The presence of F in the ABCDF grading scale results from the struggle between authoritarian and egalitarian philosophies over how best to support the school work ethic. Authoritarian forces have favored the precise 0-100 scale that centralizes power clearly in the hands of the teacher. Egalitarian forces have supported less precise measures, such as the ABCDE scale. The current ABCDF system represents an informal compromise between these forces. The history of education shows the development of this compromise. As education became more complex, especially in the nineteenth century, it was rationalized and centralized into an age-stratified system where power was held by the instructor. High school expansion, parents' desires, college requirements, and the authoritarians' need to motivate students toward the school work ethic led by 1900 to the general use of the 0-100 scale. However, studies during 1910-1915 discredited the claimed objectivity of this method, leading to an egalitarian shift toward more relative scales. During the 1930s the ABCDE scale became accepted, but F was substituted for E because authoritarian forces desired a more emphatic grade to punish failing students and symbolize teachers' power. (RW)
POLICING THE MOVEMENT
OF
MODERN EDUCATION

John A. Bradford
Department of Sociology
University of California, San Diego

This paper was prepared for the 37th annual meeting of the
Midwest Sociological Society and delivered in the Sociology

Gratitude is hereby expressed to the National Science Foundation
for a fellowship which helped support this research. Critical
comments by Joseph Gusfield, Thomas Lasswell, and Linda Fritschner
of an earlier draft of this paper were greatly appreciated.

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John A. Bradford
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During the development of modern education there has been a struggle between tendencies for the centralization and decentralization of power. In America the grading scale has served as a centralizing force designed to distinguish academically adept from others as public education acted as a decentralizing force promoting equality in education. The ABCDE letter scale emerged as a compromise between (1) educators who advocated the 0-100 scale which enabled a clear ranking of students and (2) educators, parents and students who felt that such a scale could not be used fairly to evaluate students. The simplification of grading scales resulted in a loss of power for educational organizations. As a reaction to this loss of power, educators left the E out of the scale to symbolically express their opposition to the use of a scale which has only five categories for ranking students.
Why are the letters "ABCDF" normally used to designate the quality of academic achievement? Why is it that a numeric scale is not employed? Considering the emphasis placed upon the systematic organization of human thought and action by the movement of modern education, why does the dominant scale not even follow the normal sequence of the traditional English alphabet? Why is the "E" left out of the scale?

This paper claims that an ongoing conflict between authoritarian and egalitarian social forces has influenced the way in which the "school work ethic" has been supported within the movement of modern education. That influence is reflected in the fact that letters rather than numbers are used in grading scales. It has fostered the elimination of the "E" from the ABCDE grading scale.
INFLUENCE ON SCHOOL WORK ETHIC: AUTHORITARIAN VS. EGALITARIAN FORCES

The "school work ethic" is a primary value of modern education. This value carries with it essentially the same characteristics as the work ethic within the economic institutions. The work ethic reveals itself in society as a morally grounded social force driving people to display the best of their abilities producing goods and services for themselves and others. The educational version of this value channels efforts toward academic productivity. One could say that the school work ethic acts as a preparatory value for lifelong obeisance to the work ethic.

How the value of working hard in school is fostered depends upon whether its proponents are influenced by authoritarian or egalitarian ideals. Conflict between forces of authoritarianism and egalitarianism cross-cut institutional sectors of society at various levels. One can focus upon these forces acting within modern education at the classroom level. At that level authoritarian forces favor placing power in the hands of the instructor. This is exemplified through the use of symbols of power and authority: regimentation of classroom settings and utilization of evaluatory devices which enhance the appearance of precision and objectivity support their power. Historically they have promoted the "school work ethic" through use of the dunce cap and low grades. Both are forms of educational stigmatization.

Egalitarian social forces promote less precise measures of the creative self-expression which teachers moved by these forces encourage students to display in their work. These values support grading systems
which disperse power through the use of non-stigmatizing standards and imprecise scales.

