DOCUMENT RESUME

ED 129 187 HE 008 275

AUTHOR Suslow, Sidney

TITLE A Report on an Interinstitutional Survey of

Undergraduate Scholastic Grading 1960s to 1970s.

INSTITUTION California Univ., Berkeley. Office of Institutional

Research.

PUB DATE Feb 76 NOTE 62p.

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.

DESCRIPTOPS *Admission Criteria; Credit No Credit Grading; *Grade

Point Average; *Grading; *Graduate Study; *Higher

Education; Pass Fail Grading: Tables (Data);

*Undergraduate Students

IDFNTIFIERS *Grade Inflation

ABSTRACT

Surveyed are undergraduate grading practices and their impact on graduate admissions. A diversity of reasons are offered by the respondent universities and institutes for the dramatic rise in undergraduate grade-point averages since the mid-1960's. These speculations focus on changes in student and faculty behavior, innovations in grading systems, and ancillary changes and influences. A derived grade-point index for respondent institutions shows a consistent increase since 1963. However, graphs reported undergraduate grade-point averages by student class level, freshman through senior, show a flattening of the curves, that is, a trend toward a slowing of the rise in grade-point average values. Plus and minus symbols or some alternate scheme for greater differentiation in grading is used by roughly half of the respondent institutions. Important innovations in grading are pass/fail, credit/no credit, and withdrawal without penalty regulations for courses attempted and not completed or failed. The respondent institutions are not planning any major changes in their current grading systems. Statistics are presented along with a discussion of the data. (Author/KE)



US DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

DICED EART IT AS BEEN REPROTHE PERSON OR ACCENTED PROM
ATMIGHT PUNT OF VIEW OR OPINIONS
TATED DO NOT NECESSARILY REPREEDUCATION POSITION OR POLICY
EDUCATION POSITION OR POLICY

A Report on an

Interinstitutional Survey

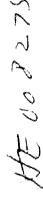
of

Undergraduate Scholastic Grading

1960s to 1970s

Wclsu2 yanbi2

Office of Institutional Research University of California, Berkeley February, 1976





Preface

At the request of the Provost and Dean of the College of Letters and Science a limited survey was made in December, 1975 on behalf of subcommittees of the Graduate Council and the Executive Committee of the College of Letters and Science concerned with undergraduate scholastic grading practices and their impact on graduate admissions. A letter and a request for information was sent to the fifty institutions receiving the most federal funds. Twenty-three replies were received by the end of January, 1976, containing comparative information. The few other institutions that replied stated they could not provide any useful information.

Although the request for information stressed that the replies would be used for internal purposes only, almost all of the respondents indicated an interest in receiving a copy of any summary that was made from the survey. A copy of this report has been forwarded to each respondent, and all institutional identification has been deleted except that Berkeley is identified with the letter B.



Acknowledgements

My sincere appreciation is extended to all of the institutions that were able and willing to share information for this interinstitutional survey of undergraduate scholastic grading.

I wish to acknowledge Steve T. Timko, graduate research assistant, for his analyses of the grade point indices, Sandy M. Campos, senior administrative analyst, for her careful and very helpful review of the draft copy of this report, and Barbara R. Komatsu, secretary, for her excellent production of the final copy.



Table of Contents

Page
Summary Remarks1
Nature of Survey and Responses3
Speculation on Factors Responsible for Grade Inflation4
Rise in the Proportion of \underline{A} Grades
Grade Point Indices10
Undergraduate Grade Point Averages15
Honors22
Plus/Minus Grading22
Letter Grade Symbols24
Plans for Changes in the Grading System26
Policy Changes in Graduate Admission Criteria28
Some Special Comments of the Respondents29
Appendix
Survey Instrument





Figures and Tables

Figure 1	: Percent	of "A" Grades Awarded to Undergraduates	8
Figure 2	: Mean Gra	ade Point Index	12
Figure 3	: Freshman	n Grade Point Averages, 1960 to 1974	. 16
Figure 4	: Sophomo	re Grade Point Averages, 1960 to 1974	17
Figure 5	: Junior (Grade Point Averages, 1960 to 1974	. 18
Figure 6	: Senior (Grade Point Averages, 1960 to 1974	. 19
Table 1:	Mean Grad	de Point Indices and Standard Deviation by Year	11
Table 2:	Means and Collapsed	d Standard Deviations of Respondent Institutions'd Grade Distributions, 1960, 1965, 1970, 1974	. 14
Table 3:	Undergrad	duate Grade Point Averages	21
Table 4:	Current (Grade Point Averages Required for Honors	23
Table 5:	Current (Grading Systems for Undergraduates	. , 25
Appendix	Table 1:	Current and Oldest Reported Distribution of Passing Grades.	. , 33
Appendix	Table 2:	Reported Undergraduate Grade Distributions by Responding Institutions; Collapsed Percent Distributions by Standard Grades, A, B, C, D, & F, Grade Point Indices	37
Appendix	Table 3:	Tests of Significance of Difference Between Mean Grade Point Indices	. 40
Appendix	Table 4:	Tests of Significance of Difference Between Grade Proportions	41



Summary Remarks

A diversity of reasons are offered by the respondent universities and institutes for the dramatic rise in undergraduate grade point averages since the mid-1960s. These speculations focus on changes in student and faculty behavior, innovations in grading systems, and ancillary changes and influences. The stimulus for the changes may have been student activism beginning in 1964, followed by faculty reactions, and sustained by intensified student competition for graduate and professional admission in the early 1970s.

From the early 1960s to early 1970s, the percent of \underline{A} grades has more than doubled, from 16% to 34%, while the percent of \underline{C} grades has diminished by not quite half, from 37% to 21%. There is some indication that the pass/fail grading option is chosen by undergraduates less frequently now than when it was first introduced. One speculation for this change is the increased competition for entry to graduate and professional programs.

A derived grade point index for respondent institutions shows a consistent increase since 1963, from 2.49 that year to 2.94 in 1974. However, graphs of reported undergraduate grade point averages by student class level, freshman through senior, show a flattening of the curves, that is, a trend toward a slowing of the rise in grade point average values.

Plus and minus symbols or some alternate scheme for greater differentiation in grading is used by roughly half of the respondent institutions. The most differentiated grading scheme reported is a numeric system where faculty may award a student any value between 4.0 and 0.0 by tenths of a grade point.



Aside from these innovations, the most important recent innovations in grading systems are the pass/fail, credit/no credit, and withdrawal without penalty regulations for courses attempted and not completed or failed. These three grading innovations were intended to encourage student academic exploration with little, or no, fear of misadventure.

The respondent institutions are not planning any major changes in their current grading systems. Although a couple reported recent faculty dissatisfaction with grading practices and some indicated proposed changes, none indicated they expected to undergo any extensive changes in the near future. Additionally, with one exception, no institution has any plans for changing their criteria for admission to their graduate programs. The one exception is exploring the possible need for change and plans a longitudinal study of graduate admission criteria.



Nature of Survey and Responses

The survey asked eight questions and provided the potential respondents with detailed information about Berkeley's grading practices and records (see attached survey instrument). Respondents varied considerably in their answers to the survey. Among those who sent a response, some provided similar information to match Berkeley's in content and breadth, some sent copies of existing studies or reports on their institution which answered many of the questions, and some answered the questions only partially.

The limited nature of the survey does not allow rigorous analysis or generalizations; nevertheless, in the report which follows some attempt is made to bring similar information together and to draw inferences from it.

In the report, individual institutions responding to the survey are recorded by an arbitrarily assigned number. Except for two institutions, all respondents are either public or private universities.



Speculation on Factors Responsible for Grade Inflation

Several responding institutions speculated on the factors responsible for the rise in undergraduate grade point averages since the early or middle 1960s. Some speculation focused on local policy only but most of the guesses reflected a broader perspective.

There is a surprising diversity in the list of factors attributed to grade inflation. With some repetition among the responses, a lengthy list of different factors is compiled on the following pages arranged by student behavior, faculty behavior, changes in grading policies, and other changes and other influences. Some factors in one arrangment have counterparts in another arrangement. For instance, student intense competition to be admitted to graduate professional programs is matched by the faculty's inclination to award higher grades to give their students a competitive advantage in seeking these admissions.

Many of the speculations can be tied together by surmising that student activism and intensified competition led to faculty revisionism resulting in changes in grading practices and policies.



List of Speculations on Factors Responsible for Grade Inflation

1. Student Behavior:

- a. better prepared
- b. more highly selected
- c. student activism
- d. student evaluations of faculty performance induce generous grading
- e. student self-evaluations
- f. contract learning
- g. adroit selection of credit/no credit options to avoid standard arades in difficult courses
- h. intense competition for admission to profes onal programs
- i. increased student voice in academic policy formulation

2. Faculty Behavior:

- a. award higher grades to give students a competitive advantage
- b. disinclinations to grade induce benign grading practices
- c. failure to assign term papers
- d. failure to give sufficient examinations
- e. reluctance to fail students during Vietnam war
- f. growth of faculty freedom and concomitant lessening of administration's influence on uniform standards
- g. publications of information on scholastic grades induces faculty to increase grade level to average but not decrease grade level to average



3. Changes in Grading Policies:

- a. pass/fail grading options
- b. credit/no credit grading options
- c. withdrawal from courses late in the term with no scholastic penalty
- d. plus and minus grades and intermediate AB and BC grades
- e. exclusion of incomplete grades
- f. increased use of "other" letter grades--e.g. when incomplete (\underline{I}) grade is given in place of \underline{D} or \underline{F} grades.
- g. assignment of greater than four points for A+ grades (e.g. 4.3 or 4.5 grade points) causes upward thrust to other grades

4. Other Influences or Changes:

- a. general relaxation of academic rules
- adoption of permissive standards for educationally disadvantaged students has resulted in their adoption for all students
- institutional concern for decreasing student enrollments has brought about relaxed grading standards
- d. excessive opportunities for students to select majors in nonacademic disciplines including self-designed majors
- e. reduction of breadth course requirements in the freshman and sophomore years
- f. increased prevalence of non-traditional instructional procedures
- g. widespread availability in the open market of guaranteed quality term papers



