

CHAPTER II

EARLY STEPS TOWARD FORMAL TESTING

FOR COLLEGE ADMISSIONS

Introduction

In the last 100 years, both admissions criteria and the methods of assessing whether a candidate meets those criteria have changed dramatically. The innovations reflect the impact of changes in the role and scope of higher education, changes in the configuration and demographics of American secondary education, and the radical rethinking of concepts of measurement and assessment. In 1903, Edwin Cornelius Broome of Columbia's Teachers College described the relationship between admissions requirements and the nature of secondary and higher education noting:

Had the American college remained substantially as we found it at the opening of the nineteenth century, had the preparatory school continued to be the Latin-school of the colonial period, the articulation between secondary and higher education in the United States would probably never have caused difficulty; in short, college admission requirements would never have been a serious and perplexing problem.¹

Prior to World War I, the admissions decisions of American colleges and universities did not emphasize academic selectivity. With small numbers of

¹ Edwin Cornelius Broome, A Historical and Critical Discussion of College Admission Requirements Columbia University Contributions to Philosophy, Psychology and Education (New York: MacMillan Co., 1903), p. 71. Joseph Lindsey Henderson, a Professor of Education at the University of Texas, made a similar point in his chapter "Educational Conditions in the United States About 1870," Admission to College By Certificate, (New York: Teachers College, Columbia University, 1912), pp. 13-41.

students choosing to attend college, even prestigious institutions scrambled to fill classes. Although colleges sought a minimum standard of academic preparation, their limited appeal led them frequently to admit, "with conditions," students who did not meet minimum standards.² David O. Levine points out that as late as the first decade of this century a general lack of demand for higher education meant that the enlarged conception of the American institutions of higher education held and enunciated by a small group of distinguished universities remained largely unrealized.³

In the second half of the nineteenth century, educators struggled to cope with the problem of college admissions; the old processes based on private preparatory schools, which enjoyed special relationships with colleges and personal interviews, could not meet emerging needs. One approach to solving new college admissions dilemmas--the certification of high schools--avoided admissions tests altogether. A second approach, requiring written essay admissions examinations, paralleled the introduction of written examinations for matriculated students in higher education.

This section focuses primarily on these written essay examinations. The movement to expand the use of these tests will be juxtaposed at points with the competing "certification movement." Harvard University introduced essay admissions examinations at mid-century as instruments to test what students knew. These tests became widely adopted in the post-Civil War period. At the

² David O. Levine, The American College and the Culture of Aspiration 1915-1940 (Ithaca: Cornell University Press, 1986), p. 17.

³ Ibid. In this important recent book that highlights the significance of the interwar period to American higher education, Levine notes that during the decades prior to World War I, "the so called elite universities had less impact than historians, educators, and the public have assumed."

turn of the century, the College Entrance Examination Board codified these examinations, then, immediately prior to World War I, modified them in an early attempt to test student learning aptitude and reasoning ability. The 1916 modifications stemmed from a desire to go beyond recall of material and to test prospective students' "mental power"; this same desire, ten years later, would usher in the Scholastic Aptitude Test.

Examinations in Early Colleges

American higher education first used examinations to determine readiness for graduation. There is evidence that in 1646, ten years after its founding, Harvard University used an oral disputation at commencement to demonstrate the candidate's intellectual abilities.⁴ Initially examinations at other schools such as William and Mary and Yale were oral and public.⁵ In some cases these examinations were disputations involving a questioner and the respondent; in others, they were individual declamations.

Educators did not, however, consider these public examinations successful. Harvard professor George Ticknor remarked in 1825 that the exams were "neither thorough enough nor long enough to test properly either the abilities of a student or the degree of advancement which he had attained." Ticknor concluded that "heretofore, the public examinations at most of our places of education . . . have been miserable farces, which have imposed on nobody,

⁴ Mary Lovett Smallwood, "An Historical Study of Examinations and Grading Systems in Early American Universities," Harvard Studies in Education 24 (1935) p. 8. Smallwood makes extensive use of primary source materials including faculty records of Harvard, William and Mary, Yale, Mount Holyoke, and Michigan to document the use of examinations in these colleges up until 1900.