This report, proceeding from a summary of the interaction of forces promoting the unification or dispersement of power within the movement of modern education, will focus on grading scales used by American educational institutions. One place this ongoing interaction can be seen having a practical effect is in conflicts over appropriate grading scales. The ABCDP grading scale is an informal compromise between authoritarian and egalitarian social forces.

CENTRALIZATION OF CONTROL WITHIN MODERN EDUCATIONAL BUREAUCRACIES

Aries (1962:173-254) informs us that during the Middle Ages European schools were not stratified according to type, such as elementary, secondary, college and university. Academic subjects were not hierarchically ranked according to difficulty. There was no grammar I, II, III, etc. Rather, students of various ages gathered to listen to a teacher they held in high esteem to learn assorted academic matters. Students possessed the greater power. By their mere presence at lectures, students evaluated their teachers. Instructors evaluated students subjectively through oral interaction and generally unstructured written work.

During modern times relationships between students and teachers, and their social organization, have become much more complicated. The modern period has been a movement toward the stratification of educational structures. Power and prestige have become focused at the peak of these emerging structures. Today there is a clear ranking of types of educa-
tional organizations—elementary, secondary and college. Subject matter is now arranged according to degree of difficulty. Students are grouped according to age. Also, the power to evaluate has shifted from students to teachers. Ebel (1972:300-315) noted that objectivity in evaluation procedures is often perceived as an ideal.

TENSIONS BETWEEN AUTHORITARIAN AND EGALITARIAN FORCES WITHIN MODERN EDUCATION

Spring (1972) noted that the expansion of educational opportunities was strongly fostered by the demand for public education. All citizens were to have equal chance to get a basic education. That demand arose on the democratic side of the tide of industrialism and nationalism. Lauter and Alexander (1969) have shown the ties between political and educational sectors through activities of the American Council of Education. They show that this agency seeks to "mobilize the resources of higher education for nationalistic purposes." Modern education is a social reaction to the need for the systematic production and distribution of knowledge—often in support of nationalistic and industrial movements. Education's existence is often justified through its support of humanitarian values and promoting equal opportunity for citizens to achieve in all sectors of society.

Herman (1976:287-289), in citing an 1884 Board of Education Report, shows the authoritarian side of the emergence of modern education. During that time the factory served as a model of organizational creativity. Regimentation and precision were powerful values. Bowles (1972) has shown that the stratification of educational institution's tends to
retard social mobility. Essentially he argues that students of wealthy parents are more likely to be able to attend prestigious academic institutions than students of poor parents. And, graduates of prestigious schools tend to achieve positions of greater wealth, power, and prestige in their postgraduate life. Thus, while education may serve as a means to general social mobility, there is little change in the generation to generation stratification of families in society (cf. Kariier, 1973).

Weber (1946) described the conflicting forces of centralization and decentralization as inescapable contradictions of bureaucratic entities. Modern education follows the enlargement of bureaucratic systems developed to foster national and industrial movements. The authoritarian impact of bureaucratic influences may be seen in the similarity between the factory system—a process designed to mass produce America into economic prosperity; and the school system—a process designed to mass produce the American society out of illiteracy.

Spring (1972) and Callahan (1962) both point out that the rise of the factory system as a sensible solution to economic problems is similar to the establishment of age graded elementary schools as a rational solution to the problem of public education. (cf. Curti, 1959: 48-49; Lazerson, 1971).

Throughout the nineteenth century there was a continually increasing demand for a system of public education which promoted national ideals, provided basic training in the "three R's," and advocated "moral education." In America, the "Dame school"—one woman teaching and controlling children of assorted ages between six and sixteen in one large classroom—
was common throughout this period. That was the era of the "School Mom." During this time the dunce cap was used by teachers as a symbol of their power to stigmatize children who did not support the school work ethic. Students were given a simple "F" or "P" to indicate whether or not they had passed on to the next grade. Such a simple system could not support the rapid growth and changes taking place in America's social movements (Otto, 1973).