Rise in the Proportion of A Grades

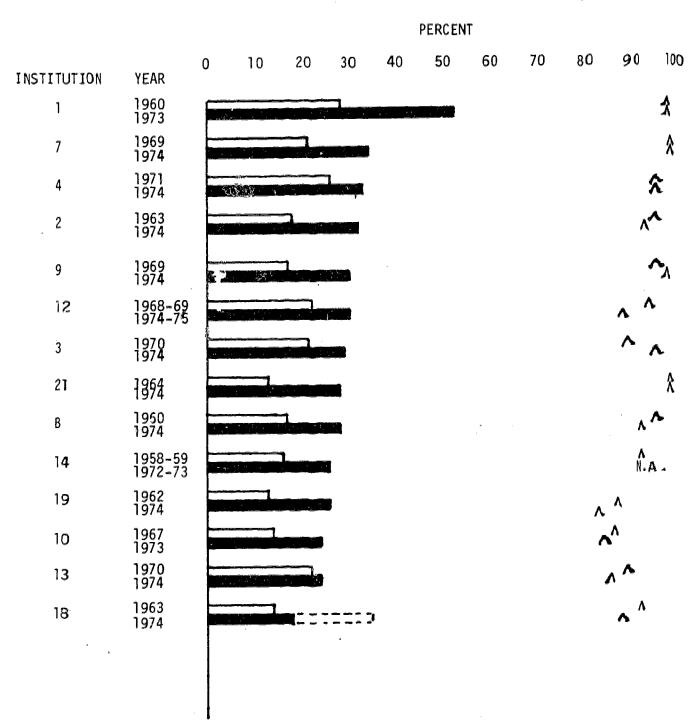
Fourteen institutions, including BerkeTey, supplied sufficient information to permit a good view of the rise in the proportion of A grades from the 1960s to 1973 or 1974. A rough comparison is provided in Figure 1 where the earliest reported information of distributions of grades awarded to indergraduates is compared to the latest reported information for each institution. If an institution reported a significant percent of grades for withdrawal from courses (identified by W for withdrawal, or WP and F for withdrawing with a passing status and withdrawing with a failing itatus) and provided a count of grades for the distributions, then the W grades were subtracted from the count and a redistribution of the percentages of other grades was made. No credit grades were subtracted from the distributions, also.

Figure 1 arranges the fourteen institutions by their 1973 or 1974 percent of A grades. Excluding institution number 1 with its extreme values for this limited collection of institutions, the percent of A grades has increased from 13% - 18% in the early 1960s to 24% - 34% in 1974 (or 1973). Those institutions reporting only late 1960 or early 1970 grades for comparisons with 1974 (or 1973) grades show an average percentage point rise of 9 points while those institutions reporting early 1960 grades show an average percentage point rise of 12 points by 1974 (or 1973).

On Figure 1 the inverted "v" marks indicate the percent of total passing prades awarded by the institutions. Included in the non-passing grades are such grades as failure, incomplete, in progress, and no record. As noted previously, withdrawal and no credit grades used by some institutions were excluded from the percent distributions. Even with withdrawal grades



PERCENT OF "A" GRADES AWARDED TO UNDERGRADUATES



NOTES: (1) The "A" marks indicate the total percent of passing grades.

(2) The dotted area for institution #18 indicates the additional percentage of "AB" grades awarded.

Office of Institutional Research University of California, Berkeley Pruary, 1976 removed, the proportion of grades which are neither passing nor failing grades differs considerably among the institutions.

Several institutions reported grades by lower and upper division levels or by course level. This information together with total undergraduate percent grade distributions (where reported) is shown in Appendix Table 1. With almost no exception upper division students received a higher proportion of \underline{A} 's than lower division students in the earliest and latest reported year.

Thirteen of the twenty institutions reporting grade distributions award one or more Pass grades which are tallied under the column in Appendix Table 1 labeled Pass (P). The Pass grade may include only C- to A+ or extend to include D grades. It is noteworthy that among these institutions only six report more than 5% Pass grades in their current distributions. A few institutions commented that increased student interest in gaining admission to graduate programs has led to decreased interest in choosing a pass/fail option. At institution number 9, the percentage of Pass grades declined from 22% in 1969 to 9% in 1974; however, at institution number 17 the reverse occurred. from 9% in 1965 to 18% in 1974.

A very rough calculation of the average number of percentage point changes in the grades \underline{B} , \underline{C} and \underline{D} which occurred among the institutions shown in Appendix Table 1 gives a change of -1% in \underline{B} grades, -10% in \underline{C} grades, and -3% in \underline{D} grades for all undergraduate grades over the period of years reported in the table. For those institutions reporting lower and upper division grades, the average percentage point change was 1%, -11%, -3% lower division and -5%, -9%, -2% upper division, respectively for \underline{B} , \underline{C} , and \underline{D} grades.



Grade Point Indices

Two institutions, including Berkeley, reported scholastic grade percent distributions for 1960 and fifteen reported distributions for 1974. A collapsed distribution was calculated (if not already provided by the respondent) for each institution which supplied sufficient information to make this calculation. Grade point indices are determined by arbitrarily assigning the same point-values to presumed equivalent grades. Plus/minus grades are not considered separately, that is, At, A, and A- are all treated as A grades, and so on for the other grades where plus/minus options are used. The points used are 4, 3, 2, 1, and 0 for A, B, C, D, and F, respectively. The collapsed distributions and derived grade point indices are shown in Appendix Table 2.

The purpose of this exercise was to examine the overall trend in grading among this small sample of institutions. Table I gives the mean grade point indices (unweighted averages) by year and the standard deviations. Figure 2 plots these mean values and shows that the points closely fit the least square regression line. A series of t-tests of the significance of the apparent rise in the grade point index shows that for the periods 1960 versus 1974, 1966 versus 1970, and 1970 versus 1974, the change in index value is significant at the .025 levels (see Appendix Table 3).

The actual values shown in Table 1 are not important since another



 $^{^{\}star}$ A distribution of <u>A</u> through <u>F</u> grades disregarding all other grades.

Table | Mean Grade Point Indices and Standard Deviation by Year

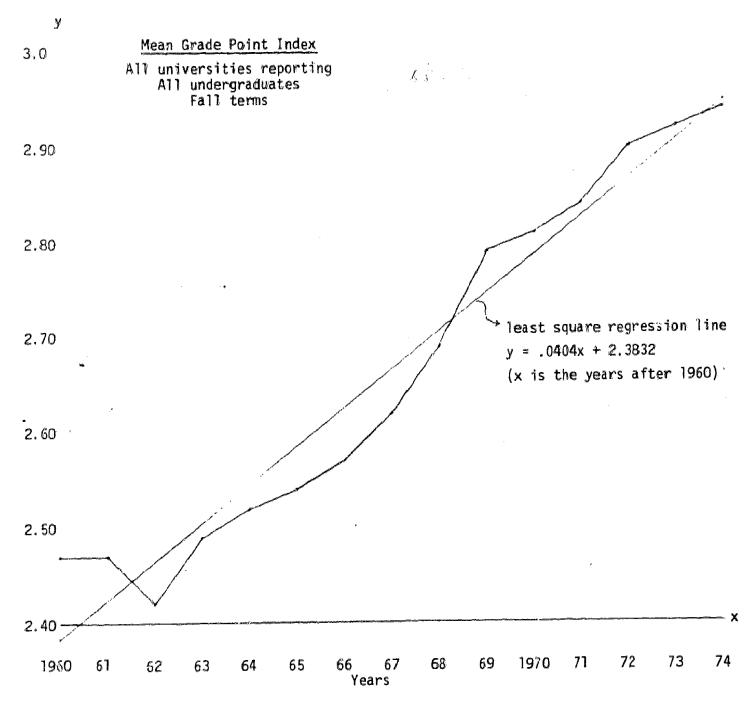
Year	Number of <u>Institutions</u>	Meam Grade Point Indices*	Sample Standard Deviation
1960	2	2.47	. 09
1961	2	2.47	.09
1962	3	2.42	.15
1963	5	2.49	13
1964	5	2.52	. 15
1965	7	2.54	.13
1966	7	2.57	.15
1967	8	2,62	.13
1968	8	2.69	.13
1969	10	2.79	.12
1970	13	2.81	.10
1971	15	2.84	.11
1972	14	2, 90	.12
1973	15	2.92	.10
1974	15	2.94	.10

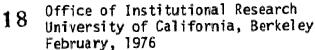
Office of Institutional Research University of California, Berkeley February, 1976



^{*}Unweighted averages

F. Brighe







can infer that among most public and private universities the rise in the grade point index as calculated here would not be very different in its significance or relative magnitude.

In the preceding section some rough calculations were made on the change in the percentages of standard grades, comparing the earliest reported distribution with the latest reported distribution. In Table 2, the mean percentages of standard grades from the collapsed distributions are given with their standard deviations. The obvious changes have occurred in the A and C grades, the former more than doubling in proportion, from 16% to 34%, and the latter diminishing by not quite half, from 37% to 21%. Appendix Table 4 and its accompanying statement examine this change statistically. This statement notes that assuming a normal distribution there is a probability of .995 that the 1974 mean for A grades has increased by at least 14.4% but mot more than 20.6%.



