Consisting of four papers, this study examines university entrance examinations in France, Great Britain, and West Germany and compares them to similar tests in the United States on the basis of three subjects: world history, language study, and biology. The first paper, "The Relationship of the Examinations to the Secondary School Age Group" (Nicholas Farnham), discusses the following examinations: (1) the French Baccalaureate; (2) the German Abitur; (3) the British GCE-A Level (the advanced level of the General Certificate Examination); (4) the International Baccalaureate (accepted by universities in all countries); and (5) the United States Advanced Placement Test (APT) and Achievement Tests. The second paper, "World History" (Robert A. McCaughey), discusses separately the breadth of each examination and evaluates the capacity of each for self criticism (of its own country's history). The author finds no reason to believe that American students taking the APT are less equipped for serious study than are European students. The third paper, "Language Study," by Richard I. Brod, looks at each country's tests for second language competency. The author finds the United States College Entrance Examination Board test lacking because it does not approach the universality of the other countries' tests. The author finds the APT much more satisfactory. The fourth paper, "Biology" (William V. Mäyer), after discussing each country's test in detail, finds the United States' Achievement Tests have breadth in the subject matter of the test questions but no depth. Although the author feels the APT is better, in comparison, the United States biology examinations do not compare well. They are less demanding, more detail laden, require no writing, and do not concentrate on higher educational objectives. (JM)
UNIVERSITY ENTRANCE EXAMINATIONS AND PERFORMANCE EXPECTATIONS

A Comparison of the Situation in the United States, Great Britain, France, and West Germany

I. The Relationship of the Examinations to the Secondary School Age Group -- By Nicholas Farnham

II. World History -- By Robert A. McCaughey

III. Language Study -- By Richard I. Brod

IV. Biology -- By William V. Mayer

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A Background paper prepared for The National Commission on Excellence in Education by
The International Council on the Future of the University
I. The Relationship of the Examinations to the Secondary School Age Group

This paper is the result of an invitation to the International Council on the Future of the University to organize a comparative analysis of university entrance examinations in at least four countries, to assist the National Commission on Excellence in Education's panel discussion of how performance expectations are stated at the juncture between school and college. The staff of the commission identified the subject areas world history, foreign language and biology as of interest. The Council proposed Great Britain, West Germany and France to compare with the United States, as examples of other advanced industrial systems with similar social and economic pressures being exerted upon the educational system. It originally proposed to include Japan in the comparison, but was unable to collect examination material in time. It also proposed including the international baccalaureate as an example of a cross-national effort to state performance expectations.

The International Council has been asked to represent the academic disciplines in this discussion presumably because of its interest in the articulation of college and university admissions standards and the relation such an improvement might have to the enhancement of the quality and expectations of achievement in high schools. Obviously this relates chiefly to academically oriented high school training. In the United States, of course, this involves
more than 50% of the high school age group, whereas in most other countries it is a significantly smaller percentage. For the countries involved in our comparison, the percentage ranges from about 40% in Great Britain to 33% in France to about 20% in Germany. However, if one is interested in the influence of college entrance examinations on the high school age group as specified for this paper, the percentage in the United States is greatly reduced. Only 20% are influenced by the need to take 'achievement tests' such as the College Board or the Advanced Placement Test (APT) as compared with virtually all of the students in academically-oriented programs (schools) in other countries. This leaves a major segment -- more than 30% of the United States high school age group -- engaged in a curriculum which will lead to some higher education but for whom no performance expectations may be deduced from university or college entrance examinations. This important group must, of necessity, be excluded from consideration in this paper. However, the conclusions of this paper indicate that it would be important to undertake an investigation of how performance expectations for these students are stated, how college admissions policies are or are not influential, whether students, parents, teachers understand the expectations and what changes, if any, should be undertaken. This analysis could not be done in a comparative context, however, for it is almost a uniquely American phenomenon to have a large segment of the academically-oriented high school program unconnected to a nationally administered achievement examination system.

1. A much larger percentage of the United States secondary school age group do, of course, take the Scholastic Aptitude Test (SAT). This test is not comparable with European tests and has been excluded from this study.
The examinations used in this comparison for the countries other than the United States are, all of them, universally required for students engaged in academically-oriented secondary studies. They are in fact not college entrance examinations at all, although they have increasingly been used for that as the percentage of the students entering higher education has dramatically risen over the last few years in all Western countries.

These examinations are proficiency examinations needed to be passed before a degree or certificate at the secondary level will be awarded. In the event of failing the test, it has to be re-taken to get the degree. Success rates for the tests vary markedly. Less than 65% of the candidates for the French Baccalaureat were passing the exam in the mid-seventies, a slightly higher percentage of the British candidates were passing the GCE, General Certificate Examination, Advanced level -- the one used in this comparison -- while an astonishing 95% of the German candidates were being successful in their achievement examination, called the "Abitur".

The examinations do also serve as gatekeepers to higher education, which is the reason for their use in this comparison. Although the differences between these two functions have begun to blur in recent years, some distinction does still exist: a secondary school student expecting to go on to higher education will have to do better on the examination than if he is merely expecting to get the secondary certificate. In Great Britain and Germany entrance into higher education is competitive according to score. (Great Britain presents

the most competitive situation: Less than one-half of those passing the Advanced level exam are selected into higher education). In France entrance is similarly competitive for the Grandes Ecoles; but not for the universities; even here, however, a slightly higher grade is mandated on the "bac" for university entrance — a mark of 12 out of 20 is needed rather than the 10 out of 20 necessary to get the certificate. Italy is the only major European country to have recently wiped out the distinction entirely; passing the maturita is now a passport to any Italian university, a situation which has caused considerable controversy.

The reason for mentioning these details here is to provide some texture to the point that the way these examinations influence performance expectations at the juncture between secondary level and higher education is rather different from the way the American College Board or Advanced Placement Program test (APT) can be viewed. The European tests influence a larger category, reflect mandatory requirements, and, importantly, reflect a basic assumption that there is a concrete difference between what is needed to exit from secondary years and what is needed to enter higher education. The College Board and the APTs state only what is needed to enter the upper segment of United States higher education. They are competitive, but not for entrance into higher education itself. They state, in short, elective expectations. Nobody getting a low score on these examinations will have to backtrack, take remedial work, change direction or otherwise admit to failed performance if he can enter higher education through any of a huge assortment of

3. The International Baccalaureate has been accepted by all these countries as an equivalent university entrance examination at least for nationals residing in foreign countries. However, it does not confer the secondary level certificate.
other doors.

It is not in the scope of this paper to trace how this situation in the United States has come about. However, the contribution could be mentioned in passing of the influence of the ideals of James B. Conant who successfully pressed forward in the fifties the concept of the comprehensive high school, which emphasized an elective system of courses providing maximum fluidity in a curriculum combining vocational with academic interests. Higher education, on its side, strove to match this fluidity in the sixties by providing greatly increased diversification through master plans that called for "tertiary" education programs. These have importantly influenced the present condition in which the "juncture" between high school and college appears to reflect not one level of proficiency, but a scale of levels of development. As Conant said:

"One might almost say that the justification of the American system as contrasted with the European must be in terms of social and political ideals. The comprehensive high school attempts to accomplish these ends: it endeavors to provide a general education for all future citizens on the basis of a common democratic understanding, and it seeks to provide in its elective offerings excellent instruction in academic fields and rewarding first-class vocational education."

Admirable though these political and social ideals are, they appear not to have contributed to the strengthening of the high school diploma, which remains in the minds of many of very low standard as school boards and state legislatures find themselves politically unable to deny graduation to large numbers of seniors. Implicit in Conant's formulation, it would appear, is


the assumption that even for academically-oriented students in high school, what should govern is not performance expectations but democratic idealism. This same assumption has been instrumental in the establishment of the tertiary education sector.

Performance expectations do exist, nevertheless, whether they have been explicitly articulated by school authorities or not. They are brought about by political factors -- sometimes with negative results -- as in the case of the need to demonstrate equality, by academic factors as in the need to train university graduates, by industry and professional factors as in the need to provide competent employees and professionals, and finally by social and family standards of self-esteem. In a situation where all of these expectations have not been reconciled into a meaningful high school diploma, the student has been left to interpret the various influences for himself. It is hard to see how this could be anything but a very confusing task for most students.

With respect to academic expectations, the subject of our concern here, the establishment of new tertiary institutions, such as community colleges, has not been helpful in clarifying expectations. To some these institutions are regarded as doing the remedial work which secondary schools would have to undertake if their standards were higher. To others they are doing innovative, creative work. No doubt both assertions are true to a degree, and yet the first assertion is rarely articulated to students. The signals coming from universities and colleges that do not require entrance exams are very mixed, obviously. Here standards for entrance are based on a high school accreditation system and sometimes course grades. What is likely
to stand out in the graduating student's mind is the incredible diversity of interpretations of his academic worth. Much of the confusion is the result of competitiveness of United States higher education institutions. As the economy remains constrained and the over-stretched higher educational institutions strive to maintain previous levels, competition is likely to increase, causing an increase in this confusion as well as a tendency to find lower standards acceptable.