⁵ Ibid.

not even the students subjected to them."⁶ Although unsuccessful for graduation purposes, oral examinations did serve as important precursors to later forms of examinations.⁷

Oral Admissions Examinations

The second use of examinations was in college admissions. Entrance into each institution demanded that some subjective opinion be reached concerning a student. In general, college entrance examinations in the first half of the nineteenth century were highly personal.⁸ Like early graduation examinations, early admissions tests were oral. The criteria of success were at first vague, subjective and general.

Admissions tests in the early nineteenth century reflected more the peculiarities of specific institutions than established academic standards. Pre-Civil War colleges were extremely dependent on tuition for their financial survival. Competition among institutions to attract the necessary students in order to balance their budgets played a major role in shaping admissions policies.⁹ It was

⁶ George Ticknor. "Remarks on changes Lately Proposed or Adopted in Harvard University. pp. 5. [Cited in Smallwood, page 11-12.]

⁷ These declamations can be considered precursors to the "Harvard General Examination." See: A. Chester Hanford, "Tests and Examinations At Harvard" in William S. Gray ed. Tests and Measurements in Higher Education, (Chicago, University of Chicago Press, 1936), pp. 5-26.

⁸ The degree of subjectivity is stressed by George E. Maclean, who noted that these oral examinations included an assessment of the "appearance and character of the candidate." See: George E. Maclean, "Which is Better: The Western Plan of Admitting Students to colleges and Universities By Certificates from Duly Inspected Secondary Schools, or the Eastern Method of Admitting Only by Examinations Conducted by Representative Boards or Otherwise?" Proceedings of the National Educational Association (1905) pp. 502.

⁹ Levine, The American College, p. 138. Levine notes that this scrambling for students continued at many schools until World War I. Yale's James R. Angell commented, "Oh, spirit of Democracy, what scrambles for numbers and fees are performed in thy name." Cited in Levine, p. 138.

common for these early institutions to assist potential students in their preparation for college. This assistance sometimes was provided through proprietary preparatory schools and sometimes through individual tutors--most frequently ministers who were alumni of the college.¹⁰

Typically the preparatory agent prepared a student quite pointedly for the entrance requirements of a single local college. Then, immediately prior to the beginning of the fall term, the prospective freshman appeared for an interview with the president and several faculty members of the college. These men, who often were acquainted with the applicant, questioned him on his previous studies in Greek, Latin, and mathematics. "The decision to admit a student . . . was determined by the quality of his answers, [and] the college's financial picture."¹¹

Gradually the requirements became rigid and specific.¹² Harvard University introduced the word "examination" into its admissions requirements in 1734 when its laws were revised to include the phrase: "Whoever upon Examination by the President and two at least of the tutors shall be found able to read, construe, and parse, Tully, Virgil. . . ." ¹² Yale University began to codify its oral entrance examinations in 1815, when it specifically prescribed that prospective students be examined in the work of the preceding year, or, in the case of senior students, in the work of the current year.¹⁴ Yale's early

¹⁰ Harold S. Wechsler, The Qualified Student: A History of Selective College Admissions in America (New York: John Wiley and Sons, 1977), 6.

¹¹ Ibid.

¹² Smallwood, "An Historical Study," p. 11.

¹³ From a manuscript copy of laws by President Wadsworth. Cited in E.C. Broome, Historical and Critical Discussion, p. 29.

¹⁴ Yale Faculty Records, May 6, 1815. Yale University Archives.

nineteenth-century move toward codification was, however, the exception; most colleges did not make such changes prior to the Civil War.

A University Model Emerges

After the end of the Civil War, American higher education made a marked transition from a collegiate model, characterized by small--often sectarian--locally oriented colleges, to a university model, characterized by large--generally secular--institutions with regional or even national constituencies.¹⁵ As higher education made rapid changes in the last third of the nineteenth century, the problems of college preparation and admissions policies became far more complex.