Table 2

Means and Standard Deviations of Respondent Institutions' Collapsed Grade Distributions

1960, 1965, 1970, 1974

55 <u>%</u> 0 = 2		1965 0 = 2 n = 7				1974 n = 15		
χ	S	X	S _x	χ	S _x	χ	s _x	
16.2	1.7	18.1	2.7	27.5	3,3	33.7	4,3	
33.2	2.1	35.6	3.9	38.3	4.1	37.8	4.2	
36.9	. 4	33.5	2.2	25.3	2.9	20.8	2.8	
		6.6	3.4	5,5	2.3	4.6	1,5	
		4.5	2.2	3.4	1.2	3.2	1.2	
	x 16.2	X S _X 16.2 1.7 33.2 2.1 36.9 .4 9.1 2.8	\bar{X} S_X \bar{X} 16.2 1.7 18.1 33.2 2.1 35.6 36.9 .4 33.5 9.1 2.8 6.6	\tilde{X} S_X \tilde{X} S_X 16.2 1.7 18.1 2.7 33.2 2.1 35.6 3.9 36.9 .4 33.5 2.2 9.1 2.8 6.6 3.4	\bar{X} S_X \bar{X} S_X \bar{X} \bar{X} S_X \bar{X} X	\bar{X} S_X \bar{X}	\bar{x} S_x \bar{x} S_x \bar{x} S_x \bar{x} S_x \bar{x} \bar{x} S_x \bar{x}	

n = number of observations

X = sample mean

 S_{x} = sample standard deviation

Office of Institutional Research University of California, Berkeley February, 1976



Undergraduate Grade Point Averages

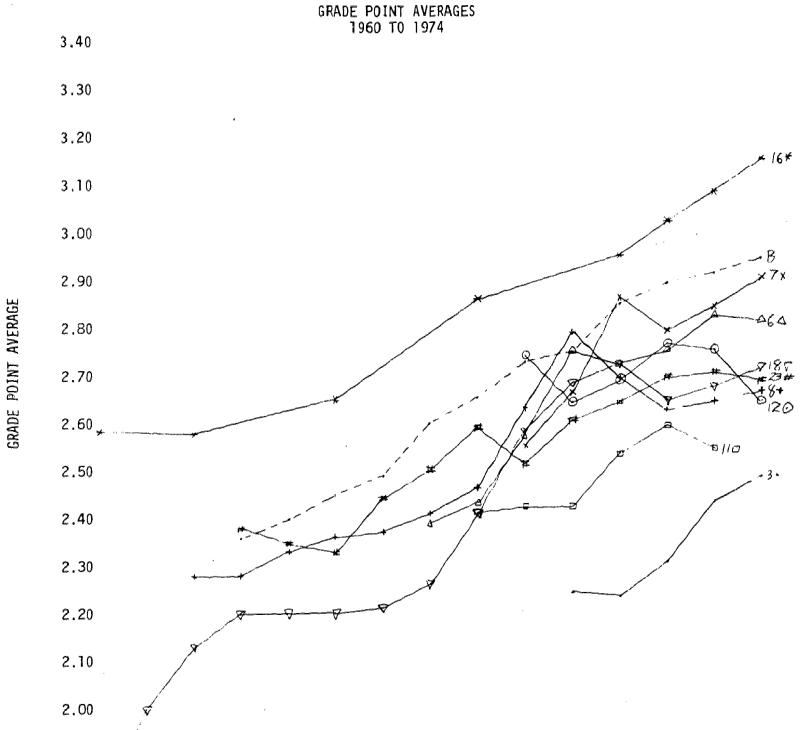
Several institutions supplied six or more years of information on grade point averages by student class level. This information is protted in Figures 3 through 6. Each class exhibits a slightly different pattern from the others. Freshman curves exhibit a greater variety of rises and falls. Excluding institution number 16 with its quite different curve for the freshman level, as well as all other class levels, the freshman curves are less clustered than other class curves. The variation in the freshman curves does not permit any easy summary statement. It cannot even be said that all institutions show a higher current freshman grade point average than their earliest reported figure, for institution number 12 started with a 2.74 g.p.a. in 1969 and had a 2.64 g.p.a. in 1974. Among the ten institutions shown on the freshman chart six have a leveling or declining curve in the last few years. This observation may represent a reaction by some institutions to slow or reverse the grade point average rise or it may simply represent fluctuations in the curves. There is some evidence from remarks made by a few institutions that deliberate steps have been taken to slow or reduce the grade point average trend of the 1960s and early 1970s.

For the most part, the curves for the sophomore and junior classes (Figures 4 and 5) are similar. The general slope is relatively steep from about 1968 to about 1970, and then flattens somewhat. Seven of the ten institutions in the senior class chart are clustered relatively closely and form a clear "S" curve.

From the limited evidence in the grade point average charts one may surmise that the rapid growth in grade point averages in the middle and late 1960s is slowing down. One institution, number 16, clearly does not



FRESHMAN



YEAR (usually fall term)

Office of Institutional Research University of California, Berkeley February, 1976



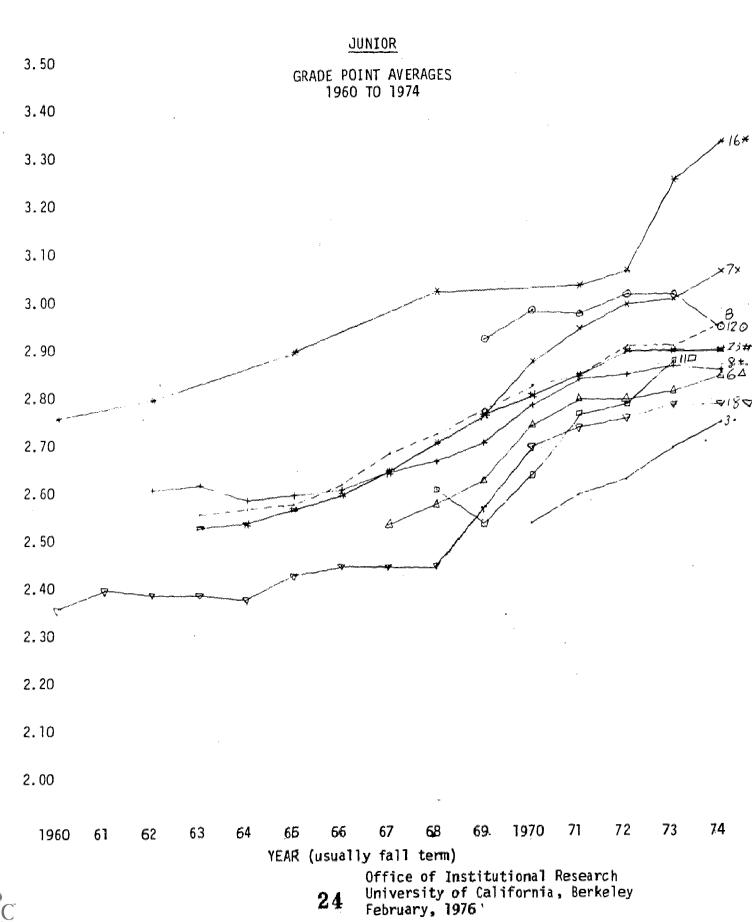
1960,

3.50

23

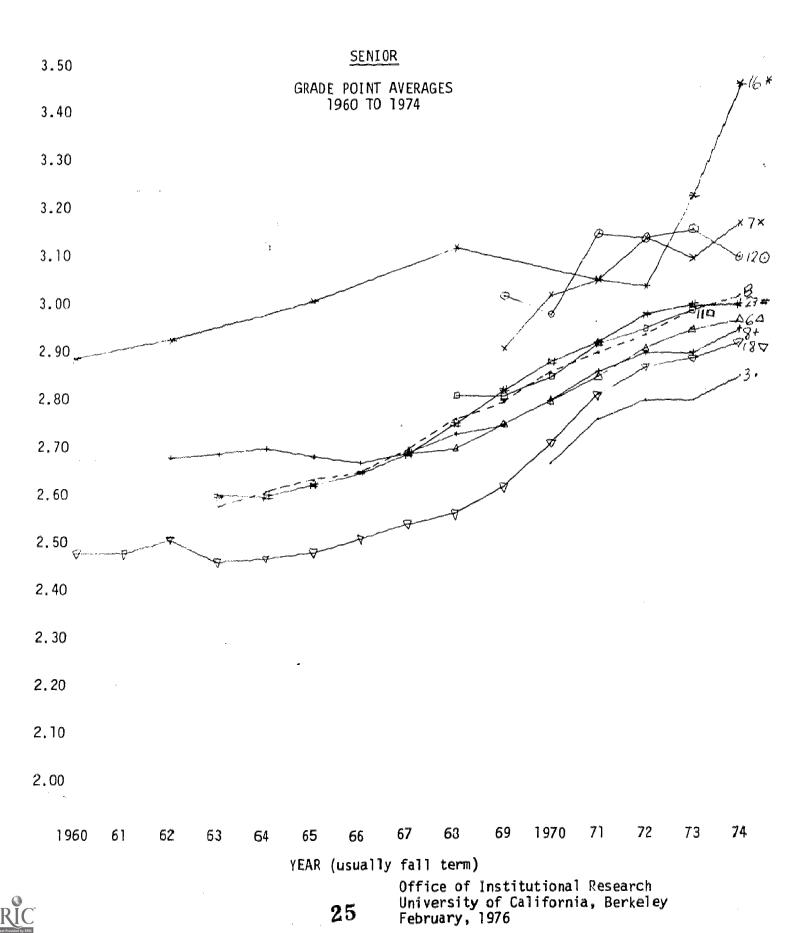
GRADE POINT AVERAGE

18. Figure 5





19. Figure 6



show this trend. All of its classes have a higher current grade point average than the other institutions and the grade point average increases of the last decade do not seem to be slowing down.

Eight of the ten institutions reported in Figures 3 through 6 gave total undergraduate grade point average information and so did three institutions which gave no class information. These eleven institutions are shown in Table 3. Among the four institutions reporting 1960 grade point averages, their average rise in 1974 was .48 points. From somewhere around a $\frac{C+}{B}$ average in the early 1960s all the institutions are hovering around a $\frac{B}{B}$ or $\frac{B-}{B}$ undergraduate average in 1974.

As I noted a few years ago, the \underline{B} grade has replaced the \underline{C} grade as the standard for a satisfactory performance.* Student pressure for high grades to qualify for graduate and professional programs and a number of other factors already discussed in a previous section of this report have altered the meaning of the \underline{C} grade. Despite institutional insistence on labeling a \underline{C} as a fair, satisfactory, or average attainment grade, the majority of the students have come to regard a \underline{C} as a "failure" to perform up to their, and others, expectations.



Pass-Fail Grading at Berkeley: Facts and Opinions, Office of Institutional Research, University of California, Berkeley, February, 1973.

Table 3
Undergraduate Grade Point Averages

21.