One interesting feature of Conant's justification of the American education system is his failure to mention an economic ideal. The idealism of that time appears relatively unconcerned with the efficiency of the educational system. However, in our present condition it appears unlikely that we can be so oblivious to costs. Ways to reduce expenditures in universities must be examined. At the same time new ways of stating academic expectations so that they are meaningful economically should be explored. Having 30% more students engaged in higher education than other countries is, of course, a costly proposition. Is it justified, or is it another example of Americans' willingness to pay extra for a little more roominess? If it is the latter, then perhaps, like large cars, it is outdated. These are very difficult but crucial questions which ought to be examined in a further study.

Turning to the roughly 20% of the high school students who prepare for the College Board Achievement test or, better, the Advanced Placement tests, the question which this paper has been asked to raise is: how do the expectations of performance for this group, as stated in the tests, compare with that for students taking the French Baccalaureate, CGE-A level, Abitur and International Baccalaureate? It can be argued that the comparison is meaningful
since roughly 20% of the high school age group in each country (all of which accept the International Baccalaureate as an equivalent test) pass the test each year. The fact that the European tests are given to students who are on the average a year older than the American students is roughly balanced by comparing them to the APTs which place students one year ahead in university work.

The Council gathered examples of the actual tests used in Europe in the past two years from a variety of sources. The easiest to obtain was the French Baccalauréat, which publishes commercially the questions asked in all the regions every year in paperback. The test is nationally administered by the Ministry of Education and the results are given extensive publicity in the newspapers, reflecting great national pride in the system. The most difficult test to determine a suitable example for was the German Abitur. The test is locally administered by district in each of the eleven Länder. There has been considerable controversy in the recent past in Germany over how to weight the Abitur results in different districts when comparing them, which may be why our request to the federal authorities for representative examples went unanswered. We were able to secure, instead, from a German board member of the Council, a 1980 test from a better-than-average high school nearby him, Albertus-Magnus Gymnasium in Bensberg, North Rhein, Westphalia. British examinations are also administered by district. Two of the largest, the London based University Entrance and School Examinations Council and the Oxford and Cambridge Schools Examination Board cooperated with us by sending their examinations. The International Baccalaureate office in New York sent a set of their 1981 examinations. For the United States, the
College Board would send us only sample questions as contained in descriptive material about both the Achievement test and the Advanced Placement test.

The Council then invited representatives of the three academic disciplines selected for the comparison to analyze the material collected. These comments, by Professor Robert McCaughey of Columbia University for World History, Dr. Richard Brod of the Modern Language Association for Foreign Languages, and Dr. William V. Mayer of the Biological Sciences Curriculum Study form the remaining sections of this paper. We are grateful to them for their help.

What is most impressive about the results of their comparative comments is the degree to which all three commentators agree that the tests resemble one another, at least superficially, using the APT for the United States case. Of course there are important variations in stress that have significant implications within the discipline. There are very interesting differences in balance between language and literature expectations and the degree of interest in oral-aural skills, pointed out in the analysis of the language tests, for instance. Germany appears to have more demanding expectations for English language than France. Great Britain appears to have somewhat less significant expectations for Spanish than the United States. These variations reflect educational considerations, but also geo-political biases, apparently.

In the case of World History, important differences in the way history is influenced by national self-perceptions are demonstrated. The differences are striking and would indicate that national pride plays a strong role in how performance expectations are stated. The reviewer provides a persuasive list of the superficial similarities of the test questions, however.

The one finding of a concrete and substantial difference in the level of academic performance in the different countries was contained in the biology analysis where Germany has been ranked at the top of the scale and the United States at the bottom. This was surprising in view of the fact that United States biologists were at the forefront of an international effort more than twenty years ago to reform
the secondary school curriculum to reflect advances in the science and we invited the
director of the organization formed to monitor the progress of that effort to make their
collection. It would appear that the reforms mentioned have been absorbed better by
European schools than here. The reasons for this need to be looked at more carefully
than this paper can.

Taken together, the comments of these reviewers would seem to verify that,
while the U. S. may be slightly better off in one subject and worse off in another,
there is not a huge difference in the way the country has stated its performance ex-
pectations for academic disciplines at the college level for the very best students.
This assessment is valid only if it is assumed that the objective College Board test
has roughly one year difference in level of expectation from the ACT. Not all the re-
viewers agree with this. Also it must be underlined in making this assessment how very
different the U.S. is in the way it has or has not stated expectations for college
bound students not taking the tests. The situation is made clear in the following
chart:

**IMPACT OF UNIVERSITY ENTRANCE EXAMINATIONS
UPON SECONDARY SCHOOL AGE GROUP**

<table>
<thead>
<tr>
<th></th>
<th>Fed Rep of Germany</th>
<th>France</th>
<th>Gr. Britain</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent pursuing academic studies</td>
<td>50%</td>
<td>40%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Percent entering higher education</td>
<td>40%</td>
<td>30%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Percent taking entrance examination</td>
<td>30%</td>
<td>20%</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Shaded area: those entering higher education without entrance examinations.
Educational efficiency — the degree to which boys and girls trained in academic studies take, and pass, the examinations compared in this study and go on to higher education — is expressed in visual terms on the chart by the degree to which lines A, B and C come together for each country. Germany clearly gets the most for its academic dollar, the United States the least.

A timely "Op-Ed" article in the April 17th, 1982 issue of the New York Times, entitled "Federal Dough, College Loaf" provides a very relevant perspective on those American students, represented by the shaded area in the chart, who have not had their performance expectations clarified by entrance examinations or standards. The author, Michael Cooper, writes of his own experience as follows:

"When I graduated from high school in the late 1960s, I was a poor student, neither academically, emotionally, or motivationally ready for college. But, following my middle-class friends, I applied to the state university... As a state resident, I was automatically accepted by the university but I couldn't afford to go until I was informed I had been awarded an Educational Opportunity Grant along with a National Defense Loan. To my surprise, I became a subsidized student for five years... While I liked living in the university community, I wasn't a serious student. I spent less time in class and studying than I did with friends drinking beer, smoking pot, and listening to rock-and-roll. When awarded my diploma, I had no skills or discipline... Instead of going to college right after school, I now believe I would have been better off working, traveling or -- particularly repugnant to young men of the time -- joining the military. Any of these pursuits could have given me what I then needed most: a realistic understanding of life, self-confidence and a sense of direction."

The degree to which these frustrations are shared by others who are and have passed through the tertiary sector ought to be looked into thoroughly.
Some Reading:


Christopher Jencks and James Crouse: "Aptitude vs Achievement: Should we Replace the SAT?" The Public Interest, Spring 1982.
II. World History

At least three assumptions prompted the commissioning of this paper. The first was that questions about the qualitative level of American educational performance ("excellence") today might receive illumination by a comparison of one component of the American educational enterprise with its counterpart in the educational enterprises of several other countries, specifically the United Kingdom, France, and West Germany. The second was that this comparative analysis might usefully focus on the examinations used in these four countries (plus that used in all four, the International Baccalaureate) to determine university admissions. The third was that an analysis of these examinations would be useful for desired purposes whatever the particular subject area, but not least of all for the area of "world history." Because none of these assumptions is indisputable or even obvious, each requires comment before proceeding as if they were both.

A comparative analysis, using the experiences of several countries as the comparative unit, is by no means novel to this undertaking. Americans studying everything from the abolition of slavery to the state of scientific research have made use of it. Nor is the use of the experiences of the three countries to be considered here particularly innovative. All four, that is including the United States, have developed industrial economies and stable systems of parliamentary democracy. Moreover, of particular relevance here, all four have recognizably modern university systems that date back to the
nineteenth century and universities that date back at least to the seventeenth. All have governments and industrial sectors that invest substantially in scientific research, and populations that speak and write a single nationally accepted language. All four enjoy something approximating universal adult literacy.

To be sure, there are important differences as well, particularly in the structures of these countries' respective educational systems. Those of the United Kingdom, France, and Germany are largely publicly administered and financed, while that of the United States is distinguished by its substantial (if declining) measure of private control and private financing. But even among the publicly administered European systems, effective administrative control can be centrally located as in France, federally located as in each of Germany's eleven länder governments, or, as in England, be shared by very local units and a central agency. The administration of American education is, where private, also local, and where public, as much on the state as national level. Such differences matter greatly when one tries to generalize from locally observed circumstances. Such a generalization in France, for example, might be quite valid; in Germany somewhat risky; in the United Kingdom riskier still; in the United States, given the diversity of its educational system, pretty dubious.

