWERS THAT ARE *ADVANTAGES*)

1. appropriate questions
2. useful information
3. less class time required
4. easy to administer
5. easy to interpret
6. provides useful comparison data
7. valid student response
8. well constructed instrument
9. useful for faculty evaluation
10. useful for faculty development

11. Other \_\_\_\_\_

12. Other \_\_\_\_\_

4. What are the disadvantages of the SOS form? (CIRCLE ALL ANSWERS THAT ARE *DISADVANTAGES*)

1. inappropriate questions
2. useless information
3. too much class time required
4. difficult to administer
5. difficult to interpret
6. does not provide useful comparison data
7. invalid student response
8. poorly constructed instrument
9. not useful for faculty evaluation
10. not useful for faculty development

11. Other \_\_\_\_\_

12. Other \_\_\_\_\_

(Over)