Fall,	<u>Institut(n</u>										
Spring, or Year	<u>B*</u>	<u>18</u> *	<u>4</u>	<u>13</u>	<u>8*</u>	23*	12*	<u>6*</u>	11*	<u>7*</u>	<u>15</u>
1960	2.51	2.31	2.37	2.29	-	-	-	-	-		-
1961	2.52	2.35	2.36	N.A.	-	-	-	-	-	-	-
1962	2.53	2.33	2.38	N.A.	2.59		-	æ	-	-	-
1963	2.54	2.35	2.41	N.A.	2.58	2.52	vine.	-	-	-	-
1964	2.56	2.35	2.41	N.A.	2.59	2.54	-	-	-	-	-
1965	2.59	2.37	N.A.	2.29	2.59	2.56	-	-	-	=	-
1966	2.63	2.38	N.A.	2.33	2.59	2.60	2.48	-	-	-	-
1967	2.69	2.41	N.A.	2.42	2.62	2.65	2.50	2.54	-	-	-
1968	2.74	2.47	N.A.	2.53	2.65	2.75	2.54	2.57	2.56	-	-
1969	2.78	2.58	N.A.	2.57	2.71	2.78	2.86	2.65	2.54	2.70	2.82
1970	2.84	2.69	N.A.	2.77	2.79	2.82	2.81	2.76	2.59	2.81	2.89
1971	2.88	2.75	2.73	2.81	2.83	2.85	2.85	2.80	2.69	2.98	2.97
1972	2.92	2.77	2.81	2.78	2.85	2.90	2.89	2.83	2.74	2.94	2.99
1973	2.94	2.77	2.87	2.77	2.87	2.90	2.89	2.86	2,77	2.95	3.05
1974	2.99	2.80	2.88	2.74	2.88	2.91	2.80	2.89	-	3.03	-

Office of Institutional Research University of California, Berkeley February, 1976



^{*}Institutions which also appear on Figures 3 - 6. Those not appearing on this table but which do appear on the charts are institutions number 16 and 3.

Honors

Grade point average minimums for honors, either for dean's lists or at graduation, are fairly uniform for the institutions commenting on this special feature of the grading system, less than half of the number who sent a reply to the survey. Table 4 gives a summary of this information. In addition to the minimum averages, students are often held to minimum credit hours earned at the institution and maximum of grades earned in pass/fail, and similar, courses.

Plus/Minus Grading

Among the twenty-three institutions replying to the survey, nine noted that they are using some direct form of plus/minus grading, two have or will have numeric systems (one by .1 and the other by .5 of a grade point), and one has an \underline{AB} and a \underline{BC} grade.

The point values of the plus/minus grading vary. Of those institutions responding to this feature of the grading system, three indicated points given above 4.00 (A grade) for an A+, 4.30 at two institutions and 4.5 at the third. The last institution dropped this point value in 1972. The other variations are small ranging from \pm .33 to \pm .25.

Institution number 1 presented these arguments against plus/minus grading: (a) it gives an unwarranted appearance of an equivalent accuracy; (b) it increases grade pressures upon students; (c) it has a "push down" effect, for example, an \underline{A} - will be thought of as a \underline{B} .



Table 4

Current Grade Point Averages Required For Honors

(In some instances may apply only to the most populous college in the university)

		Dean's List Honors	Honors at Graduation						
Institution	G.P.A.	Comments	Distinction	High Distinction	Highest Distinction				
1	no stat	ement (n.s.)							
2	n.s.	recommendation was made March, 1975 to change honors criteria	3.40	3.60	3.80				
3	3.3		3.30	3.65	3.95				
4	3.5		n.s.						
5	n.s.								
6	n.s.								
7	3.3	since 1962	3.0	3.3	3.7				
8	3.25		3.25	3.	75				
9	n.s.		determine instruct	ed by each dep ion	artment of				
0.7	n.s.								
7 7	n.s.								
12	n.s.		3.25	3.5	3.75				
13	3.3	has remained constant	3.0	3.	5				
14	n.s.	3-point system. Prior to 1973 only one student award highest honors in any graduating class	2.2 ed	2.5	2.8				
15	graduat	oint averages not used for hone ing classgrade inflation has ese criteria	orsbasis is not affected	on fixed perc number of hom	entages of or awards				
16	n.s.		3.2	3.	6				
17	n.s.								
18	3.5		3.0	3.	4				
19	n.s.	,			•				
20	n.s.								
21	n.s.								
	n.s.								
22	111.51								
22 23	n.s.								

Office of Institutional Research University of California, Berkeley February, 1976

 $\sum_{i\in A_{i}}\sum_{j\in A_{i}} y_{j}^{k(A_{i})}$



Letter Grade Symbols

In Table 5 the current undergraduate grading systems of the respondents are arranged by similar letter grade definitions as best can be determined from the information provided. The complexities of university grading systems preclude unambiguous classification. A few letter grades used for internal recording keeping only are not shown in this table, for example, grades for visitors.

Aside from minor differences in the definition of the standard letter grades \underline{A} through \underline{F} and in the use of plus/minus grading discussed in the preceding section, the variations in policies governing incomplete, withdrawal, credit/no credit, and pass/fail grades would provide the greatest challenge to a taxonomist. These grade innovations represent avenues for student academic exploration with little, or no, fear of misadventure.



25.

Table 5 Eurnant Grauting Systems for undergraduates

	6 (1977) 6 (2017) 6 (2017) 6 (2017) 6 (2017) 7 (POST EUS DYEMBER 1911. STILSFRIEDE STAMMER SOUTHER	PONCH LOWEST PASSING GRASS. LOW PASS: GARLE CONNELENS: SAMSTANDARY, SAPINAL	FALLED, COLOTTY RACTORNS TOT PARKENS			OE FERRE G		TEMPORARY 14 Fe preti	40 GRADE; PELIMINARY F		(THEMAIN)		
·	i de la companya de l	# 8 T.	7F2LY	FALCIRE	3	NIT PASSED 8 NO CREDIT	INCOMPLETE (BUT FASSING)	INCOMPLETE BECOMES FAILURE	IN PPOGPESS	NG PECOPO	MISSED FINAL EXAM	FPCM COUPSE ++P	AUDITOP	SMANUE GRADLE
* -	1 , -	F 5 2	* ¿ =	ÿ	₽ (Δ+ +C+)	BP.	Ŧ		ΙÞ	5.7				
ā	**	Ç	Ü	e no credi	t	no symbol	I		T-recom		በ(excuse ባX(not "	d))		
- -			ı)	Ė	PS.	FI	DÉF		DEF					GPADE IN
*1	13	ě,		£	6.9	l(C	Ī			ŊĠ	X	W(on or befo last day)	rē	
:		ċ	ij	F				χ(-F)		PF	P(ex= cusra)	Q(with approval)		FERCIAM FOR FAILED
3	5	<u>-</u>	F 3	F	CREDIT (A -€)	no credit (D&F)						W(becomes F)		FINAL
ù	9	-	ن	Ē	5	(5.1)		[(~F)		X		EW(F) PW(PASS)		
† ×	* 5	+ Ç =	* ; =	F	۲	U	I		Z	N	X(-F)	WF(F) WP(PASS)		
a AB 3	t 3	E (Ċ	F	S & CR	U(D&F) !:		I(+F)	Р					
* *	- و *	* () =	D	F	P	F								
	,	Ç	()	, \$1î	P 3 5		16	IF				W	Ř	
4.9	INFOR	12 A T	104											HONORS
+ A -	+ E =	+ (-	+ [) -	F3U	PAS	hĒ	Ġ		I	NG		W(NO FEMALTY		EXCEPTIONAL WORK
Å +	* \$ *	* 19 *	+ ;, =	Ē	PS 3 CR	FF	I*	1	Þб	ИĄ		<pre>!!F(pass-prio to 21 day WF(fail-prio to 21 day W(after 21 d</pre>	s) r s)	ABC FRESHMEN ONLY
A r	8	C	(,	f	P	RC repeated course								
+ 7	* 5 =	٠ 4 -	+ J -	F	٢	F								
* / -	* b -	+ (, =	+ D -	E	P.SACR	F,U,NC	I		Y	NŘ	X			
., Λ ≥			* U =	Ē	ÇR	NC	Ī	Х				W(up to Ath	week)	
4,0	3.0 2.5	2.0	1.0 .5 (0.5	PACR	N	I		DF deferred					
А	į.	Ç	D	F	PAS		ï					W	QUA	
μ	ž,		Ū	F	P	HР								P/F FRESHMEN CNLY
* 1 +	r ") a	€ ³¹ , 3	+ .) =	F	f _b	IJ	Inc		Р					*·· ·
9.0	BER	·· 4 []	1 0 N											
Α	4	Ċ	Đ	F	Þ	нР	Ĭ		IP			Office of In	stitution	al Research

Office of Institutional Research University of California, Berkeley February, 1976



Plans for Changes in the Grading System

Almost none of the institutions indicated any recent plans for future major change in their grading system; however, several noted changes in the recent past or changes being implemented now.

A committee at institution number 1 recently recommended that faculty be given the option to add to each recorded grade comments that, also, would become part of the record. Students and student advisors would receive copies of these comments.

In response to faculty dissatisfaction with laxity in grading practices, institution number 6 has adopted a new system effective the summer of 1976. The new system is a numerical system where faculty may grade from 0.0 to 4.0 in tenths of a grade point. Additionally, incomplete grades, with few exceptions, must be removed by the end of the following quarter in residence or the incomplete becomes a failure.

The grading system at institution number 7 is under review, but no major changes are anticipated.

Plus/minus grading has been added, effective January 1, 1976, by institution number 12, but they do not expect it to change the overall grade average significantly.

Within the last five years, institution number 13 has implemented these changes: (1) all freshmen are graded \underline{A} , \underline{B} , or \underline{C} , only; (2) no freshman may enroll for a pass/fail grade, and plus/minus grading is not used for freshmen.

The remaining institutions either did not comment on this survey point, or they stated that they knew of no plans for major policy changes.