Another crucial difference between the three European educational systems and that of the United States is that at their upper reaches (i.e. university level) they serve significantly different proportions of their university-age citizenry. Whereas more than half of that population in the United States pursues some form of post-secondary schooling, less than one quarter of the United Kingdom's university-age population does so. As recently as 1960 that
proportion was around 10 per cent. Both France and West Germany greatly
expanded educational opportunities at the post-secondary level in the 1960s,
and brought upon themselves considerable turmoil in the process, but still
substantially lag behind the United States in this respect.

This historic and persistent difference in utilization of --
and accessibility to -- higher education as between the United States and
these three European countries is both reflected in and, in part, attributable
to differences in their respective structures of secondary education. The
United Kingdom, France, and West Germany all divide their pre-university
education into primary and secondary levels, with the break occurring at the
seventh year, or about when American students would begin junior high school.
Unlike in the United States, however, the move at this juncture is crucial in
establishing post-secondary educational prospects. In Germany, for example,
about 65 per cent of the children in primary schools (grundschulen) move on to
hauptschulen, another 15 or 20 per cent to realschulen, both of which do not
lead ordinarily to formal schooling beyond, unless it be of a vocational sort.
Only those who enter gymnasiums (the classical training school), about 15 or 20
per cent of the total, are assumed to be university material. In France, a similar
division occurs at about the same point, with only the students entering lycées
to be considered university-bound. In England, the grammar schools similarly
set apart that small segment of the secondary-school going population that is
slated for university training. Even more clearly do the "public" (i.e. private)
schools such as Éton and Harrow. The introduction of comprehensive schools,
rather like a typical American high school with its mixture of students, occurred
in England in the 1960s but has not yet displaced the older and admittedly more class-conscious system. Similar schools have been introduced in Germany (Gesamthochschulen) and talked about in France, but to even less effect.

Thus, to compare the examinations given to students completing their training in a German gymnasium, a French lycée, or an English grammar school with that given to American high school seniors requires two limiting provisos. First, the German student sitting for his or her Abitur examination, the French student for his Baccalaureat, the English student for his General Certificate of Education examination (GCE) has been academically segregated from the mass of his contemporaries for at least seven years, whereas most American students taking a College Board Achievement Test have received their training to that point alongside others not previously determined to be going on to university training. This difference is perhaps made clearer by the fact that the Abitur, the Baccalaureat, and the GCE are all required "exit" examinations, while both the College Board Achievement Tests and the Advanced Placement Examinations are used strictly for determining admissions to the next level of education.

The second proviso is that the German, French, and English students taking these examinations are typically a year older and have had a year more of secondary schooling than American high school seniors taking either the College Board or the APTs. Accordingly, to control somewhat for this discrepancy, all subsequent comparisons will be based not on the American achievement tests but on the advanced placement exams (APTs), which are designed to test a high school senior's command of materials comparable to that expected of a college student completing a year-long introductory course, as against the advanced level Abitur, Baccalaureat, and GCE exams.
Thus, with these provisos, one can accept both the premise that the similarities between the American situation and that of three European countries are such that their educational differences might be meaningfully compared, and the rough comparability (in terms of level of examinees) of the German Abitur, the French Baccalaureat, and the English GCE exams with the American advanced placement exams. That still leaves the question whether a comparison of examination questions in a given subject -- here "world history" -- can be of use to those who would wish to assess American educational performance in terms of expectations and its commitment to excellence. My inclination, based on a close reading of several examinations in history, is that it cannot.

My reasons for reaching this conclusion turn largely on what I take to be the distinctiveness of history as a subject. Unlike physics or mathematics or biology, all of which presumably are international (is there German physics, English biology, French mathematics?), history does have its German, English, French, and American renderings. For these countries not to have, to some extent, their own histories would be to deny them their own distinctive past, their own distinctive present condition, their own peculiar view of an achievable future.

To argue that the differences in how a given country views both its own history and that of other countries whose history has intersected with its own are so fundamental as to render them fundamentally incomparable, is not to suggest that a comparison of history examinations serves no useful purpose. Nor is it even to suggest that such examinations share nothing in common. To the contrary, I am struck by the similarities in the format of all
four history examinations (and, for that matter, of the international baccalaureate's higher level history exam). All are written examinations, to be taken in the course of a single 2-1/2 — 3-1/2 hour sitting, without benefit of outside assistance or notes. They are either all or primarily (the APT has a one-hour multiple-choice section) in the form of a series of essay questions, typically soliciting 40 minute responses. All examinations have questions that utilize documents that are provided, and all offer a mixture of required and "choose one of the following" type questions. In addition, all examinations state the necessity for, as the GCE prepared by the University of London put it, "good English and orderly presentation." Finally, all examinations allow grading not only according to pass/fail but with finer (and numerical) discriminations to assist university admissions decisions. The APT, for example, has a 5-point division with the "extremely well qualified" sorted out from the "well qualified" and the only "possibly qualified," as well as from the "no recommendation.

But for all these superficial similarities in format, the content differences are both more numerous and more fundamental. Three such differences: the basic division of the subject of history; its chronological limits; its geographic comprehensiveness. The American administered APTs divide history into two neat packages, labelled respectively "American" and "European." American history begins, properly enough, in the 17th century, while European history, somewhat arbitrarily, goes back no earlier than 1450. The world beyond Europe enters into either APT exam only as part of the United States' or Europe's diplomatic or military history, (In this the APTs are more ethnocentric than the College Board achievement tests).
The German Abitur examination in history admits to no basic division, though its focus is narrowly that of Western Europe, with some attention paid to the United States, still less to the Soviet Union. It seems largely concerned with the 18th and 19th centuries, and primarily with the diplomatic and economic developments impinging upon the politics of those two centuries.

The English GCE is more chronologically inclusive and more even-handed in treating other parts of the world. Indeed, the University of London GCE I read included coverage of the history of the United States under "the Americas," wherein Cuba and Guyane received nearly as much attention. On the score of historical breadth, the English examinations are much the most impressive.

The French baccalaureate examination in history is coupled with the examination in geography. Accordingly, much that might have been the expected responsibility of the history exam, especially coverage of the world beyond the Atlantic world, is left to the geography exam. The baccalaureate exams in history that I read were entirely on the 20th century, which while a serious chronological limitation, allowed the questioners to explore the history of the first four decades of the century with considerable thoroughness. They were by far the most imaginative questions, both in terms of topics raised and in the kinds of materials deemed historically relevant.

All four examinations reflect an unavoidable lag between the current views contained in the scholarly monographs and periodical literature and those informing the examinations. The lag would seem to be about five years for their own history, twice that for the history of other countries. The GCE, for
example, is a decade behind current American views about the origin of the American party system, the Baccalauréat. A decade behind current views about American "isolationism" in the 1920s.

Perhaps the most distinctive feature about these exams is the relative willingness they manifest to encourage students to engage in a critical reassessment of their nation's past. Obviously criticism comes easier when directed elsewhere. The French Baccalauréat, for example, addresses itself to such topics as "le racisme Hitlérien," "le génocide," the Moscow purge trials of the late 1930s, and the Sacco-Vanzetti case in the United States, as well as the Munich Accords in 1938. The troublesome issue of collaboration with the Nazis during the Occupation of France is not yet confronted in the examinations I read, but, given their willingness to deal with such political subjects as the Popular Front and the L'Action Française in the 1930s, it will be once the monographic literature on the Occupation becomes fuller.

By contrast the German Abitur examination is almost painfully circumspect when it comes to raising questions relating to German history this side of Bismarck. The only departure from this stance in the exams I have read was a critically disposed question about the constitutional shortcomings of the Weimar Republic. Similarly, its treatment of the recent history of the United States and Russia bespeaks an unwillingness to take issue with the actions of other countries in this century. Apparently the Abitur examination administered by Hesse, under the influence of its Social Democratic administration, has attempted to deal more directly with Germany's immediate past, but no such willingness was in evidence in the 1980 Abitur prepared for the gymnasium students in Bernburg that I read. As a new generation of German
historians, that were born since 1945, comes to the fore, this too may well change, but slowly I suspect.

The English GCE examination indicates a capacity among its creators for self-criticism but also for accepting the past as the past. There is little sense, however, that England's dealings with the colonial worlds of the past need to be gone into for purposes of retrospective apologizing. The American Revolution in the GCE, prepared by the Oxford and Cambridge Schools examination Board, for example, is depicted as an early instance of imperial miscalculation brought on by a fit of administrative inefficiency. And perhaps it was.

The American APTs, if not as lively as the French Baccalauréat examinations, do seem to be their equal in willingness to deal with some of the unlovelier aspects of America's past. The most recent American history exam, for example, had as its document-based question a consideration of the political, social, and intellectual backdrop of the "conquest" of Mexico in the 1840s. Indian-White relations are also figuring prominently in the exam lately, as are women as a discriminated "minority." In posing questions about American foreign relations and dealings generally with the rest of the world, the examination retains a hint of the self-abasement that seemed called for during the last years of our Vietnamese involvement. There was also in evidence considerable interest in matters that American social historians have concerned themselves with of late, among them the family and informal social networks.