Few of the concerns that had previously influenced admissions decisions were relevant to the emerging modern research university. The centralization of decision making in society and processes of industrialization and urbanization placed a premium on the growth of knowledge, thus increasing the status of the professions and redefining the role of higher education.¹⁶ Complex universities, with their national constituencies, their regional or even national pools of applicants and their broader funding bases, had new problems to consider in selecting students.

¹⁵ Frederick Rudolph, The American College and University: A History (New York: Vintage, 1962), pp.177-200. E.C. Broome, writing in 1903 places these changes in the context of the individual student: Students who had left college as boys at the outbreak of the Rebellion returned men, no longer amenable to the old-fashioned disciplines. See: Broome, Historical and Critical Discussion, p. 48.

¹⁶ Burton Bledstein, The Culture of Professionalism: The Middle Class and the Development of Higher Education in America (New York: Norton, 1976) p. 127. Bledstein notes that higher education became a "social necessity and a source of public acceptance."

The American Public High School Emerges

Striking alterations in American secondary education paralleled the reconfiguration of American higher education in the years following the Civil War. These secondary school changes, too, had direct effects on college admissions procedures. Edward Krug points out that, well into the decade of the 1880s and 1890s, the broad classification "secondary education" was quite loose, including academies, public high schools, seminaries, and secondary or preparatory departments maintained by colleges.¹⁷ Further, the boundary between secondary schools and colleges was not clearly defined. The public high school did not gain the numerical lead among the various types of secondary education until the mid 1880s.¹⁸

The demographics of secondary education underwent dramatic changes in the last two decades of the nineteenth century. It was extremely rare to go to high school in the 1880s; in 1889-90 less than one percent of the total population was enrolled in public high schools.¹⁹ Among those attending, a very small percentage went on to college.²⁰ However, with demographic shifts and population growth bringing people to the cities where public high schools were available, the number of public high schools grew dramatically in the 1890s.

¹⁷ Edward A. Krug, The Shaping of the American High School: 1880-1920 (Madison, University of Wisconsin Press, 1969), p. 3.

¹⁸ Ibid., p. 5. Krug cites the Report of the U.S. Commissioner of Education. In 1889-90, there 202,963 pupils enrolled in 2,526 public high schools and 94,391 pupils enrolled in 1,632 private secondary schools including academies.

¹⁹ Ibid., p. 11.

²⁰ Ibid., p. 6. See also: Levine, The American College, p. 16. Levine points out that as late as 1913 fewer than one in twenty young persons attended college.

Moreover, the total number of students enrolled increased by a factor of over two and one half in that decade.²¹

Within these growing high schools--both public and private--ever larger percentages of students were preparing for college. In 1900 the U.S. Commissioner of Education reported that 30.28 percent of the public high school graduates and 46.43 percent of the private high school graduates were enrolled in college preparatory curricula.²² The number of graduates who did, in fact, enroll in higher education similarly represented a dramatic increase from ten years earlier.²³

Higher education responded to these new circumstances in admissions in two ways; some institutions introduced or expanded the use of written examinations for applicants, while others established new relationships with the secondary schools who would certify the suitability of the candidates sent from that school.

The Certificate System

The University of Michigan led the nation in one approach to dealing with the complex admissions considerations introduced by changes in post Civil War society. In the 1870s, recognizing that the traditional model of personal examination or interview of each candidate was no longer workable,

²¹ Krug, The Shaping, p. 169.

²² Report of the U.S. Commissioner of Education (Washington, Bureau of Education, 1901), pp.2120-2122 and 2125-2127. Cited in Edward A. Krug. "Graduates of Secondary Schools in and around 1900: Did Most of Them Go to College?" The School Review 70 (Autumn 1962):269.