If the above assessments can be accepted as fair prognostications of institutional plans, then one may infer that the recent era of innovations in grading systems is over and, fore importantly, no widespread planning for reversing these innovations is on the horizon. The rise in grade point averages has been observable for many years, but only recently has it become an item for discussion in the media. The lack of plans for change may reflect institutional recognition that additional innovations that reduce the severity of grading penalties are not needed, or necessarily desirable and that any attempt to reverse the current standards unilaterally would be unwise and probably unacceptable to most students and many faculty.



Policy Changes in Graduate Admission Criteria

With one exception every institution either reported no plans for policy changes in graduate admissions or made no comment on this point. The one exception (institution number 16) forwarded a separate letter to me from the associate dean of the graduate school. Here are his remarks:

"We are exploring the possibilities for change of admission criteria. This year we have initiated a longitudinal study of graduate admission criteria. The absence of systematic, integrated research on this subject has prompted our action. We shall begin with students in ten programs who started their doctoral studies within the past five years. A variety of admission criteria (traditional and nontraditional) and performance measures in Graduate School will be employed, as well as indices of success in later careers. Later, more programs will be included, provided funds can be found.

We believe an empirical approach to the issue of entry to graduate study will result in more realistic and durable admission policies and practices. We invite your comments and interest as well as a sharing of any similar plans or results."



Some Special Comments of the Respondents

A special committee on grading at institution number 1 came to the conclusion that "some degree of judgement by the teacher regarding the student's ability and achievement (and vice-versa) is likely to be formed even if none were officially demanded." But the committee expressed the concern that "students may perceive an educational process too much in terms of its being a mechanism for judging them and less as a means for personal growth." This potential difficulty notwithstanding, the committee recommended the continuing need for the institution to evaluate its students using the basic type of grading system, one "in which the student receives a grade in every subject for which he/she is registered and that the grade is officially assigned by the instructor in charge of the subject."

A subcommittee of the senate committee on academic affairs reported on grade distributions at institution number 2 and made these recommendations in the spring of 1975: (a) "study the impact of grade inflation upon graduation honors and Dean's list with the aim of possibly changing the criteria upon which these honors are awarded;" (b) an appropriate campus office should publish effective information on changes in grading practices "at least once each year, to the Senate;" and (c) reaffirming the basic role of the instructor to judge the student's scholastic attainment "there are collegial and departmental responsibilities in establishing and maintaining the standards upon which grades are assigned."

Institution number 3 noted that there is "considerable variation among institutions in the methods of calculating grade point averages" and infers that the variation "have contributed to the 'inflation' of grade-point



averages in subtle ways".

A study completed in November, 1975 at institution number 5 found "that while there has been grade inflation over the periods observed for the study, no department, or group of departments, can be signaled as the cause of the grade inflation at the university level. However, for the course levels noted, eighty percent observed positive correlations of withdrawals with GPA for the first withdrawal division. As withdrawals are going up in the first withdrawal division, GPA is going up." The divisions refer to the weeks in the semester governed by a withdrawal policy adopted Fall 1973. In weeks 1-4 a grade of \underline{W} will not appear on the student's permanent record following withdrawal from a course. In weeks 5-12 a grade \underline{W} will appear on the student's permanent record, and in weeks 13-14 a grade of \underline{W} or \underline{F} will be assigned to the student based on the professor's recommendations.

As noted elsewhere in this report, institution number 6 stated that faculty dissatisfaction with current laxity in grading practices led them to adopt a numeric system effective this coming summer that ranges from 4.0 to 0.0, by tenths. Their expectation is that this system will "permit expression of greater discrimination by those who feel capable of such distinction, and will allow those who wish to retain the traditional A, B, C, D, E approach to use 4.0, 3.0, 2.0, 1.0, 0.0."

From institution number 8 comes the statement that in "...early 1973...
the system underwent a rather radical change. At that time the intermediate
grades of AB and BC were added to the system and provisions were made for
students to repeat failed courses to improve their grade point averages. A
new classification of courses which are graded on the credit or no credit basis
was instituted at the same time."



In 1969-70, institution number 9 introduced "a standard A-F system with a Pass/Fail option, and pluses and minuses as options for grades A, B, and C. There is no average, and standing is determined strictly by the number and sequence of F's (failures) received." Prior to this change the institution was on a numeric system and these grades were averaged.

One institution, number 11, speculated in an evaluation of grade inflation that if the trend continued at that institution the undergraduate grade point average would be 4.00 by the year 2004.

A statement by institution number 12 probably could be a typical statement for many institutions: "Beginning in 1967, the University's grading policy underwent a gradual change away from strict letter grading to a more liberal use of other non-letter grading options. The pass-fail option was made available for one course per (term) to all students in good standing. In succeeding years the satisfactory-unsatisfactory option and a credit-no entry option were also made available. The non-letter (grade) was devised to allow students to explore new areas of study without being unfairly penalized by competing with majors in an unfamiliar area."

The credit/no credit option at institution number 17 has been that institution's most controversial part of their grading system. "During the present year (1975), the faculty in a fit of pique voted to set the second week of the quarter, rather than the eighth week, as the deadline for both withdrawal from a course and for declaring a credit-no credit option. The students responded to the new withdrawal deadlines by signing up for lighter loads, thereby lowering our FTE relative to other schools in the...system."

One institution, number 21, forwarded with their response a copy of a booklet on grades and grading which carries as a secondary title the words



"A Guide for the University Faculty." This guide was first proposed in 1962, revised in 1966, and the latest revision was in 1972. Some of the subheadings in the booklet are: "Why Grades?"; "Faculty Responsibility;" "Guidelines for Meaningful Grading;" "Comparability in Grade Distributions;" "Differentiating Validly Among Levels of Student Performance." The guide is intended to "be useful to all members of the...faculty but it may prove to be of particular value to new faculty members who wish to familiarize themselves with grading practices at..."



APPENDIX



Appendix Table 1

Current and Oldest Reported Distribution of Passing Grades

	· .			Pas	Perce sing G			r
Institution	Year	Remarks	<u>A</u>	B	<u>C</u>	<u>D</u>	<u>P</u>	TOTAL
1	1960's - early 1973	lst year grades for entering class	28 52	37 33	26 10	6 2	-	97 97
2	1963 spring 1974		18 32	35 33	29 20	9 5	4 3	95 93
3	1970 fall 1974	Excludes W grade for withdrawal from course - no penalty	21 29	30 31	27 25	7 6	4 4	89 95
4	1971 fall 1974	Collapsed distribu- tion - excludes grades for withdrawal with no penalty and credit/no credit courses	26 33	37 36	26 21	6 5	<u>-</u>	95 95
5	197 0 spring 1975 1970 1975 1975 1970	Reported A-F only Lower Division Upper Division (Level 1) Upper Division (Level 2)	28 38 29 43 36 50	31 32 34 30 34 30	28 20 28 21 24 15	5 5 3 3 3	-	92 95 96 97 97 98
6	1964 fall 1971 1964 1971 1964 1971 1964 1971	Recalculated to exclude no credit grades (called PW or passing withdrawal #100 level courses #200 level courses #300 level courses #400 level courses) 15 30 17 29 21 31 22	30 33 33 36 40 37 42 36	39 23 37 24 30 21 28	10 5 8 4 5 3	-	94 91 95 93 96 92 96 90
7	1969 1974 1969 1974 1969	Reported A-P only Lower Division Upper Division Undergraduate	17 30 25 38 21 34	41 43 44 41 43 42	30 19 21 14 26 17	8. 4 4 2 6 3	1 1 3 4 2	97 97 97 99 98 98



				Pas	Perc sing	ent Grades		
Institution	<u>Year</u> '	Remarks	A	В	<u>C</u>	D	<u>P</u>	TOTAL
8	1963 fall 1974 1963 1974 1963 1974 1963	Unclear whether course level/class level - probably latter. freshman sophomores juniors seniors	AB 13 16 14 16 20 16 19 22 18 23 25 19	25 20 20 11 35 25 25 40 24 12 44 24 10	32 16 37 17 32 14 26	10 6 8 4 6 3 4 2	1 2 5	80 84 96 95 97 97 97
9	1969 fall 197 4		17 30	32 40	20 15	4	22 9	95 97
10	1967 fall 1973 1967 1973	liberal studies UG Percentages are an estimated average of two colleges	14 24 19 29	32 33 37 32	31 22 23 15	9 5 5 4	- * 6 *	86 84 90 80
11		Not given in reply						
12	1968-69 year 1974-75 1968-69 1974-75 1968-69 1974-75	Recalculated to exclude W and No report grades Lower Division Upper Division Total Undergraduate	19 29 28 35 22	35 30 40 31 36 30	29 21 21 17 27 19	7 6 3 4 6 5	3 4 2 3 3 4	93 90 94 90 94 88
13	1970 fall 1974	Cannot deduct non- credit courses since no counts were given. Freshmen have ABC grading. D's & F's can be wiped off record. UG (undergraduate)	22 24	29 29	22 19	6 6	10 7	89 85

^{*}less than .5%



 $^{^{\}dagger}\underline{AB}$ and \underline{BC} grades awarded in 1974.

`				Pa	Perc assing		<u>!S</u>	
Institution	<u>Year</u>	Remarks	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>p</u>	TOTAL
14	1958-59 1972 -7 3		16 26	35 Not	32 given	9 in	reply.	92
15	1973 fall		27	38	12	2	-	79
16		None given in reply						
17	1965 fall 1974 1965 1974	Subtract Withdrawal and no credit Lower Division Upper Division	13 24 28 36	26 29 34 29	34 18 25 13	9 4 4 1	9 18 1 9	91 93 92 88
			3.5 [†]	† <u>2.5</u>	<u>5</u> ⁺⁺ <u>1.</u>	<u>5</u> ††		
18	1960 fall 1974 1960 1974 1963 1974	Lower Division Upper Division Undergraduate	13 17 16 23 21 19 14 18 17	28 20 16 35 20 13 30 20 15	24 3 9 35	12 5 3 5 3 2 10 4 3	N.A. N.A. N.A. N.A.	90 89 87 87 9 2 88
19	1962 fall 1974 1962 1974 1962 1974	Lower Division Upper Division All Undergraduate	10 22 19 29 13 26	26 30 38 33 29 31	36 24 29 19 33 20	15 8 6 4 12 6	-	87 84 92 85 87 83
20		Similar to UCB except all freshmen graded on pass/fail only - believes fraction of A&B grades have increased significantly over last 15 years.						
21	1964 fall 1974	Undergraduate	13 28	42 43	34 21	9 5	ĩ	98 98

 $^{^{\}dagger\dagger}\text{This}$ institution is on a numeric system and awarded these intermediate numeric values for 1974.