In the most recent European examination, new attention was paid to the evolution of political elites and the development of political parties and ideologies.
In sum, the commissioned exercise has proved to be far more revealing as to the national self-perceptions of the four countries whose examinations were compared than as to their relative emphasis on excellence or even their relative effectiveness in discerning excellence among students taking these examinations. The exercise does, however, yield a negative conclusion. Based on it alone, there is no substantial reason to believe that American high school students entering college with Advanced Placement credit, or American college freshmen upon completing a one-year course in American or European history, are less equipped for the serious study of history than their English, German, or French counterparts. My own hunch is that they are somewhat less able to conceptualize history in global terms but otherwise can hold their own. That there are substantially fewer American students taking history courses is disquieting to be sure, but that is a quite different issue.

Whether the American student today getting a 5 or a 4 on his or her History Advanced Placement Examination is as historically sophisticated as one who did so twenty years ago is also another question, and one for which the comparative approach mandated here would have to be supplemented by an historical approach before it could begin to be answered with any certainty. But, again, it is my hunch, based on reading APT exams of students seeking advanced standing in history at Barnard and Columbia Colleges over the past decade, is that the evidence for a "decline of the best" conclusion is quite skimpy, while that for the no less disquieting conclusion that there has been "a decline of the rest" is compelling.
Bibliographic Note

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- The College Board Review
III. **Language Study**

In terms of research, a comparison of the societal expectations of four western industrial democracies for achievement in language study has only very limited utility, but it is nonetheless an instructive and provocative exercise, and specifically in the case of foreign language study there is a compelling logic behind it. The logic lies in the simple fact that language study, at least in its basic stages, is eminently objective. That is, a sentence like "La plume de ma tante est sur la table" is a valid utterance, identifiable as French, and therefore from a pedagogical perspective "correct," no matter where it is uttered or written, whether by natives or by foreigners, in Poitiers of Paducah, Dakar or North Dakota, Montreal or Murmansk. To the extent, therefore, that a second language can be regarded as a body of knowledge, this objectivity is a great advantage, because it provides a standard for defining performance objectives. What it does not do, of course, is assist educational decision-makers in the task of determining the specific body of material—in effect, the specific utterances—that need to be learned, the methods or stages by which they are learned, or anything about the ways and means by which learning takes place. The trouble with language, as one commentator has pointed out, is that, like sex, it is nearly universally practiced, and consequently many of its rank-and-file practitioners fall easily into the error of believing that their sheer length of experience has made them instant authorities, experts, and theoreticians, when in fact they lack any theoretical basis for expertise. In the one area, this
thoughtless ignorance of professionalism leads to a wide range of serious social consequences; in the other, it leads to a considerable waste of educational resources, and possible further social consequences that are probably indefinable.

Even within the quasi-objective body of knowledge known as the study of French (or Greek, Tamil, or any other language), instructional choices still need to be made and expectations articulated by those responsible for doing so. With varying forms and degrees of centralization, these expectations can in fact be fairly well defined nationally for Britain, France, and the Federal Republic of Germany, with specific reference to the stage when a student has completed his or her "schooling," most of it compulsory, and enters into what can be called, for the sake of convenience, higher education. Though comparability is limited among these three systems, and even more so when they are compared with the United States, it is nevertheless instructive to note their differences of emphasis and other qualitative differences. Quantitative differences, on the other hand, are mostly indefinable, and no attempt will be made to define them within the scope of this review.

France: le bac

To judge by the information available to this reviewer, the format of the French baccalauréat examination, in foreign languages at least, is a masterpiece of brevity and simplicity. The format appears to apply universally to the examination given in over thirty regions, each, however, using a different basic text. One assumes that the decision-makers in France have chosen to disregard a basic principle of testing, namely, that for an examination given to mass numbers of students the time spent in constructing multiple-choice, short-answer, or other easily scored tests is an investment that pays off in time saved on scoring; whereas an essay-type test incurs a
vast expenditure of scoring time. The bac stands firmly in the latter camp and in so doing makes a clear statement of the French system's expectations in terms of functional competence.

The sample-bacs available to this reader consist of three parts: texte à commenter, a passage of 400 to 500 words; commentaire dirigé, a set of four questions in the target language, to be answered in the target language, on the same text; and version, a translation of approximately half the commented text into French. While all of the thirty-plus texts here reviewed are approximately the same length, no two are alike. Whether by design or by accident, about half of the regions use literary texts for the examination in English, chosen from works of fiction or serious works of non-fiction (history, biography, etc.); the other half use journalistic pieces, chosen from periodicals like Time, The Guardian, and a few others. In the case of the Spanish examination, by contrast, all of the texts are literary, deriving from the works of well known writers like Asturias, García Lorca, Jiménez, Machado, and Neruda, among others.

The ultimate "statement" made by the baccalauréat examination is clear: the expectation of a school-leaver and/or candidate for admission to higher education in France is that he/she has a functional command of the language sufficient to read, comprehend, and discourse on a serious, adult, unabridged text of moderate length. While a text by Orwell, Malamud, or Margaret Mead, or an extract from Time, or a piece by Lorca or Jiménez may not have the intellectual depth or challenge of a treatise on philosophy or a scholarly article on economics, it is certainly adult enough and respectable enough to test the depth of a student's familiarity with the language as such—structure and lexicon—, with the connotations of words, and with the cultural context in which they are imbedded. Given the serious, literary bias of the chosen texts and the topics derived from them, it is clear that
the bac is concerned with the standard written language of educated speakers (and writers) of the language, more than with colloquial idiom. While student preparation for such a wide range of possible examination texts will demand familiarity with an equally wide range of materials and with a variety of kinds of language, the essence of the examination is, clearly, language and language-in-culture (or, as many prefer to describe it, culture-in-language), not literature.

The lack of an oral-aural (speaking-listening) component in the bac is significant, but it is probably pointless to speculate on the reasons for this omission. Presumably tradition plays a major role in the format of the examination, but it can also be argued that testing of oral-aural skills is in any case only ancillary, not central, to the obvious principal purpose of the examination: certifying intellectual readiness for university work. Testing of aural-oral skills is, after all, quite feasible and appropriate at lower levels of schooling; such tests can constitute appropriate hurdles on the road leading to the bac and no longer need to be repeated at the time the final hurdle is reached. Moreover, given the immense burden of scoring vast numbers of essays and translations, one can understand why test administrators would resist taking on the additional burden of scoring oral-aural skills—an area where objective standards are considerably more difficult to apply.

Federal Republic of Germany: Abitur

For Germany, this reviewer was asked to look at Abitur examinations given to students with a primary concentration (Kernfach) in English. The specific papers available for review came from a Gymnasium in a small town near Cologne, but they appear to reflect a state-wide (and probably also national) standard of expectation, even though the test questions are not standardized. The test clearly also reflects a high level of concentrated
preparation in English language and literature. As an examination, it is easily the most difficult and demanding of all we have reviewed. No portion of it is devoted exclusively to language per se, not even translation into the target language. However, all questions and answers are in the target language (in this case English).

The first portion of the test is a free essay on a "surprise" discussion topic that presupposes no specific reading or preparation, but is philosophically sophisticated; the second portion focuses on a short passage selected from a larger work already studied in preparatory courses, e.g., Macbeth. The essay questions, all of which must be answered, are demanding in their expectations. They require sensitivity to language, literary interpretation, and literary history, as well as factual knowledge about the text and its sources. The wording of the questions suggests the expectation of an advanced level of complexity in the written response: i.e., the responses of an adult commentator, not a school pupil.

The Abitur does not appear to be significantly concerned with testing knowledge of the culture of the foreign language. While some of the questions deal with literary background or "cultural references" in the text, even these are presented as part of the overall literary approach. Similarly, the independent essay questions we have seen deal with broad, philosophical issues, not with specifically British or American themes, and they serve primarily as a vehicle for demonstrating linguistic and general intellectual competence. In short, the Abitur presupposes a thorough knowledge of the language, upon which is built a sophisticated understanding of the principles of literary interpretation and analysis of ideas, with a solid grounding in the specifics of the literature of the target language.

By contrast, the Abitur for non-concentrators (also called Reifeprüfung, or "maturity examination") is very much like the bac in the
sense that it does not cover literary history or literary analysis. Instead, a previously unseen passage—essay, short fiction, or journalism—is presented for comment, and essay questions are asked requiring close analysis and understanding of the cultural context behind the passage. Unlike the bac, the Reifeprüfung has no translation section, and the entire examination is written in the target language.