²³ The precise figures for secondary school students who then enrolled in college in 1900 is arguable. For a discussion of the debate among historians of education over this question see: Krug "Graduates of Secondary Schools," The School Review, pp. 266-272.

administrators at Michigan launched an innovative admissions program based on certifying high schools to attest to the qualifications of applicants. Michigan's calendar for 1870-71 issued the following notice:

Whenever the Faculty shall be satisfied that the preparatory course in any school is conducted by a sufficient number of competent instructors, and has been brought up fully to the foregoing requirements, the diploma of such school, certifying that the holder has completed the preparatory course . . . shall entitle the candidate to be admitted to the university without further examination.²⁴

In this program The University of Michigan granted high schools accreditation that entitled them to certify the preparation and admissibility of their graduates.

Other institutions emulated Michigan's plan for admissions; the growth of this approach, however, varied by region and by type of institution.²⁵ The Universities of California and Wisconsin quickly followed Michigan's lead. Indiana and Minnesota modified the approach to certificates by having state departments of education provide the accreditation. Admissions by "certificate" became quite popular in the midwest, where it had originated, and in the west in the years between 1870 and 1900.²⁶ In New England this approach also grew rapidly but

²⁴ Calendar of the University of Michigan, 1870-71, page 49. Cited in Broome, Historical and Critical Discussion, p.116.

²⁵ See: Broome, Historical and Critical Discussion, pp. 116-125 and Krug, The Shaping, p. 153.

²⁶ According to E.C. Broome, "By 1897 there were 42 State colleges and about 150 other institutions in which some form of a certificating system of admission was in use." Broome, Historical and Critical Discussion, p. 118. Henderson's 1912 study of admissions cites similar figures for the same time period. Broome's and Henderson's studies are diametrically opposed in their attitudes toward certification. Broome being quite critical of the system and Henderson proposing a "national system." Joseph L. Henderson, Admission to College by Certificate (New York: Teachers College, 1912) p. 165.

not within the Ivy League schools.²⁷ In the middle Atlantic states, opposition from Columbia and Princeton retarded acceptance of the certificate system.²⁸

With a growth of the certification approach to admissions came problems for both the secondary schools and the colleges. From the secondary school point of view, the certification process meant they were subject to visits from many different universities. Some secondary schoolmen feared that, if given responsibility for determining fitness for college, they would be set up to take "all responsibility for failure."²⁹

The colleges also faced difficulties in implementing certification. A certification system with the capacity to evaluate meaningfully students from broad geographic regions required frequent visits to a large number of schools. These annual visitations took a tremendous effort on the part of the colleges' faculties. As the geographic areas from which colleges drew their students expanded, it became physically impossible for colleges to certify all potential "feeder" schools. To cope with this problem, universities occasionally accepted the certification processes of other comparable institutions; this was allowed, however, only with great reluctance.³⁰ Some universities accepted certification of distant schools by alumni who lived near the school being evaluated; others

²⁷ Wechsler, The Qualified Student, p. 58. Wechsler contends that this growth "counteracted the enormous regional influence of Harvard and Yale."

²⁸ Ibid. p. 58

²⁹ Isaac Thomas. "The New England Certificate Board from the Standpoint of Schools," School Review (November, 1904), p. 607. See also: Charles W. Parmenter. "Entrance Requirements and the College Degree," Education, January 1913, pp. 276-280. Parmenter asserts (page 278) that the certificate system led to an "assumption that preparatory schools are responsible for failures in colleges."

³⁰ See Henderson, Admission to College, pp. 80-81 and p. 159.

extended the time between visitations. Critics of the system pointed out that certification of a school's graduates was "like English common law, the precedent once established, the thing becomes fixed then grows."³¹ These critics feared that simply a general reputation for being a "good school, or because its principal was graduated from the college in question," might allow for unlimited certification.³²

By the turn of the century, some educators attempted to coordinate school accreditation.³³ There was, however, a general reluctance among faculty members to relinquish any of their direct control over the certification process either by such delegation of authority or by the development of a system of institutional reciprocity.³⁴ Significantly, it was the Ivy League schools that led the resistance to the certificate system. Although they each accommodated in their own way the certificate in their admissions processes, these schools were the leaders in another form of admissions selection--the institutional essay examination.³⁵

³¹ Broome, Historical and Critical Discussion, p. 118.