Appendix Table 1 - continued

•								
Institution	Year	Remarks	<u>A</u>	<u>B</u>	<u>c</u>	<u>D</u>	<u>P</u>	TOTAL
22	1971 fall 1974 1974	CoTTege of L&S Undergraduate Lower Division Upper Division	32 25 32	32 34 32	17 24 17	4 6 3	7 5 9	92 9 4 93
23		Not given in reply						
В	1960 fall 1974	Lower Division	14 27	31 30	40 17	9	* 17 *	94 94 95
	1960 1974	Upper Division	21 29	38 34	31 15	5 2	12	92
	1960 1974	Undergraduate	17 28	34 32	36 16	7 2	* 14	94 92



^{*}less than 0.5%

Appendix Table 2

REPORTED UNDERGRADUATE GRADE DISTRIBUTIONS BY RESPONDING INSTITUTIONS

Collapsed Percent Distributions by Standard Grades A, B, C, D & F

Grade Point Indices

Inst		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
2	A B C D F Gr	ade Po	oint I	ndex	19.2 37.1 31.1 9.2 3.4 2.60	20.7 37.2 30.5 8.4 3.2 2.64			22.8 36.7 28.9 8.1 3.5 2.67		27.7 36.8 25.2 7.1 3.2 2.79		31.2 37.2 22.3 6.1 3.2 2.87		33.2 36.0 21.4 5.8 3.6 2.89	33.9 35.9 21.0 5.7 3.5 2.91
3	A B C D F	P.1.	•••									24.0 33.5 31.0 8.3 3.2 2.66	25.8 32.5 30.4 7.8 3.5 2.69	28.0 33.2 27.4 8.0 3.4 2.74	30.2 32.9 27.3 6.4 3.1 2.81	30.9 32.7 26.9 6.4 3.1 2.82
4	A B C D F	.P.I.											26.4 36.8 26.4 5.8 4.6 2.75	29.1 37.2 24.4 4.7 4.6 2.82	31.0 36.8 23.0 5.7 3.5 2.86	33.0 36.4 21.6 4.5 4.5 2.89
5	A B C D F	.P.I.										28.8 32.7 24.6 7.7 6.2 2.70	30.8 29.7 26.0 5.6 7.9	35.8 31.4 21.9 5.3 5.6 2.80	43.5 31.0 17.8 2.7 5.0 5 3.05	45.5 30.0 15.9 3.3 5.3 3.07
6	A B C D F	.P.I.		,		17.5 34.6 36.4 8.4 3.1 2.55	17.8 34.9 36.0 8.1 3.2 5 2.56	18.6 35.7 35.1 7.6 3.0 5 2.59	19.8 37.4 32.8 7.1 2.9 2.64	23.1 37.9 30.6 5.6 2.8 4 2.7	27.6 38.2 26.5 5.1 2.6 3 2.83	30.6 38.1 24.8 4.2 2.3 3 2.91	32.7 37.4 23.1 4.3 2.5 1 2.9	1		



Appendix Table 2 continued

REPORTED UNDERGRADUATE GRADE DISTRIBUTIONS BY RESPONDING INSTITUTIONS

Insti- tution	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	19 70	1971	1972	1973	1974
7 A B C D F G.P.I.										21.1 43.4 26.2 6.1 3.2 2.73	24.6 44.8 26,6 0.0 4.0 2.86	28.8 45.7 22.7 0.0 2.8 2.98	32.1 43.2 19.0 3.6 2.1 3.00	32.9 42.2 18.7 3.6 2.6 2.99	35.1 43.1 17.0 3.0 1.8 3.07
8 A B C D F G.P.I.				18.0 37.0 33.8 8.0 3.2 2.57		18.1 37.4 33.1 7.9 3.5 2.59	19.7 38.3 32.2 6.9 2.9 2.65	20.7 39.1 30.9 6.4 2.9 2.68	26.0 39.2 25.9 5.4 2.4 2.79	27.3 40.1 24.7 5.5 2.4 2.84	30.6 37.9 23.3 5.0 3.2 2.88	30.7 38.3 23.3 5.0 2.7 2.89	30.6 38.0 23.4 5.2 2.8 2.88	31.1 40.7 21.1 4.7 2.4 2.93	31.2 41.9 20.5 4.1 2.3 2.96
9 A B C D F G.P.I.									· .	22.5 43.0 26.0 5.8 2.7 2.77	25.0 44.7 22.3 5.3 2.7 2.84	30.3 44.5 19.2 3.7 2.3 2.97	30.2 45.2 19.3 3.4 1.9 2.98	31.4 44.9 18.0 3.5 2.2 3.00	33.8 44.5 17.0 2.9 1.8 3.06
B C D F G.P.I.									23.9 38.6 28.4 6.8 2.3 2.75	33.3 38.3 22.2 5.0 1.2 2.97	31.7 37.8 23.2 4.9 2.4 2.92	34.1 36.5 22.4 4.7 2.3 2.95	34.9 34.9 20.9 5.8 3.5 2.92	34.1 35.2 21.6 5.7 3.4 2.91	34.1 34.1 21.2 5.9 4.7 2.87
B C D F G.P.I.											27.6 35.6 27.0 7.8 2.0 2.79	29.2 34.3 26.7 8.1 1.7 2.81	31.5 35.2 24.8 6.9 1.6 2.88	27.9 36.0 25.6 7.7 2.8 2.79	29.9 36.7 23.7 7.0 2.7 2.84
7 A B C D F G.P.I.						20.0 32.2 34.4 7.8 5.6 2.53	21.2 31.8 34.1 8.2 4.7 2.57	22.6 32.1 33.3 7.2 4.8 2.61	21.7 32.5 33.8 7.2 4.8 2.59	24.7 33.8 33.7 5.2 2.6 2.73	29.3 33.3 29.4 4.0 4.0 2.80	31.2 32.4 27.3 3.9 5.2 2.81	35.3 38.2 22.1 1.5 2.9 3.02	35.8 35.8 20.9 3.0 4.5 2.95	36.3 36.2 20.3 2.9 4.3 2.97



39.

Appendix Table 2 continued

REPORTED UNDERGRADUATE GRADE DISTRIBUTIONS BY RESPONDING INSTITUTIONS

Insti- tution	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
18 A B C D F G.P.I.	15.0 31.7 37.2 11.1 5.0 2.41	14.3 32.4 37.9 10.9 4.5 2.41	14.5 32.1 37.5 11.2 4.7 2.41	14.7 32.0 37.5 11.1 4.7 2.41	15.2 32.4 37.7 10.2 4.5 2.44	15.9 32.5 36.4 10.3 4.9 2.44	16.1 32.8 36.3 10.0 4.8 2.45	17.2 33.3 35.3 9.5 4.7 2.49	20.6 37.4 30.9 7.9 3.2 2.64		27.5 39.0 24.2 5.6 2.7 2.82	27.0 39.9 24.1 6.2 2.8 2.82	28.1 39.3 23.6 5.6 3.4 2.83	29.5 39.4 22.2 5.6 3.3 2.86	29.1 39.6 22.5 5.5 3.3 2.86
19 A B C D F G.P.I.			13.5 30.5 34.5 13.2 8.3 2.27	14.1 31.4 33.9 12.7 7.9 2.31	14.3 32.3 32.5 12.2 8.7 2.31	14.6 31.4 32.8 12.3 8.9 2.31	15.2 31.8 33.0 11.7 8.3 2.34	16.1 32.5 33.3 10.7 7.4 2.39	17.3 33.7 32.2 10.0 6.8 2.45	19.7 35.8 29.9 8.6 6.0 2.55	22.7 36.6 27.5 7.7 5.5 2.63	24.0 36.7 26.9 7.0 5.4 2.67	26.2 35.8 25.5 6.7 5.8 2.70	28.8 35.3 23.7 6.1 6.1 2.75	30.3 35.4 23.7 6.4 4.2 2.81
21 A B C D F G.P.I.						17.5 41.7 30.8 7.7 2.3 2.64	17.2 40.9 31.5 7.8 2.6 2.62	16.8 42.4 31.4 7.0 2.4 2.64	19.0 43.3 28.2 6.8 2.7 2.69	19.2 44.6 27.0 6.2 3.0 2.71	23.4 43.3 24.4 6.1 2.8 2.78	24.8 43.8 23.5 5.5 2.4 2.83	26.2 43.6 22.4 5.5 2.3 2.86	27.3 43.3 21.2 5.6 2.6 2.87	28.5 43.4 21.1 4.8 2.2 2.91
22 A B C D F G.P.I.							٠						41.2 36.1 17.5 3.8 1.4 3.12	38.2 36.3 19.6 4.5 1.4 3.05	38.3 36.4 19.5 4.4 1.4 3.06
B A B C D F G.P.I.	17.4 34.7 36.7 7.1 4.1 2.54	17.4 34.7 36.7 7.1 4.1 2.54	18.2 35.4 35.3 7.1 4.0 2.57	18.6 35.0 35.1 7.2 4.1 2.57	20.4 37.8 32.6 6.1 3.1 2.66	22.7 39.2 30.9 4.1 3.1 2.72	24.7 39.3 29.2 4.5 2.3 2.80	26.8 40.2 25.6 4.9 2.5 2.84	28.4 40.7 23.5 4.9 2.5 2.88	32.1 40.7 21.0 3.7 2.5 2.96	32.1 41.0 20.5 3.8 2.6 2.96	33.3 39.7 21.8 2.6 2.6 2.99	34.6 39.7 20.5 2.6 2.6 3.01	35.0 40.0 20.0 2.5 2.5 3.03	35.0 40.0 20.0 2.5 2.5 3.03