Britain: A-level Examinations

As a test of the results of study and learning, the British Advanced-level (A-level) examinations are certainly demanding and illustrative of a high academic standard. What is disappointing about them—though not surprising if seen as a reflection of the proverbial British insularity—is their relative lack of emphasis upon productive language skills, and the absence of any test of oral skills. In other respects, the A-levels achieve a responsible balance between language and literature, with some limited attention to civilization. The tests of language are thorough but conventional: translation into English reading comprehension and analysis (answered in English), aural comprehension (answered in English), dictation, and two short translations into the target language (in this case, Spanish). The literary tests include substantial essay questions (to be written in English) on prepared texts, plus a section similar to the French bac dealing with unfamiliar texts in the target language, but, unlike the bac, requiring essay responses in English. Correctly or not, one perceives in the A-level that the division between language and literature has been made and maintained as a matter of philosophic principle. That is, the student is encouraged (and required) to learn to write in the target language, but is not expected to write in the language about serious literary questions. In fact, the only section of the examination requiring such writing can be characterized as fairly easy: the student is allowed to choose one of eight topics and is asked to write only about 300 words
on it. Some, but not all, of the available topics deal with relatively simple aspects of the target culture; others are more general. By contrast, the questions posed in the literary portions of the examination—requiring answers in English—are considerably subtler and more demanding. Obviously, two coordinate assumptions have been made: first, that students should be encouraged and expected to answer the literary questions in depth, i.e., with the full degree of profundity of which they are capable; and second, that the language curriculum of the schools has not, even at the A-levels, brought students to the point where they can use the target language as a vehicle for their most profound thoughts.

Clearly, then, the A-level examination differs fundamentally from the German Abitur in its assumptions, in its principles and premises, and presumably in the curricular choices made by school faculty and decision-makers. It is self-evident, of course, that in both systems the examination both reflects and determines curriculum in a classic reciprocal (or chicken-egg) relationship. To speculate beyond this point about national choices or cultural biases would exceed the reasonable limits of this review.

The International Baccalaureate

Like the "national" examinations reviewed above, the I.B. examination is a gateway to levels of education that correspond more nearly to the junior year of U.S. colleges than to the freshman year. It also is used in a specific context, namely, that of an internationally oriented school, either public or private, that places a premium on study and awareness of international issues and internationally oriented subjects, including substantial work in foreign languages, literatures, and cultures, and an ambience that fosters frequent contact with representatives of a variety of nations and cultures. As the examination materials point out, foreign language class-
rooms in such schools typically include students of many native languages. Consequently, it is both appropriate and easier for all instruction to be conducted in the target language, without benefit of translation, and for all materials to be exclusively in the target language. The I.B. examination in any case presupposes such conditions. Both questions and instructions are written in the target language; and students answer exclusively in the language; no translation is used or required, nor is translation used even as a device for assessing language competence. The written examination covers both literature and civilization, but the student is required to write one essay on a literary topic; his or her other essays may deal with literature or with topics that could be classified as culture or civilization. The oral portion of the examination makes use of cassettes and is essentially a language test of aural and oral skills, using texts on literature or civilization. The oral portion of the examination makes use of cassettes and is essentially a language test of aural and oral skills, using texts on literature or civilization as a basis for comment and questions. There is also a listening comprehension test.

The emphasis of the I.B. examination and of the curriculum preparing for it is clearly on language. Beyond language, literature and civilization are covered in approximately equal balance, but only at moderate depth. (In this respect, the I.B. is closer to the A-levels than to the Abitur.) In literature, only four texts, balanced by genre, are required as part of the preparation for the examination. What is sought, however, is not literary history or even literature-in-culture, but rather the student's capacity to understand texts, themes, and modes of literary analysis as exemplified by the chosen texts. The I.B. examination gives evidence of having been influenced by the British system more than by any other national examination we have reviewed, with the significant differences
of emphasis on language and exclusive use of the target language in instructions, questions, and answers. In sum, the I.B. examination represents a clear point of view on language competence and language use, and a fairly demanding level of expectation for both. It is also fair to point out, however, that while the I.B. expects more than the British A-levels in terms of language competence, it appears to be less demanding in terms of literary analysis, and is less demanding than the German Abitur in both areas.

United States: The CEEB Achievement Test

In no sense do the College Board examinations approach the universality of the baccalaureate or British A-levels for their respective nations, nor do they have a relationship to high school curriculum comparable to the reciprocal defining-and-reflecting relationships which exist in the other countries. In languages, for example, CEEB achievement tests have remained much as they always have been, testing the reading skill exclusively, and even within the context of testing vocabulary and comprehension, placing a fairly high premium upon recognition of grammatical distinctions. No doubt this approach is both valid and professionally responsible, but it fails to respond directly to those instructional programs—probably a majority—that now place greater emphasis on aural-oral skills. This limitation is not necessarily a serious drawback. Considering the limited uses of the test—general diagnosis of admissibility to college, and specific diagnosis of placement level in a college language sequence—it is probably adequate for its purposes, if far from ideal. It is, moreover, because of its passive-response, multiple-choice format, relatively cheap and easy to score and thus, once again, adequate for its purposes. Apart from these practical considerations, it is also professionally and philosophically arguable that the passive skills measured by the CEEB tests in foreign languages are the indispensable basis
of any achievement in language education, even one which emphasizes oral productive skills. In the absence of any universally accepted measure of productive skills and oral proficiency, the logic of this argument seems unassailable. An argument could, however, also be framed in support of the addition of an aural comprehension test to the CEEB, as well as a translation exercise as evidence of a deeper and more complex comprehension of a language. To add such sections to the tests would undoubtedly enhance their usefulness (as well as increase their cost), but the College Board cannot be blamed for failing to do so in the absence of evidence from the teaching profession and from educational decision-makers that the newly obtainable diagnostic information would be properly used.

Even in the United States, where there are no national norms or national standards, an examination like the CEEB has some limited relationship to school curriculum, not as well defined as in the European countries, to be sure, but nevertheless a reciprocal defining-reflecting relationship. To this extent, one of the major drawbacks of the CEEB language tests is their real and potential effect upon the curriculum of schools preparing students to pass them. The effect may not in fact be widespread, and it is undoubtedly counteracted or modified by pressures, both within and outside of the language teaching profession, to promote instruction in active as well as passive skills. As an isolated "signal," however, the CEEB examination sends a very traditional message about reading, grammar, and vocabulary that does not directly help the cause of those striving to promote oral production as a prime learning objective for students in language courses.

United States: Advanced Placement

While the College Board's Advanced Placement tests in languages (or in other fields) in no sense represent a national expectation of rank-and-file American students entering college, they certainly represent a desirable
ideal and also probably also a standard that could in fact be attained by much larger numbers of students than is presently the case, if the public, parents, students, and school decision-makers could be persuaded of the value and need for making AP more widely accessible. In short, if the United States had an educational system comparable to that of Germany, the AP would represent an attainable ideal or standard for any student seeking entrance to university work at a level equivalent to the junior year in an American college.

Because of variability in school curricula and in college expectations, AP offers Spanish and French examinations with emphasis on either language or literature. Separately or together, they define significant expectations and make significant demands; each lasts three hours. The language examination tests proficiency in the language without special emphasis on literature, and uses in its reading sections unfamiliar texts on a variety of topics. The examination also includes tests of listening skills and of oral (productive) skills. The literature examination, by contrast, focuses almost entirely on literary analysis, terminology, and—in a limited way—literary history. It also makes use of a published list of authors—five, in the case of Spanish—without specifying which of their works are to be read. Multiple-choice questions are asked both about listed authors as well as "unseen" materials. Free-response essays are written in Spanish on the listed authors, in Spanish or English (without prejudice to the score) on the unfamiliar material. There is no oral productive test, and no translation.

Even granting the fact that the AP is not used in the way the bac, Abitur, or A-levels are used, it its standards it compares favorably to all three. In some ways more demanding, in some less, in its general level of expectations it is quite respectable. The language examination, in particular,
appears to have expectations higher than the A-levels, though perhaps somewhat less sophisticated than those of the bac or Abitur, and also less narrowly literary than those of the Abitur. It is, moreover, a balanced test, requiring oral and written productive skills as well as passive. While not intended to have general applicability as a national standard, it nevertheless represents the results of many years' experience and fairly wide consultation within the language teaching profession, and thus constitutes a useful starting point for any future discussion of possible national norms or standards of language proficiency. The literature test is also a fine example of good test-making and certainly reflects good work on the part of the developers. For better or worse, it also reflects the assumption, still prevalent in many educational circles, that the purpose of language study is to prepare for literary study. Like the CEEB Achievement Test, therefore, it still sends a one-note signal.

