## Social Science

## A STATISTICAL STUDY OF COLLEGE STUDENTS' VIEWS OF CLASSROOM TEACHING

## HERBERT PATTERSON, OKLAHOMA A. & M. COLLEGE

During five years, 1923-1928, a qu teaching was used in the School of Ec tural and Mechanical College. Followin INSTRUCTOR	ducation of ng is a copy	the Oklaho of the ques	oma Agricul- tionnaire.
ROOM HOUR	DAY	'S	
	entirely ho seeing the ad each question. est judgment	e School of nest. The questionnai stion and p	Education, I material will re except the ut a check in
	Excellent	Average	Poor
<ol> <li>Does he begin and end classes on time?</li> <li>Does he keep the air in the room as fresh as possible?</li> </ol>			
3. Does he prepare his work carefully?			
<ul> <li>4. Is he always kind and courteous?</li> <li>5. Does he speak loudly and clearly enough?</li> <li>6. Can you take good notes from his discussions?</li> <li>7. What is your general estimate of his</li> </ul>			

8. What positive suggestions for improving the work do you offer?

A discussion of the beginning of the use of a student questionnaire on classroom teaching at Oklahoma Agricultural and Mechanical College appeared as a published article in "School and Society," January 31, 1925, under the title "An Experiment in Supervising College Teaching."

Only undergraduate classes were given the questionnaire. Thirteen different instructors participated in the experiment and student responses totalled 11,552. The following tables, however, are confined to the seven instructors who were in residence during the entire period of the experiment, five years. The student responses considered in the table total 9,701.

A very simple method of giving quantitative value to the student responses was to call "excellent" 100%, "average" 60%, and "poor" 20%. Each class was taken as a unit and then an average computed each quarter for all classes taught by the same instructor. It is these averages (arithmetical means) which are used in the tables. Per cents for the seven instructors are given under the letters T, U, V, W, X, Y, Z, and an average computed for the entire group.

TABLE I Does He Begin and End Classes on Time?

Time		Insti	uctors		Averag				
	T	U	v	w	X	Y	Z	-	
	Per	Per	Per	Per	Per	Per	Per	Per	
	Cent	Cent	Cent	Cent	Cent	Cent	Cent	Cent	
Fall, 1923	86	88	57	85	90	79	86	81	
Winter	90	96	85	89	93	90	93	90	
Spring	90	96	95	93	90	94	90	92	
Fall, 1924	82	90	85	90	92	86	91	88	
Winter	85	87	100	91	93	94	89	91	
Spring	88	88	88	93	94	92	93	90	
Fall, 1925	83	89	87	87	95	94	92	89	
Winter	90	86	95	81	85	88	89	87	
Spring	88	96	88	93	97	92	82	90	
Fall, 1926	82	86	85	93	94	91	95	89	
Winter	93	95	73	95	93	97	91	91	
Spring	93	92	96	93	96	93	96	94	
First Sem., 1927	89	91	92	87	95	87	85	89	
Second Semester	91	87	90	91	88	94	89	90	

Since the semester organization prevailed during 1927-28, it is perhaps better to make comparisons between the first six quarters, 1923-25, and the last six quarters, 1925-27. If such a comparison be made, it is found that the average for 1923-25 was 88 per cent and for 1925-27 the average was 90 per cent.

TABLE II
Does He Keep The Air In The Room As Fresh As Possible?

Time		Inst	ructors					Average
	T	U	v	w	X Per	Y	Z	
	Per	Per	Per	Per		Per	Per	Per
	Cent	Cent	Cent	Cent	Cent	Cent	Cent	Cent
Fall, 1923	84	89	100	74	86	81	80	84
Winter	93	86	100	81	89	80	76	86
Spring	87	87	100	94	85	82	84	88
Fall, 1924	87	89	99 <sup>1</sup>	88	96	89	95	91
Winter	96	96	84	82	92	94	94	91
Spring	92	88	100	83	84	88	80	87
Fall, 1925	90	92	96	81	90	86	85	88
Winter	96	97	100	88	91	83	84	91
Spring	93	92	95	85	94	88	94	91
Fall, 1926	85	81	97	85	77	74	83	83
Winter	88	92	94	83	95	85	84	88
Spring	93	95	95	90	93	88	90	92
First Sem., 1927	87	95	87	81	90	78	78	85
Second Semester	94	87	89	83	91	93	84	88

Comparing again, the average for the first six quarters, 1923-25, is 87 per cent, and the average for the last six quarters, 1925-27, is 88 per cent.

TABLE III

Does He Prepare His Work Carefully?

Time		Insti	ructors		Avera				
	T	U	v	w	х	Y	Z	_	
	Per	Per	Per	Per	Per	Per	Per	Per	
	Cent	Cent	Cent	Cent	Cent	Cent	Cent	Cent	
Fall, 1923	97	91	99	88	89	98	98	94	
Winter	98	96	100	92	97	98	98	97	
Spring	97	96	99	88	95	96	100	95	
Fall, 1924	91	98	99	95	97	98	98	96	
Winter	96	96	100	92	97	99	99	97	
Spring	97	94	. 100	93	95	96	98	96	
Fall, 1925	98	94	99	97	91	94	99	96	
Winter	100	96	100	95	98	94	100	97	
Spring	96	94	100	96	99	96	100	97	
Fall, 1926	96	91	99	97	97	93	100	96	
Winter	98	96	100	97	97	93	95	96	
Spring	97	96	100	92	94	95	100	96	
First Sem., 1927	97	93	100	96	95	96	97	96	
Second Semester	98	88	91	98	89	95	97	93	

Once again comparing, the average for 1923-25 is 95 per cent, and for 1925-27 it is 96 per cent.