³² Ibid. Broome argued that "the Certificate system without a thorough inspection of the preparatory schools, with no safeguard except the biased judgment and self-interested sincerity of the high-school principal, is unsafe at its best, and deserves no further consideration at this point." (p. 118).

³³ Krug, The Shaping. See pages 152-157 for a discussion of the 1901 Convention of the North Central Association at which Dean S.A. Forbes of the University of Illinois led the effort to coordinate accreditation. See also: Wechsler, The Qualified Student, Chapter 3: "The Spread of the Certificate System" pp. 43-45.

³⁴ Wechsler points out that this reluctance was paralleled by reluctance on the part of some high school headmaster's to take on any "power of selection and the accompanying responsibility." see: Wechsler, The Qualified Student, p. 42.

³⁵ Wechsler, The Qualified Student, p.57. Wechsler points out that Brown, Cornell, Dartmouth, and Pennsylvania admitted students by certificate, citing documentation from the First Annual report of the New England College Entrance Certificate Board and Walter C. Bronson's

Written Admissions Examinations

A second response to new, post civil war complexities of college admissions was to modify and formalize the admissions testing process. As long as colleges and universities were both unable to certify all high schools from which potential students might apply and unwilling to accept the validity of the certificates of other universities, individual institutions needed to modify their approach to admissions. The Ivy League schools, having resisted the certificate approach to admissions, provided leadership in the development and advocacy of institutional examinations. Even among those institutions that embraced the "certificate plan," coexisting alternatives were necessary to meet the needs of students who attended distant or otherwise uncertified secondary schools. To complement the "admissions by certificate" approach, many institutions developed extensive admissions examinations, which became a necessary alternative for students who graduated from uncertified schools.

The highly personal oral examination was impractical for the new, larger colleges. An alternative was to have the prospective student respond in writing to questions. Written examinations for any purpose represented an entirely new way of assessing student knowledge or ability. Before the latter part of the eighteenth century, when Cambridge University began using dictated questions, the expense of printing papers was prohibitive.³⁶ Harvard University, which,

The History of Brown University pp. 402, 476. Columbia would become the leader in the creation of the College Entrance Examination Board, which, until 1942, would directly seek to influence the secondary curriculum in ways produced an effect very similar to "certification." See: John A. Valentine, The College Board and the School Curriculum (New York: College Entrance Examination Board, 1987), for a discussion of the Board's "standard setting role."

³⁶ Smallwood, "An Historical Study," p. 15. Smallwood quotes from the Historical Register of the University of Cambridge to the Year 1910,. p. 352.

along with Yale, had been using written examinations for purposes other than admissions in the 1830s, introduced the written admissions test in 1851.³⁷

Even prior to this innovation, faculties had sought ways to divide the entering class into "sections qualified to progress together."³⁸ Using written examinations allowed this sectioning to be more precise. The 1850 faculty legislation at Harvard that established the written entrance examination also introduced specific categories of deficiencies or "conditions" and prescribed circumstances under which a candidate could makeup any deficiencies.

A student examined at the regular time and admitted with conditions, must make up the studies in which he is conditioned by the end of the vacation and pass a satisfactory examination in them before he can be permitted to join his class. . . . If they are not then made up, his connection with the college shall cease.³⁹

The introduction of written examinations both for admissions and for evaluation of matriculated students provided the basis for an increased emphasis on standards. Unlike student performance on oral examinations, student answers to written examinations could be saved and reevaluated. Moreover, a broader range of faculty members could be involved in evaluating of answers. Thus these written examinations provided the basis for greater objectivity and for stricter standards.

Initially, these written examinations, like the oral examinations, required the candidates to travel to the college, but, unlike the personal interviews of the early colleges, they were administered to groups of candidates. Beginning in the

³⁷ Broome, Historical and Critical Discussion, p. 37. Broome contends that there was no trace of written admissions examinations until mid 19th century.