Expectations and the Search for Standards in the United States

It is difficult to understand sometimes why it has taken so long for the American public and American educational decision-makers to see the need for clearer statements of expectations and standards. One possible explanation, perhaps, is that our society in general, and our educational system in particular, have been in flux for most of the last generation (at least twenty-five years), and people have simply not realized that the expectations, definitions, and standards they thought were still applicable no longer are. Change has indeed been rapid, and much of it has been radical rather than merely a process of evolution. Given the persistence of institutions, however, change has affected students faster than it has affected schools and colleges (and their personnel), with the result that there is perhaps more dissonance between the system and its users than might be desirable.

With respect to foreign language study, one is dealing with educa-
tional assumptions (and in part, personnel) that still, even in 1982, derive in large measure from Europe and European social institutions. The persistence of tradition, and of traditional institutions, has played a larger role in this field, one is inclined to think, than in some others. This is a neutral fact with both positive and negative implications, depending on one's perspective, but it should not be overlooked.

As recently as fourteen years ago (1968), language study in the United States was governed by nearly universal expectations stated in terms of college and university entrance and degree requirements, primarily the latter. A survey of requirements in B.A.-granting institutions; undertaken by the Modern Language Association in 1966, revealed that 33.6% of them had fixed entrance requirements for language study (normally two high school "units"), and 88.9% had language requirements for the B.A. degree (variable, but averaging out as the equivalent of four semesters of college-level work). In the 1960's, as still today, most requirements were stated in terms of credit hours, course units, or other measures of time spent in the classroom, and this practice was largely unquestioned. Norm-referenced tests existed: not only the College Board achievement tests, but also three other batteries developed by the MLA through committees of linguists and experienced college faculty in collaboration with the Educational Testing Service. Yet despite the existence of such tests, neither the language teaching profession nor educational administrators, apparently, had the vision or incentive to promote these tests as standards and thereby lead a movement away from requirements stated in terms of credit hours (or "seat-time") to requirements in terms of competence or proficiency. It is arguable, of course, that the near universal (89%) applicability of traditional requirements was itself a disincentive and a source of complacency during that period.

As time passed, conditions changed. In the wake of social and
attitudinal shifts of various kinds, and campus upheavals of various kinds, requirements for foreign language study—as well as certain other subjects—began to erode. By 1975, another survey undertaken by MLA showed that entrance requirements in foreign languages were now extant in only 18.6% of the colleges and universities, and B.A.—degree requirements in only 53.2%.

The late 1970's saw a renewal of public interest in foreign language study and in the establishment of standards for language competence as a matter of national concern. In the wake of the negative information about declining requirements and equally negative statistics on declining enrollments in languages, both in the high schools (down 20.3% between 1968 and 1976) and in colleges and universities (down 17.2% between 1968 and 1977), and in response to growing perceptions of unmet national needs, a federally authorized and funded President's Commission on Foreign Language and International Studies was constituted in 1978. Its final report, issued in 1979, called for mobilization of public and private efforts to remedy what it called our nation's "scandalous" incompetence in foreign languages.

Even before the President's Commission had completed its work, the Foreign Service Institute, early in 1979, developed materials and syllabi for instructing select groups of college and university faculty in the theory, practice, and scoring of the Foreign Service Institute's oral interview examination, the U.S. Department of State's principal device for rating Foreign Service Officers and other government personnel in the skills needed for professional work at embassies and other work stations where language competence is required. For many years, the Foreign Service interview test (and others like it used in other agencies) has been the only national oral examination with a significant "track record" concerned with functional competence in language—meaning that the widely used FSI rating scale (zero
to five) defines what an individual can do in and with a language.

The pioneering contribution of the FSI to the work of the civilian teaching profession has had fruitful consequences. Taking its cue from FSI's successful experiment, the American Council on the Teaching of Foreign Languages, one of the leading organizations in the profession, sought and obtained grants to finance additional training programs and to begin work on defining in detail—in a way the FSI does not—the "lower" or elementary stages in the learning of the four language skills, both generically and for specific languages. This work, currently in progress, is being conducted by the American Council on the Teaching of Foreign Languages (ACTFL) with the aid of expert specialists at Educational Testing Service and with the cooperation of the MLA and other professional organizations who are universally convinced of its timeliness and importance to the field.

In working toward the development of a national standard for oral proficiency, the profession is, of course, attempting to close a major gap left by earlier tests. Given the widespread, though still incomplete, shift in language instruction over the last thirty-five years, from passive reading skills to active oral skills, the need for a standard of oral competence is self-evident. What is not clear, however, is whether such a standard, once it is achieved and defined, will be any more widely accepted by language faculty and administrators than the existing standards (or norms) for reading, listening and comprehension. As it happens, the present climate for restoration of language requirements is more favorable than it has been in several years. Since 1978, over seventy colleges and universities have reported to the MLA that their faculties have voted to restore either an entrance or degree requirement in languages; probably several more are unreported. In a few instances, faculties have received a mandate to develop a proficiency-based
curriculum, which suggests that the requirement is intended to be defined in terms of proficiency at these specific institutions.

While the President's Commission of 1978-79, in recommending the restoration of requirements in American colleges and universities, did not specify that they be stated in terms of proficiency, it separately urged the development of a national criteria and assessment program for foreign languages, as a means of monitoring the achievement and competence of learners in meeting the perceived needs of the nation for language skills. The two concepts—institutional requirements and competency assessment—were linked subsequently (1980) by the Association of American Colleges in the recommendations of its National Assembly on Foreign Languages and International Studies, specifically in its recommendation "that all college graduates achieve functional competency in speaking, listening to, reading, writing, and understanding a second language." Clearly, the linkage between requirements and competency is an idea whose time has come, and the convergence of activity within the profession and the clarification of expectations outside the profession cannot help but produce desirable results for the field and for education in general. Undoubtedly, the nation as a whole, and future generations of students and leaders as well, would be the beneficiaries if some of our leading colleges and universities would see the value of restating (or restoring) language requirements in terms of functional competencies achieved. The FSI rating scale, certified by years of professional practice and "field testing," is available for the purpose, and can be modified and adapted for the use of school and college faculty, parents, students, school boards, and administrators. It is a simple concept, but one with far-reaching positive benefits for language study and for the kind of heightened and improved sensitivity to the world's language and cultures that is now universally recognized as an essential component of education for the shrinking and increasingly interdependent and interlinked world of the late twentieth century.
Examinations may be the single most important factor in the entire educational process. Examinations in Europe have, for decades, been gatekeepers. They decide the careers and the futures of many, many youngsters. In the United States, because of the plethora of educational opportunities, the examination may not be so decisive or limiting, but nonetheless, it does control entrance to the so-called "better schools" and to the more demanding curricula. In those countries where the examination determines the future of students, the examination comes to control the educational pattern. Teachers teach for the examination, students study for the examination, the curriculum is designed to prepare for the examination, and parents have expectations that their children will pass the examination. Thus, the entire educational process is geared to the examination.

Those who prepare examinations contest this contention, in that they say the examinations simply reflect the curriculum and the expectations of the educational system. But this is a chicken and egg argument, where in all the parts are related. The textbook, the curriculum, the examination, and parental expectation all are tied together in such a way that to change one without affecting the others is impossible. Curriculum development is held back because of stasis within the examination process. The examiners, on the other hand, indicate that it is not their job to lead the way, but simply to reflect what is being done.
Were I to be given but one role in the educational process, I would wish to be the person who made the examinations, for the examinations will govern the emphasis of any program of studies. By reviewing examinations critically, one can ascertain what is being taught, what is being emphasized, and the educational processes to which students are being exposed.

In general terms, one might divide examinations as to whether they are objective or essay. The word "objective" itself has connotations not justified by objective examinations. People come to believe that an objective examination has its questions derived through some process that guarantees that the questions do reflect the state of the discipline and are both unambiguous and unequivocal. This is not so. The content emphasis and the types of questions for objective examinations are as subjectively derived as any in an essay examination. What is objective is simply the grading. Because of the way the questions are constructed, they are easy to grade and all questions are graded alike. Objectivity applies only to handling the questions but not to developing the questions.

Objective examinations have been roundly criticized as measuring only recognition. The student, in essence, is required to recognize a correct answer out of a series rather than to resort to any other educational processes. Objective examinations have been referred to as "multiple guess" examinations, requiring little on the part of the student except an examination-wise attitude.

Defenders of the objective examination indicate that a great number of questions can be asked over a large body of material in a relatively short time and that a student will have the opportunity to exhibit areas of strength by the breadth of the questioning and not be penalized by the question concentrating on the one area in which the student was weak. They also maintain
that there is more to the objective examination than simply selecting the
correct answer. They maintain that the student will also have the opportunity
to exercise higher cognitive processes through the used objective format.