Appendix Table 3

Tests of Significance of Difference Between Mean Grade Point Indices

(See Table 1 in text)

years x vs y	t	df	α	$t_{_{lpha}}$	LB _{1-α}	UB _{1-α}	LB.85	UB.85	LB.60	^{UB} .60
1960 vs 1974	6.844	2	.025	4.303	.17	.77	. 37	. 57	.45	.49
1962 vs 1966	1.449	5	.15	1.156	.03	. 27	.03	. 27	.12	.18
1966 vs 1970	3.803	8	.005	3.355	.03	.45	.17	. 31	.22	.26
1970 vs 1974	3.431	27	.005	2.771	.03	.23	.09	.17	.12	.14

Null hypothesis: $U_y = U_x$

Alternate hypothesis: $U_y > U_x$

where U_k is the mean GPI in the year k

t is standard t-test

df is degrees of freedom

 α is the level of significance of the test

 \mathbf{t}_{α} is the critical value of \mathbf{t}

 $LB_{_{\omega}}$ is the lower bound of $U_{_{\boldsymbol{y}}}$ - $U_{_{\boldsymbol{X}}}$ with certainty $_{\omega}$

 UB_{ω} is the upper bound of U_y - U_x with certainty ω



Appendix Table 4

Appendix Table 4 lists calculations for t-tests comparing the mean percentages for each grade between the years 1960 and 1974. A normal distribution is assumed.

We see that there is a probability of .995 that the 1974 mean for A;s has increased by at least 14.4% but not more than 20.6%. Conversely there is a probability of .995 that the 1974 mean for C's has decreased by at least 14.7% but not more than 17.5%. There is probability of .95 that the mean for B's has increased but less drastically. That is, the mean has increased at least 0.7% but not more than 8.5%. The means for D and F have changed little. At the 95% level of significance we cannot reject the null hypothesis for the mean for D grades. There is a .95% probability that the mean F grade has decreased by at least 0.3% but not more than 2.5%.

Overall there seems to be a decreasing shift in the proportion of C's, D's, and F's and an increasing shift in the proportion of A's and B's with the greatest change affecting A's and C's.

Tests of Significance of Difference
Between Grade Proportions

	H ₀ : U ₇₄ =U ₆₀		degrees of	Signifi- cance		U ₇₄₋ U ₆₀		
	Н ₁ :	t-value	freedom ∨v	Level a	tα	LΒ _α	UΒ _α	
Α	U ₇₄ > U ₆₀	10.7	7	.005	3.499	14.4	20.6	
В	U ₇₄ > U ₆₀	2.5	4	.05	2.132	.7	8.5	
С	U ₇₄ < U ₆₀	20.7	16	.005	2.921	14.7	17.5	
D	^U 74 ^{< U} 60	1.15	1	. 25	1.000	2.5	6.5	
F	U ₇₄ < U ₆₀	2.7	4	.05	2.132	.3	2.5	



Appendix Table 4 continued

 $\mathbf{U}_{\mathbf{X}}$ is the mean grade for all universities listed in the year \mathbf{X} .

 $H_0: U_{74} = U_{60}$ is the hypothesis that the actual 1974 and 1960 means are the same.

 H_1 is the alternative right or left tailed hypothesis to H_1 as indicated. v = degrees of freedom

 $_\alpha$ is the level of significance of $\,{\rm H}_1^{}$

LB $_{\mbox{\tiny L}}$ is the lower confidence limit for the difference of the means given α

 $\text{UB}_{_{\mathbf{I}}}$ is the upper confidence limit for the difference of the means given α



Survey Instrument



UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY . DAVIS . IRVINE . LOS ANGELES . RIVERSIDE . SAN DIEGO . SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

OFFICE OF INSTITUTIONAL RESEARCH

BERKELEY, CALIFORNIA 94720

November 24, 1975

Dear Colleague:

Subcommittees of the Graduate Council and the Executive Committee of the College of Letters and Science at the University of California, Berkeley are currently joined in discussions of undergraduate scholastic grading practices and their impact on graduate admissions. I am writing to you to seek your assistance in obtaining information about your institution's scholastic grading systems and records. I have attached to this letter information about Berkeley's grade system, grade-point averages by class, and letter grade distributions in the hope that it will encourage you to share similar information with us and will serve as a guide for your reply. All information you supply will be for internal use exclusively.

If you do not have direct access to records of letter grade distributions or student grade-point averages, I would appreciate either your obtaining the information so that you may send a reply to me or your passing this request to an appropriate agency at your institution for their direct response.

The attached list of questions and requests for information should be self-explanatory. If not, please call me collect on (415) 642-5743.

I hope you will be able to reply soon since I plan to use the information you supply in January.

Sincerely,

Sidney Furstow
Sidney Suslow

Director

SS:bk

Attachments



REQUEST FOR INFORMATION

Attached are several tables of Berkeley information on undergraduate student grade-point averages and distributions of grades awarded at Berkeley. For convenience spring grade-point averages are reported while grade distributions use fall data. Also, grade distributions show first, all grade notations recorded by the registrar and second, a collapsed distribution for standard grades A through F, only. The tables start with the year 1960-61 and end with 1974-75.

Please send historical information for your institution which comes as close as possible to matching these tables in the breadth of information they supply, not necessarily in their style or precise content. Fall term, spring term or year data will do. If you do not have information for all years, please send what you can.

The information received will be for internal use, exclusively.



Please supply as much information as available to you. Partial answers to questions will be happily received. Notations and comments are welcomed at any point.

1. What is your current grading system? If it has changed significantly since the early 1960s, indicate how and when.

Berkeley's grading system underwent its most radical change in the last two decades in 1966 when a pass-fail option for one course per quarter was made available to all students in good standing. In the same year the faculty adopted a plus and minus notation for letter grades A through D with appropriate grade point values for pluses and minuses. See Attachment A for a description of Berkeley's current grading system and its historical origins.

2. What are the distributions of scholastic grades awarded in your undergraduate courses since the early 1960s? (See question 3, also).

Berkeley's distribution in 1960 shows 17% A's, 34% B's, 36% C's, 7% D's, 4% F's, and 1% I's. In 1974, when considering all grades awarded, that is, including such grades as P (pass) and NP (not pass), the percent of A grades was 28%. If only letter grades A through F are considered, the percent of A's in 1974 was 35%. See Attachments B and C for detailed historical trends in letter grade distributions.

3. If you can report them separately, what are the distributions of scholastic grades awarded in your lower division and upper division courses since the early 1960s? (See question 2).

Berkeley's distribution of grades awarded in lower division courses shows an almost doubled percent of A's since 1960, from 14% to 27% in 1974. In upper division courses in the equivalent period, the percent of A's went from 21% to 29%. For both divisions, the traditional letter grades A through F now account for about 80% of all grades with pass/not pass grades being almost the entire remaining 20% in lower division courses but only 13% in upper division courses. See Attachments D, E, F, and G for detailed historical trends in lower and upper division letter grade distributions.



4. What are your—historical cumulative grade-point averages by class standing and for all undergraduates?

Berkeley's total undergraduate cumulative grade-point average distribution shows an institutional average of 2.51 in spring 1960 and 3.01 in spring 1975. Freshman made the greatest gain, up by .58 points from spring 1963. See Attachment H for detailed historical trends in cumulative grade-point averages.

- 5. If your undergraduate cumulative grade-point average distributions have changed markedly since the early 1960s, would you indicate what factor or combination of factors you would say account for the change: policies governing the grading system, student performance, faculty grading patterns, other? If you can identify one or more factors of change, please indicate, briefly how it or they influenced the distributions. For example, perhaps your institution decided in recent years not to show D and F grades on the student transcripts and also not include them in grade-point average calculations. See Attachment A for major policy changes at Berkeley in 1966.
- 6. If your institution has an undergraduate honor student status, what minimum grade-point average determines this status? Was it different a few years ago?

Berkeley's College of Letters and Science enrolls about 80% of all undergraduates on campus. The college changed the minimum grade-point average needed for scholastic honor status from 3.00 to 3.30 in 1974.

- 7. If you are planning any major policy changes in your grading system, please describe briefly what they are and what effect you anticipate from the changes.
- 8. Have you recently changed or are you planning to change your criteria for admission to your graduate programs? If so, would you indicate what you have changed or plan to change and, also, what effect the change had or is intended to have on graduate admissions.



^{*}Based on all grade points earned by the student to date.

Grading Systems at Berkeley

i 	Interpretation	Current Grade Points Assigned	Remarks
	excellent-plus	4.0	introduced fall 1966
	excellent	4.0	
	excellent-minus	3.7	introduced fall 1966
	good-plus	3.3	introduced fall 1966
	good	3.0	
	g o od-minus	2.7	introduced fall 1966
	fair-plus	2.3	introduced fall 1966
	fair	2.0	
	fair-minus	1.7	introduced fall 1966
	barely passed-plus	1.3	introduced fall 1966
	barely passed	1.0	
	barely passed-minus	0.7	introduced fall 1966
	failure	0.0	
	passed	none	introduced fall 1966; included letter grades A+ through D- from fall 1966 through spring 1968; includes letter grades A+ through C- since fall 1968; from fall 1966 through fall 1970 one course per quarter permitted on a pass/not pass basis; since fall 1970 students can take up to one-third of their total units for graduation on a pass/not pass option.
	not passed	none [*]	complement of P gradesee remarks for P grade.
	satisfactory	none*	must pass at a minimum level of B-; restricted almost exclusively to students in graduate programs
	unsatisfactory	none*	complement of S gradesee remarks for S grade.
	incomplete	none*	prior to fall 1973 counted the same as an F grade; currently indicates course work incomplete, due to circumstances beyond student's control, but of passing quality
	in progress	none*	final grade assigned upon completion of entire course sequence
	no record	none*	not an official grade, indicates that no grade was received for student listed on registrar's files.
tte	s and grade points for t er grades are not includ grade-point average calc	led in	Office of Institutional Research University of California, Berkeley November 1975