At mid-century, Horace Mann successfully sponsored a system for America which had become popular in Germany. It featured the age-graded stratification of students for formal instruction (Katz, 1968). Students of the same age were grouped in a single classroom. Each classroom had one teacher—a specialist trained to teach that age group. Brown (1968) notes that this solution to the problem of public education resulted in the first graded school in America at Quincy, Massachusetts in 1848. It was divided into eight grades. This form of elementary school became popular throughout the country.

Goodlad (1959) indicates that the McGuffy Reader was intended for six grades and provided an alternative period of time for defining the elementary level of education. The reader promoted systematic teaching of the "Three R's" and had a strong nationalistic orientation grounded in moral claims. The Reader fostered evolution to the three tier system of elementary, junior high, and senior high school, whereas the structure sponsored by Horace Mann resulted in a two level system of elementary and high school.

The American population expanded rapidly during the nineteenth century. Children of illiterate immigrants had to be educated. The
industrial and nationalistic movements required literate populations. Consequently the demand for quality teachers and elementary schools increased rapidly. These factors gave impetus to the creation of higher types of educational organization—secondary schools, colleges, and universities. The number of high schools in the United States increased 2000% between 1870 and 1910—from 500 to 10,000 (Chauncey and Dobin, 1963:27–43; Johanningmeier, 1978). That was a considerable financial expenditure for an American public which generally did not see high school as being valuable in itself.

Parents saw the high school primarily as a vehicle of social mobility for their children. Many of them questioned whether or not their children should attend high school—where they did not immediately contribute either to their own economic support or that of their family. Parents wanted to know if their children were succeeding in school. They wanted easy to understand reports on the academic progress of their children. With these reports they could decide if a child should be in the fields or a factory where their work would be immediately profitable. They viewed the high school essentially as a testing ground to determine how far their children might progress in society.

Public education has been used to promote egalitarian ideals: beginning with its founding concept of education for the "public," to the current use of elementary and secondary schools as the major mechanisms used to foster racial integration. But, at the classroom level centralizing tendencies emerged with the need for ranking students. Such ranking is completed through the use of academic evaluatory tools—
Marking Scales

Three factors strongly encouraged the creation of grading scales: parental concerns about the academic standing of their children; college entrance requirements demanding that qualitative and quantititative academic distinctions be drawn between high school graduates; and the need for motivational devices to foster compliance with the school work ethic.

Prior to the twentieth century, irregular notes on a child's academic progress, but more generally concerning behavior, were the basic form of communication between teachers and parents. Even within universities behavior was an aspect of evaluations. Rudolf (1962:348) indicated that in 1869 student evaluations at Harvard University were tied to student conduct. Students at all levels feared the "note from the teacher." Fear of a bad report from teachers remains as a typical individual emotional reaction to this traditional form of parent-teacher communication. However, now it is a reaction to the more rational system of communication—the report card (Karmel, 1970:417-420).

At the turn of the century, the growth of colleges lagged far behind the very rapid growth of high schools. There were far more high school graduates with parents who could afford higher education for them than colleges and universities could accept (Rudolf, 1962:289). Colleges demanded proof of academic quality from applicants. That forced the creation of a program for the systematic recordation of grades based on a rational system of evaluation. High schools needed measuring instruments to facilitate the ranking of students in an unbiased manner. They required scales which would enable them to compare students from one part of the country to another.
Grading scales not only improved the channeling of students from high schools to college, but they also served as tools to support the school work ethic. Davis (1964:289) notes that grading was used as a motivating device for students during the last part of the nineteenth century. Discussing colleges of this period Rudolf (1962) points out that "everywhere more attention was being paid to various sectioning, grading, and marking schemes as instruments of scholarly stimulation." Ranking clarified for students the modern emphasis upon hard work and success earned through competition (Karmel, 1970:417-420). That orientation in school work prepared them for their economic and political life (cf. Jencks and Riesman, 1968:61-62). Individual classroom competition and the academic stratification of students became vanguards in the movement of modern education.