The essay examination, on the other hand, asks the student to
exercise the facility of recall. A problem is stated, a question is asked,
and the student must, from the wellsprings of his own knowledge, gather the
information necessary to respond and organize it in such a way as to make a
coherent and cohesive answer. Critics of the essay examination have data to
show that the subjectivity of grading essays results in inequities. Identical
papers have been graded all the way from excellent to poor by different ex-
aminers, thus indicating a problem in the grading process. This, however,
can be militated by having a sequence of content points that must be incorpo-
rated within the essay and an assigned value for each. The essay test is a
more time-consuming process than the objective test. One might ask 50 or more
objective questions within an hour but only two or three essay questions
within a two and a half hour period. Thus, while the breadth of the essay
examination is limited, it measures a different type of knowledge and requires
different skills than do the objective questions.

The essay examination further demands writing, a skill that is much
neglected by the objective examinations, which require only the ability to
read and blacken a space between a row of dots on an examination answer sheet.
The ability to organize, the ability to write, the ability to express oneself,
the ability to use the language are all regarded as positive factors within
the essay examination.

This preface is included, not so much to judge the examinations, but
simply to indicate a difference in philosophy and a difference in attitude
toward what a student should be capable of doing after exposure to a secondary school curriculum. Thus, comparing essay examinations and objective examinations is a bit like comparing lap dogs and hunting dogs. They are both dogs, but each are useful for a different purpose and, therefore, the type of examination tends to be an exemplar of the objectives of the educational system under investigation. Study of the type of examination indicates the emphasis of the system as either a breadth coverage, as possible to measure by the objective examination, or an in depth narrower penetration as exemplified by the essay.

It is conceivable that students trained to take essay examinations might do well on objective exams on the basis of their knowledge. It is dubious that students trained on objective examinations would do equally as well with essays because of the lack of development of the organizational, recall, and writing skills required.

The following commentary is related to a study of examinations from the United Kingdom, France, West Germany, the International Baccalaureate, and the United States. The materials provided do not allow for a full scale, in depth comparison. The most complete examination sequence was that from France, concerned with the Series D Natural Sciences Examination for the Baccalaureat for 1981. The United Kingdom provided the Oxford and Cambridge Schools Examination Board General Certificate Examination at the advanced level for biology as well as the University of London General Certificate of Education Examination, advanced level in biology, both for June, 1981. 1981 O level examinations were also provided for informational purposes. For the International Baccalaureate, a 1981 biology examination at the higher level and at the subsidiary level was provided for examination. From the United
States, a sample of questions from the Achievement Tests for 1981-82 were provided in biology as well as an Advanced Placement Course description in biology for May 1982 which included both outlines and sample questions.

It can be assumed that in the United Kingdom and France, as well as with the International Baccalaureate, which most closely resembles these examinations, there is an expectation that the examination is an integral part of the educational system. In the United States, however, students may or may not take Advanced Placement work and may or may not be required to sit for an Achievement Test in biology or a College Entrance Examination Board test. It is feasible to go onto higher education in the United States without passing such an examination and, therefore, these exams within the United States neither carry the weight nor govern the future of students as the ones in Europe might.

**France**

The French have provided a 207 page book of examination questions divided geographically, with 26 different examinations that are administered throughout France on a regional basis from Aix-en-Provence to Toulouse. In addition, there are two experimental baccalaureates and one in sports studies as well as an overseas series of examinations for French speaking countries ranging from Antilles-Guyane to Senegal.

These examinations differ in degree but not in kind. The content is very largely interchangeable and the demands on the students are about the same. I am sure that any one of these examinations would be interchangeable, regardless of geographic location, with any of the others without too much problem for the students concerned. This is primarily because the French system is highly structured and all students are exposed roughly to similar materials in all
This uniformitarianism of education allows for the interchangeability of the examinations. Content is modern and reflective of the cutting edge of the discipline of biology in the 1980s. There is little on such classical topics as morphology and systematics. Where such occurs it is incidental to another process. The topics are as widely ranging as ecology, microbiology, cell biology, endocrinology, physiology, genetics, neurophysiology, spermatogenesis, electron microscopy, radioactivity, genetic pedigrees, and respiration, among others. The examinations are well illustrated, depicting experimental evidences presented in tabular form or on graphs. The experimental aspect of the discipline is stressed and the student is asked to exercise his abilities by interpreting experimental evidences, analyzing experimental data, and formulating hypotheses and is constantly enjoined to explain, to compare, to list reasons, to synthesize, to justify opinions, to interpret, to draw conclusions, to make deductions, to provide logical demonstrations, and to account for why he has given the answer provided.

The examinations are rich in graphics and emphasize the higher categories given in Bloom's Taxonomy of Educational Objectives. Analysis, synthesis, and evaluation are prized in these examinations rather than simple category one knowledge. These questions are comprehensive and demanding and I would expect that many students graduating from U. S. colleges might find them challenging. I am certain that I have seen questions no more difficult or demanding on doctoral written preliminary examinations in the United States. The expectations are high that a student has absorbed a great deal of information and is capable of utilizing it in such a way as to deal with problem situations. The questions are basically oriented that way rather than for provision of simple answers or a low level response. The examination is of a high caliber.
It expects the student to be well grounded in the discipline and be able to organize his knowledge in response to specific situations. It is taken for granted that the student will have sufficient written command of the language and ability with it to provide a coherent, legible, meaningful essay.

**United Kingdom**

The examinations from Oxford and Cambridge for the General Certificate, Advanced Level, require that the student be able to outline and describe experiments and be able to deal with quantitative data. This is an essay type examination, except as it requires more definitions than appear in the French examination. For example, it asks "What is meant by linkage?" or "Define a receptor." However, it goes beyond category one, knowledge, to ask the students to describe experiments, to give an illustrated account, and to show how structure and properties are related. It requires amplification and discussion and allows for great breadth of response in such questions as "Write an essay on the principles of classification in biology."

Comparisons are quite ingenious. For example, the student is asked to discuss the relationship between members of pairs such as dentition and diet, pituitary and puberty, bone and blood. The examination brings into play a great number of skills and requires comparison and analysis as well as evaluation.

An interesting feature of the Oxford and Cambridge School Examination is the Practical Biology Examination which takes three hours. Naturally, some of the material is simply routine and could be done without access to a laboratory. For example, the drawing and labeling of corn and bean seeds can be done without the use of the laboratory. This pedestrian introduction is followed, however, by some experimental techniques. In addition, a dissection is required.
in one aspect of the practical, which seems rather a routine use of time. However, there are more complex laboratory investigations that require a great deal of preparation. In one series, for example, each candidate is to be provided with 18 separate items to perform an experiment concerned with food tests on oranges. The experimental aspect, then, is far more than what could be categorized as "a dry lab." It does involve hands-on activities and requires the student to have not only laboratory experience but laboratory skills and be able to demonstrate them.

The University of London Advanced Level Biology Examination for June 1981 is answered in a prepared booklet and is more of a short answer or paragraph test rather than an essay. The student is given 12 questions, each of which may have up to seven different parts. Questions vary from those on electron micrographs of structure of cells through genetics, physiology, evolution, reproduction, and ecology. In addition to the two and a half hours allocated to the test item book, there are two additional examinations, one on theory and one a practical, each of which, in turn, takes three hours. The theory paper is a sequence of essays of a most general type, asking such questions as "Write an essay on either the arthropods or the angiosperms." "What is the significance of sexual reproduction?" and "Survey the ways in which fungi and mammals acquire and use carbohydrates."

I was disappointed, on the practical test, to see the statement that "Great importance is attached to the accuracy in labeling of the drawings," which is a rather pedestrian if not entirely nonbiological task. The examination seems more concerned with morphology and systematics rather than physiology, genetics, or some of the other, perhaps more germane, biological topics of the day.
The U. K. examination seems to be more concerned with what one might call classical biology than does the French examination. However, both have a lot in common. Both concentrate on the student's ability to write, to organize, to recall, and to deal with higher categories such as synthesis, analysis, and evaluation. The U. K. examination, more than the French, includes category one knowledge materials but, under either system, the student is given a chance to show what he or she can do with the knowledge he or she has acquired. The examinations are demanding and time consuming.

**International Baccalaureate**

The International Baccalaureate more resembles the U. K. examinations than the French. Again, they concentrate on writing. They ask the student to design experiments, to make calculations, to draw graphs and, while not as comprehensive as some of the others, nonetheless are quite acceptable.

I had trouble with the International Baccalaureate because I didn't believe the questions were as lucid as they could be. For example, question one on paper two is a long one discussing a fluid surrounding cells. In the second half of the question, the fluid is identified by reference to the lymphatic system so that the question, in part, provides an answer to the student. Similarly, on question six on the second page of the same examination, I was a little confused by the statement that asked the student to "Write a clear explanation of chromosomes." I couldn't ascertain whether it was requiring the student to respond by including all he knew about chromosomes or simply that a shorter, more terse definition might be adequate.