TABLE IV

Is He Always Kind And Courteous?

Time		Instr	uctors			Avera		
	Cent T	Cent U	Cent V	Cent W	Cent X	Cent Y	Cent Z	Cent
	Per	Per	Per	Per	Per	Рег	Per	Per
	Cent	Cent						
Fall, 1923	97	98	97	86	98	100	98	96
Winter	99	96	96	95	100	100	99	97
Spring	98	97	83	95	99	96	100	95
Fall, 1924	95	98	92	97	98	97	99	96
Winter	97	96	100	98	97	99	99	98
Spring	96	96	98	98	99	100	99	98
Fall, 1925	96	96	99	96	98	98	99	97
Winter	96	93	100	97	99	97	99	97
Spring	97	93	95	97	99	98	100	97
Fall, 1926	97	94	97	95	98	97	97	96
Winter	98	98	100	98	99	98	98	98
Spring	98	99	99	96	97	95	100	97
First Sem., 1927	96	98	98	93	96	96	98	96
Second Semester	96	97	99	98	96	96	97	97

A similar comparison to that made in the case of previous tables shows the average for 1923-25 is 96 per cent and for 1925-27 it is 97 per cent.

Does He Speak Loudly And Clearly Enough?

Time		Inst	ructors					
	T Per Cent	U Per Cent	V Per Cent	W Per Cent	X Per Cent	Y Per	Z Per	Average
Fall, 1923	92	86	92	85	94	Cent	Cent	Cent
Winter	97	87	100	93	94	87	84	88
Spring	97	91	89	92		90	85	92
Fall, 1924	92	96	93	95	97	90	85	91
Winter	97	88	92		96	90	88	92
Spring	97	91		96	88	86	85	90
Fall, 1925	96	91	98	94	97	88	85	92
Winter	99		88	95	95	90	96	93
Spring	98	91	100	96	96	92	92	95
Fall, 1926		87	92	97	94	92	91	93
Winter	98	91	99	97	95	95	93	95
Spring	97	96	82	96	95	92	91	92
	97	92	88	94	90	90	88	91
First Sem., 1927	96	88	91	95	90	94	91	
Second Semester	99	90	92	97	91	92	86	92 92

The average for 1923-25 is 90 per cent and for 1925-27 it is 93 per cent.

TABLE VI Can You Take Good Notes From His Discussion?

Time		Insti	ructors	ussion?				
	T	U	v	w	X	Y	Z	Average
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per	Per
Fall, 1923	77	80	90	72			Cent	Cent
Winter	83	82	92	72 79	73	71	84	78
Spring	75	80	86		83	84	94	85
Fall, 1924	75	91		81	80	73	93	81
Winter	87	84	96	86	79	70	82	82
Spring	83	88	76	86	83	76	92	83
Fall, 1925	83		98	87	84	71	93	86
Winter	83	95	82	89	81	72	92	84
Spring	87	83	95	92	87	78	94	87
Fall, 1926		86	89	86	87	81	94	87
Winter	85	84	93	88	80	75	86	84
vv uiter	86	94	88	89	84	74	92	86
Spring	88	90	90	92	85	77	93	87
irst Sem., 1927	86	84	77	88	73	75	89	
second Semester	90	78	80	89	80	76	87	81 82

Comparing again, the average for 1923-25 is 82 per cent and for 1925-27 it is 85 pper cent.

TABLE VII
What Is Your General Estimate Of His Ability As A Teacher?

Time		Insti	ructors					Average
	T	U	V	W	X	Y	Z	_
	Per	Per	Per	Per	Per	Per	Per	Per
	Cent	Cent	Cent	Cent	Cent	Cent	Cent	Cent
Fall, 1923	99	88	98	77	88	87	95	90
Winter	99	90	96	87	97	89	98	93
Spring	96	92	96	88	95	87	97	93
Fall, 1924	94	97	97	91	94	86	95	93
Winter	100	93	100	91	98	88	98	95
Spring	96	91	100	90	94	84	97	93
Fall, 1925	97	96	92	93	95	88	98	94
Winter	98	90	100	94	94	85	98	94
Spring	96	93	94	95	95	91	98	94
Fall, 1926	97	89	99	93	91	87	99	93
Winter	98	99	94	94	91	86	96	94
Spring	97	95	99	93	86	87	98	93
First Sem., 1927	95	94	96	92	88	93	96	93
Second Semester	97	88	93	93	80	88	94	90

The average for 1923-25 is 92 per cent and for 1925-27 it is 93 per cent. A study of the seven tables gives room for the following three conclusions:

(1) The average varies but little throughout the five years.

(2) There is a slightly higher average for the six quarters, 1925-27, than for the six previous quarters, 1923-25. This amounts to from one to three per cent.

(3) The averages for the fifth year, under the semester plan, tend to be slightly lower than the averages for the third and fourth years under the quarter plan. This amounts to from one to four per cent.