Various techniques for measuring intellectual distinctions were developed in Europe and America. Schudson (1972:36) notes that the College Board "was founded to bring order to the chaos of college entrance requirements in the eastern states". By 1900 the 0-100 scale was popular throughout all levels of the American school system.

MODIFICATION OF THE 0-100 SCALE—A REDUCTION OF CLASSROOM AUTHORITARIANISM

A major part of the contemporary aspect of the bureaucratization of modern education, grading scales have been used as tools to identify high energy calculating individuals supporting the school work ethic. All institutional sectors backed the authority of teachers to determine which students had skill and which did not. The time when students had
power to evaluate their professors had passed. Compulsory education laws required attendance. Teachers were in full control.

A 0-100 scale provided "objective" proof to substantiate evaluations. The "intelligent" were easily distinguished from the "stupid" in the context of this highly rational grading scale. Students supporting the schoolwork ethic were easily distinguished from those who did not. Stigmas were attached on the basis of a few points distinction in ranking. Low percentile scores were a sophisticated version of the dunce cap—a symbol stigmatizing those who did not adequately support the movement of modern education.

However, use of the 0-100 scale was fairly short-lived. It was perhaps never as universally employed as the ABCDF scale is today. Use of the 0-100 scale fell into disfavor because of several studies conducted between 1910 and 1915. These studies point out inequities in the use of the 0-100 scale. The work of Daniel Starch (1912; 1913) is most significant. Working with E. C. Elliott he acquired two English papers which had received an 80 at a midwestern high school. Seventy-five was generally accepted as a passing grade. They sent copies of those papers to 200 high schools throughout the nation for evaluation by other English teachers. The scores given one paper ranged rather evenly between 64 and 98. Fifty to 97 was the range on the other. Proponents of the 0-100 scale complained that grading in English was less absolute than in the sciences and math. Starch and Elliott repeated the study in 1913 with a paper in geometry which had received an 80. Evaluations of that paper ranged from 28 to 97. As it became clear that
grading was often more subjective than objective, controversy raged over fairness in marking and comparing the numerical ranking of students. The 0-100 scale fell into disrepute (Karmel, 1970:417; Hedly, 1978).

Robert Ebel, professor of education at Michigan State University, noted that from this period onward there was a shift from the use of absolutist objective systems of evaluation toward more relative and subjective procedures (1972:320-322). Several alternatives were developed during the second and third decades. During the 30's the five point ABCDE scale gained popularity. By 1940 80% of all high schools, colleges, and universities were using it (Davies, 1964:287-315). But in practically every instance it was quickly and informally converted to an ABCDF scale which became formally recognized. Becker, Geer and Hughes (1968) note that this is the system which provides the foundation to what, in Making the Grade, they call the "GPA perspective" of students at the University of Kansas in the 1960's. Why was the use of the "E" dropped?

AUTHORITARIAN REACTION TO ABCDE SCALE

The "E" was left out of the marking scale in favor of the "F" as authoritarian forces expressed opposition to the highly simplified ABCDE scale. Rather than simply an objective indication of the quality of student work, which use of the "E" could indicate, the "F" is a symbolic expression opposing students who do not serve the school work ethic. Its major purpose is identificational rather than academic. It identifies
those students who, for whatever reason, seem to oppose the school work ethic. It also identifies those who have the power and final say about who will be stigmatized as opponents of this ethic. In using it, the instructor is doing the same thing as the frustrated middle-class parent who, disobeyed by a child after the fourth rational warning, gives up reason and resorts to a traditional spanking. The "F" is not a rational calculation of an academic level below "D". It is an ambiguous level mixed as much with emotion as academic considerations. It is a rejection, a statement by the instructor that the student is unworthy of the academic institution.