Attachment B

Grade Distributions for All Undergraduate Courses Fall Terms

Letter Grade Symbols[†]

Fall Terms	А	В	С	D	F	P	ИÞ	I	ΙÞ	MR
1960	17%	34%	36%	7%	4%	*	-	1%	-	-
1961	17%	34%	36%	7%	4%	*	-	2%	÷	*
1962	18%	35%	35%	7%	4%	1%	-	1%	-	-
1963	18%	34%	34%	7 %	4%	1%	-	1%	-	*
1 964	20%	37%	32%	6%	3%	1%	-	2%	-	-
1965	22%	38%	30%	4%	3%	1%	-	2%		*
1966	22%	35%	26%	4%	2%	9%	*	1%	*	*
1 967	22%	33%	21%	4%	2%	14%	1%	3%	1%	-
1968	23%	33%	19%	4%	2%	14%	1%	3%	1%	*
1969	26%	33%	17%	3%	2%	13%	1%	4%	1%	*
1970	25%	32%	16%	3%	2%	14%	1%	5%	1%	1%
1971	26%	31 %	17%	2%	2%	15%	1%	3%	2%	7%
1972	27%	31%	16%	2%	2%	15%	1%	3%	2%	7%
1973	28%	32%	16%	2%	2%	15%	1%	2%	1%	1%
1974	28%	32%	1 6%	2%	2%	14%	1%	2%	2%	1%



^{*}see Attachment A for definitions

^{*}< 0.5%

Attachment C

Collapsed[†] Grade Distributions for All Undergraduate Courses Fall Terms

	Collapsed	Le	etter 0	irade S	Symbol	s ^{††}		4.
Fall Terms	Distributions as % of All Grades	Α	В	С	D	F	Total**	GPI*
1 960	98%	17%	35%	37%	7%	4%	100%	2.54
1961	98%	17%	35%	37%	7%	4%	100%	2.54
1962	99%	18%	35%	35%	7%	4%	100%	2.57
1963	97%	19%	35%	35%	7%	4%	100%	2.58
1964	98%	20%	38%	33%	6%	3%	100%	2.66
1965	97%	23%	39%	31%	4%	3%	100%	2.75
1966	89%	25%	39%	29%	4%	2%	100%	2.82
1967	82%	27%	40%	26%	5%	2%	100%	2.85
1968	81%	28%	41%	23%	5%	2%	100%	2.89
1969	81%	32%	41%	21%	4%	2%	100%	2.97
1970	78%	32%	41%	21%	4%	2%	100%	2.97
1971	78%	33%	40%	22%	2%	3%	100%	2.98
1972	78%	35%	40%	21%	2%	2%	100%	3.04
1973	80%	35%	40%	20%	3%	2%	100%	3.03
1974	80%	35%	40%	20%	3%	2%	100%	3.03

^{*}Excludes all but the traditional letter grades



Grade-point index calculated on the same point basis as grade-point averages (see Attachment A).

^{**}May not add to 100% due to rounding.

 $^{^{\}dagger\dagger}$ See Attachment A for definitions.

ATTACHMENT D

Grade Distributions in

Lower Division Courses

Fall Terms

Letter Grade Symbols [†]

Fall Terms	Α	В	С	D	F	Р	ИÞ	I	IP	NR
1960	14".	31%	40%	9%	5%	*		$1_{K^{i}}^{\omega}$	= =	
1961	14%	31%	40%	8%	5%			2%	7.5	*
1962	15%	32%	39%	8%	5%	*		1%	~==	
1963	15%	31%	38%	8%	5%	1%		1%		
1964	17%	34%	36%	7%	4%	1%	- -	2%		
1965	18%	34 °/	35%	6%	4%	1%		1%		
1966	19	32%	29%	5%	3%	10%	*	1%	*	
1967 .	19%	29%	24%	4%	3%	18%	1%	2%	*	
1968	21%	29%	21%	4%	3%	18%	2%	2%	*	*
1969	22%	29%	20%	4%	3%	18%	1%	2%	*	*
1970	23%	29%	18%	3%	2%	18%	2%	3%	1%	1%
1971	24%	28%	19%	3%	3%	18%	1%	2%	1%) (0,°
1972	26%	29%	18%	3%	3%	17%	1%	2%	1%,	1%
1973	26%	30%	18%	3%	3%	18%	1%	1%	1%	*
1974	27%	30%	17%	3%	3%	1 7%	1%	1%	*	*

^{*}See Attachment A for definitions



^{* &}lt; 0.5%

ATTACHMENT E

Grade Distributions in

Upper Division Courses

Fall Terms

Letter Grade Symbols †

Fall Terms	A	В	С	D	F	Р	NP	I	IP	NR
1960	21	38.	312	5%	2 %	*		2%		
1961	22.	38%	30 ²²	5%	2%	1 %		2 %		*
1962	22%	38%	30%	5%	2%	1 %	=	2%	= =	
1963	22%	38%	30%	5%	2%	1 %	=	2%	= =	*
1964	23%	40%	28%	4%	1%	1%	==	2%		
1965	25%	41 ⁸	26%	3%	2%	1%		2%	= =	*
1966	25%	38%	22%	3%	1 %	7%	*	2%	1%	
1967	26 :	37 &	18.8	3%	1%	9%	1%	3%	2%	
1968	25%	37∜	17%	3%	1%	9%	1%	4%	2%	*
1969	29 %	36%	15%	2%	2%	8%	1%	5%	2%	*
1970	27 //	35%	15%	2%	1%	11%	1%	6%	1%	1%
1971	27%	34 ^ω	16%	2%	1%	12%	1%	4%	2%	1%
1972	28%	32%	15%	2%	2%	13%	1%	4 %	2%	1%
1973	3 0 %	33%	14%	3%	2%	12%	1%	2%	2%	1%
1974	29%	34%	15%	2%	2 %	12%	1%	2%	3%	1%

[†]See Attachment A for definitions



^{* &}lt; 0.5%

Attachment F

Collapsed[†] Grade Distributions in Upper Division Courses Fall Terms

	Collapsed	L	etter	Grade	Symbo	ls ^{††}		
Fall Terms	Distributions as % of All Grades	Α	В	С	D	F	Tota1**	GPI*
1960	97%	22%	39%	32%	5%	2%	100%	2.74
1961	97%	23%	39%	31%	5%	2%	100%	2.76
1962	97%	23%	39%	31%	5%	2%	100%	2.76
1963	97%	23%	39%	31%	5%	2%	100%	2.76
1964	96%	24%	42%	29%	4%	1%	100%	2.84
1965	97%	26%	42%	27%	3%	2%	100%	2.87
1966	89%	28%	43%	25%	3%	1%	100%	2.94
1967	85%	31%	44%	21%	3%	1%	100%	3.01
1968	83%	30%	45%	20%	4%	1%	100%	2.99
1969	84%	35%	43%	18%	2%	2%	100%	3.07
1970	80%	34%	44%	19%	2%	1%	100%	3.08
1971	80%	34%	43%	20%	2%	1%	100%	3.07
1972	79%	35%	41%	19%	3%	2%	100%	3.04
1973	82%	37%	40%	17%	4%	2%	100%	3.06
1974	82%	35%	41%	18%	3%	3%	100%	3.02



^{*}Excludes all but the traditional letter grades.

^{*}Grade-point index calculated on the same point basis as grade-point averages (see Attachment A).

^{**}May not add to 100% due to rounding.

⁺⁺See Attachment A for definitions.

Attachment G

Collapsed[†] Grade Distributions in Lower Division Courses Fall Terms

	Collapsed	Letter Grade Symbols ^{††}						
Fall Terms	Distributions as % of All Grades	Α	В	С	D	F	Tota1*	*GPI*
1960	99%	14%	31%	40%	9%	5%	100%	2.40
1961	98%	14%	32%	41%	8%	5%	100%	2.42
1962	99%	15%	32%	39%	8%	5%	100%	2.44
1963	97%	15%	32%	39%	8%	5%	100%	2.44
1964	98%	17%	35%	37%	7%	4%	1 00%	2.54
1965	97%	19%	35%	36%	6%	4%	100%	2.59
1966	88%	22%	36%	33%	6%	3%	100%	2.68
1967	79%	24%	37%	30%	5%	4%	100%	2.72
1968	78%	27%	37%	27%	5%	4%	100%	2.78
1969	78%	28%	37%	26%	5%	4%	100%	2.80
1970	75%	30%	39%	24%	4%	3%	100%	2.89
1971	77%	31%	36%	25%	4%	4%	100%	2.86
1972	79%	33%	37%	23%	4%	4%	100%	2.90
1973	80%	33%	38%	23%	3%	3%	100%	2.95
1974	80%	34%	37%	21%	4%	4%	100%	2.93



^{*}Excludes all but the traditional letter grades.

^{*}Grade-point index calculated on the same point basis as grade-point averages (see Attachment A).

 $^{^{\}star\star}$ May not add to 100% due to rounding.

^{**} See Attachment A for definitions.

Attachment H

Cumulative[†] Grade-Point Average by Class for Undergraduates Spring Terms

CLASS

Spring Terms	Freshman	Sophomore	Junior	Senior	Total UG
1960	[ATA NOT AVA	ILABLE		2.51
1961		u u	ij		2.52
1962		ii O	11		2.53
1963	2.36	2.53	2.56	2.58	2.54
1964	2.40	2.54	2.57	2.61	2.56
1965	2.45	2.58	2.58	2.63	2.59
1966	2.47	2.64	2.62	2.65	2.63
1967	2.60	2.69	2.69	2.70	2.69
1968	2.65	2.72	2.73	2.76	2.74
1969	2.73	2.75	2.78	2.80	2.78
1970	2.79	2.81	2.83	2.86	2.84
1971	2.85	2.86	2.85	2.90	2.88
1972	2.89	2.87	2.91	2.94	2.92
1973	2.91	2.90	2.91	2.99	2.94
1974	2.94	2,95	2.96	3.02	2.99
1975	2.94	2.97	2.99	3.04	3.01



[†]Based on all grade points earned by students to date.