The examination is in two parts. In the first section all 20 questions have to be answered. In the second, the student can choose two out of a list...
of 12. The 20 questions are in two groups of ten, the first primarily being concerned with cells, the second with chromosomes. There is a somewhat restricted nature to the required answers for the first part. However, the second part allows the student to pick and choose in an area in which he or she feels competent.

United States

The sampler of the Achievement Test from the College Board contains 20 multiple choice questions primarily relating to diagrams and graphs. The claim is made that these questions are organized in categories from knowledge through comprehension, application, analysis, synthesis, and evaluation. However, it seems to me that properties are ascribed to these multiple choice questions that they may not possess. For example, a question described as relating to the higher objectives (analysis, synthesis, evaluation) describes an animal breeder who expected a one:one ratio of black to white offspring. He did not get this. The student is then asked why the breeder's original conclusion was unsound. The answer is that genetic ratios are reliable only for large numbers of offspring. No processes of analysis, synthesis, or evaluation are necessarily involved. The student needs simply to know the fact that genetic ratios are reliable only for large numbers of individuals and the answer stands out like a sore thumb. The way the question is structured there is no process required to select a correct answer and, therefore, despite the disclaimer that this item is related to higher objectives, it has immediately degraded to category one knowledge. Similarly, the other question in this category describes an experiment and asks the student the procedure that would be most valid in testing a new drug. The answer, again, is one that can be
garnered from previous knowledge. One simply needs to know experiments and controls to answer the question and no analysis, synthesis, or evaluation is required. This is in sharp contrast to the examinations from the United Kingdom, France, and the International Baccalaureate, where the student is specifically required to synthesize, to analyze, or evaluate without clues and without the possibility of resorting to a simple recognition of the answer.

In short, the 20 questions provided seem very largely to be able to be answered from simple recall of information and require no significant processes. Despite the fact the student must know how to read a graph and be able to understand cell organelles and their function, there is still no higher categories called for despite the assigning of them to specific questions. Parenthetically, it might be observed that the 0 level examination from the University of London is an objective examination. In the United Kingdom, at least, there is a consciousness of objective examinations but they obviously feel they do not measure what is needed for an advanced level performance.

The U.S. test seems largely concerned with detailed information. While there is breadth in the questions asked, there is no consequential depth. I admit to being perturbed by question 11, which deals with predators and prey, and keeps using a plural "preys" when normally, in biology, prey is considered both singular and plural, as is deer. Although the dictionary does allow this it is, nonetheless, an aberrant form to most biologists and one which would not be expected to be found in an objective examination.

More impressive is the Advanced Placement program of the College Board. I was provided with an outline of an Advanced Placement Biology Course. One might argue concerning detail but, by and large, it is a solid modern course in biology although short on genetics and development, and, perhaps, overly
expansive on organismic biology.

The Advanced Placement multiple choice questions seem to have had more thought placed upon them. They do go beyond category one knowledge and do ask the student to have some considerable content background and be able to manipulate it. In addition, the multiple choice questions are supplemented with essay questions, which are sound and demanding. However, one realizes that the Advanced Placement Examination can be considered to be essentially at the collegiate level because of the fact that it assumes the student is taking a collegiate course at the secondary level. It is not properly an admissions examination but, as its name suggests, an Advanced Placement one. It does not so much measure accomplishment or achievement at the secondary school level as accomplishment beyond that level.

If the achievement tests for the U. S. admission testing program are a criterion, they do not stand up well to the examinations from the United Kingdom, from France, or to the International Baccalaureate, because they are less demanding, more detail laden, require no writing, nor do they concentrate; despite their disclaimer, on higher categories of educational objectives. They are simpler, more directed, and more pedestrian than those from foreign examinations and are likely neither to be demanding nor deeply critical of a student's performance.

West Germany

The questions used in the Abitur throughout Germany last year are exclusively essay type questions. The student is asked to criticize, estimate, explain, plan a research study, evaluate, interpret, analyze, as well as to defend his answers.

In the A examinations, for students who specialize in a particular
subject, the questions deal primarily with genetics, biochemistry (enzyme synthesis), and ecology. The materials are quite modern. For example, one genetics question deals with Legionnaire’s Disease and the bacterium that causes it. It incorporates antigen and antibody reactions, gene hybridization, and immunobiology.

The questions give pedigrees to work out, request models to be sketched, and provide quantitative data with which to deal. They are experimen tally based, and the student must demonstrate how he or she handles data in deriving the answers called for.

In the B examination, which is of a more generalized type, the questions nonetheless do not approximate those of the O level in Great Britain. Again, data is given both in words and by means of charts, graphs, and diagrams, and the student is asked to analyze, discuss, formulate a hypothesis, and delineate possible experimental proofs. These questions deal with animal behavior, Drosophila genetics, the physiology of metabolism, and ecology. Here, again, the work is basically experimental. Students have not only to understand data but manipulate it in response to specific questions. One question, for example, demands the student determine the order of a specific group of genes from the data given and then to defend his answer in terms of his procedures used. The emphasis is on higher cognitive categories. The student cannot get by solely with definitions or the ability to recognize an answer set in front of him. It requires skill and knowledge at the cutting edge of the discipline to perform well on this series of questions.

Summary

In terms of difficulty and expectations, the German examinations are the equal of and perhaps even more demanding than those given in France. The
ranking remains, therefore, in terms of expectations and performance, Germany, France, United Kingdom, International Baccalaureate, and the United States.

The Advanced Level European examinations are exclusively of the essay type. They demand recall, organization, and the ability to express oneself in writing in a lucid fashion. While they demand knowledge, the emphasis of the examinations is on higher categories of skills such as analysis, synthesis, and evaluation. In the French examination designed for Canada and the United States, a student is given about a half page of information on the physiological experiments of Claude Bernard and then asked what data can be deduced from these experiments and the evidences for the role of the liver in the experiment. Additional data is then given and the student is again asked what he is able to deduce and requested to summarize, on the basis of the preceding results, the role of the liver in maintaining blood sugar levels. Questions of this type demand the ability to analyze an experiment, to evaluate the results, and to synthesize the data to draw a conclusion.

In the Oxford and Cambridge General Certificate Examination, A Level, one part of one question asks, "What is meant by linkage? What is the evidence for linkage, and what is its importance in heredity?" This question, too, demands knowledge and the ability to organize it. Here again one must analyze the available evidences, evaluate them, and provide a synthesis of their importance.

In the International Baccalaureate, the student is asked to write an essay on the link between sex and heredity. No data is given and all of the knowledge brought to bear must be recalled. Again, comparison, evaluation, analysis, and synthesis are required to produce a meaningful answer.

In contrast, the examinations in the United States are either wholly
or at least fifty per cent of the objective type. The Achievement Test is solely objective and contains such questions as "Blood richest in oxygen is carried by which of the following vessels?" The student has five printed choices and should be able to pick "pulmonary vein" out of the list with little difficulty. The answers are sitting there acting for the student much in the same manner as cue cards act for a television performer. "Can you read and can you recognize a correct answer when you see it?" is about the level of skill required to answer questions of this type. The closest examination in the United States to those given abroad is that of the Advanced Placement Course. Here, the student has approximately three hours, one and a half to be spent on objective questions such as "Which of the following is true about an enzyme?" "discuss," "describe," or "state." In short, they require descriptive answers rather than analytical ones. Unlike the European examinations, there is no practical laboratory component, no data or experiments to analyze, and no emphasis on scientific process in the questions available to me.

Assuming that examinations reflect course content and emphasis, it is quite apparent that the European system emphasizes the experimental nature of biology as a science and requires students to derive conclusions from experimental data. Higher category skills are requisite for effective handling of these examination questions. These examinations constitute filters for students planning to enter the realm of higher education and demand a preparation in a topic such as biology that will allow the instructors to proceed from a given knowledge base. In contrast, the examinations in the United States are almost bereft of experimental data and, while attempts to measure higher cognitive skills are made on the objective examinations, these efforts easily
can be degraded to simple recognition of a correct answer. On the essay segments of the examination emphasis is primarily upon descriptive rather than analytical, synthetic, or evaluative skills.

The examinations reflect the objectives of the educational system concerned. The European examinations are more elitist oriented and those in the United States more egalitarian. There is some recognition of this when one notes that the O level examination in the United Kingdom is of an objective variety.

The examinations in the United States are evidently quite satisfactory in terms of our current educational expectations but, unfortunately, they may be reinforcing these expectations rather than raising them. If reasoning and problem solving are desirable outcomes of education, the reviewed examinations place almost no emphasis upon these skills and, therefore, serve to focus the educational enterprise more upon simpler cognitive skills. An educational experiment whereby samples of American high school graduates could be given selected questions from European examinations would provide data that would show how students in the United States can respond to requests for utilizing higher skill categories.

Examinations reflect and reinforce the curriculum, but unless and until examinations can be annually revised to reflect consequential educational objectives, education will remain in a state of stasis.