Brown (1965:175-185) indicates that in the 1930's when the ABCDE scale was gaining prominence, many teachers left off the bottom line on the "E" to "more emphatically express how they felt about students who received the lowest grade." He implies that teachers associated their own lack of effort in completing the letter "E" with a judgment that a student had not taken the effort to meet even the minimum academic standards.

Recognizing the subjective judgmental quality of "F's" during the academically egalitarian 1960's, numerous professors advocated the eradication of the "F" and even more simplified grading scales (cf. Hutten, 1974). Ebel (1972:320-322) expresses some regret at the simplicity of grading scales which only have two or three points. Ebel warns: "to trade more precisely meaningful marks for marks easy to assign may be a bad bargain for education" (1972:333). Simple scales do not permit a clear ranking of students. These scales may not reinforce the school work ethic.
In this same work Ebel discusses an attempted reintroduction of the ABCDE system in northern California during the 1960's. The attempt was only moderately successful. One teacher indicated that she didn't give many F's but felt that it was the proper grade rather than "E" for students who did not "work hard".

Riesman, Gusfield, and Gamson in a study of Academic Values and Mass Education, report that during the first year of classes at a new college the faculty desired to draw students with high academic abilities (1970:147). A chemist reported: "We flunked 38% during the first term. They deserved it. We will damn well do it again. That's how we will get better students." Better students? One might question the wisdom, or even the mental stability of a student who would chance his career in such an environment. If he were brilliant, and therefore able to recognize the important of a GPA to his academic and occupational career, he would probably choose an "easy" school like MIT or Cal/tech. The chemist seems to be saying: "F is for Flunk." The grade again reflects a bias in favor of the high energy calculating student. It is not an objective rational calculation of student's ability which could be useful for comparison with students at other schools. It reflects a demand for centralizing evaluatory power with the instructor.

There were gross inequities in grading from one department to another during the first year at the above noted college. The departments which graded most strictly were almost "religious" in their advocacy of high academic standards. When one instructor heard how severely some of his colleagues had graded, he replied: "damn it, I could have given more D's" (Reisman, Gusfield, Gamson, 1970:149).
In its drive to support the advancement of high energy calculating, students, the movement of modern education uses the "F" as punishment for students who do not measure up to the instructor's interpretation of the most fundamental demands of modern education. The ABCDF scale enables an instructor to be more emphatic than is possible with the ABCDE scale successfully sponsored by opponents of the 0-100 scale. Use of the "F" reinforces the fact that the classroom instructor is the final authority.

There is evidence to support two alternative explanations for the absence of the "E" from the ABCDF scale. It may be claimed that the "E" is not used because it could be confused with the "E" in scales which use "Excellent" as the highest grade ranking. But, such scales have not been widely used. And if one takes this stand he implicitly claims that teachers fear that the most inadequate and incompetent quality of work could easily be confused with work of the highest and most superb quality. This claim would make a mockery of the grading system by implying that grades were totally ambiguous. One could also claim that use of the "F" is a continuation of the traditional marking system of Pass and Fail which had been common prior to the introduction of more sophisticated grading scales. I have found no empirical evidence of the conscious existence of this as a motivation factor in teachers. But if one assumes that this tradition remains forceful in society, it merely enhances that part of the argument which says that use of the "F" supports traditional values, rather than a rational evaluation of academic ability.
SUMMARY

The primary objective of modern education is to produce and distribute knowledge. During recent centuries in western societies there has been a strong trend toward efficiency in the pursuit of this goal. Research has become highly scientific. Teaching at all levels has become very specialized and the evaluation of students has become quite systematic. However, the movement toward optimum systemization of evaluations procedures within classroom situations reflects the history of a tension between conflicting philosophies regarding the best way to support the school work ethic.

Authoritarian oriented forces have fostered highly precise measuring instruments—such as 0-100 scale. Equalitarian forces have supported less rigid marking devices—such as the ABCDE scale. Use of the ABCDF scale represents an informal compromise between these forces.
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