³⁸ Harvard Faculty Records 11 (1829-1840). May 2, 1836. Cited in Smallwood, "An Historical Study," p.79.

³⁹ Ibid.

1870s, Harvard and Yale began to administer their institutional examinations at locations other than their campuses. This practice soon spread to other colleges. Usually the additional locations were secondary feeder schools.⁴⁰

Some proponents of the examination system contended that the use of written examinations should not simply be an alternative to admissions by certificate; these critics argued that no candidate should be admitted without some kind of test. Writing in 1903, E.C. Broome, an outspoken critic of the certificate process, asserted that the absence of examinations encouraged superficiality and deprived the students of a "valuable review and of an equally valuable intellectual exercise."⁴¹ Furthermore, he continued, "thorough examination, administered judiciously, [was] the most effective means of maintaining the proper educational standards."⁴² Alarm about the lowering of standards was not, however, the sole province of the advocates of examinations; some academics asserted that these early institutional essay exams themselves

⁴⁰ Harold Wechsler contends that some colleges, in addition to allowing examinations locations other than their campuses, "flirted with the idea of accepting the results of entrance examinations offered by other colleges." Wechsler, The Qualified Student, p. 55. There is no evidence, however, that such thought of coordination was common.

⁴¹ Broome, Historical and Critical Discussion, p. 150. Edward J. Goodwin, New York state's "second assistant commissioner of education" similarly argued that the written examination was necessary to preparation for college: "It is an axiomatic truth that no training given by the school is more valuable than that which enables the student clearly and accurately to state in writing what he knows and thinks." Edward J. Goodwin. "Discussion" NEA Proceedings, 1905. pp. 511. Goodwin is here advocating the use of essay examinations and countering the arguments of the main speaker, Maclean]. Professor James E. Russell of Teachers College, Columbia, speaking to the Association of Colleges and Preparatory Schools in the Middle States and Maryland, expressed a similar sentiment. Moreover, he broadened the sentiment: "But seriously, it is good for a boy occasionally to have to pass formal examinations. he may some day want to be a civil servant--a policeman, a street-sweeper, or a teacher (this is not intended to be an anti-climax)--and then he will be required to come to terms with a list of questions and an examining board." James E. Russell, "The Education Value of Examinations for Admission to College," speech reprinted in The School Review (January 1903):42.

⁴² Broome, Historical and Critical Discussion, p. 152.

were as ineffective at screening students as had been the certificates issued by high school principals. Others argued that the examinations were inferior to the certificates because "a good preparatory teacher, in nine cases out of ten, can judge the fitness of his pupils to enter college better than any college-entrance examination."⁴³

Institutional Essay Examinations: Criticisms and Problems

By the end of the nineteenth century, educators increasingly criticized the institutional essay examinations. Some criticisms stemmed from the methods used to prepare the tests. Usually senior members in the department of each required subject wrote the examinations. These professors were generally unfamiliar with the theory or practice of testing. In addition, the level of difficulty and types of questions asked varied from year to year and from department to department. Because of a dearth of coordination among departments, the examinations varied from relatively easy and trivial to extremely rigorous.⁴⁴ In addition to these problems in developing the institutional tests, colleges and universities faced ambiguities over responsibilities for grading them. At Columbia

⁴³ George E. Maclean, "Which is Better: The Western Plan of Admitting Students to colleges and Universities By Certificates from Duly Inspected Secondary Schools, or the Eastern Method of Admitting Only by Examinations Conducted by Representative Boards or Otherwise?" Proceedings of the National Educational Association, 1905, pp. 505. Invidious comparisons of the two systems have left curious legacies. In her 1935 Yale Dissertation, a generally well argued document, Mary Smallwood, apparently unconsciously reflects an eastern bias for the tests. She asserts that Michigan Regent's reports suggest that there "were no entrance requirements in some departments. . . Freshmen entered on a certificate from the schools. . ." Smallwood, "An Historical Study," pp. 80-81. It should be noted that not all educators were concerned about standards being lowered; Smith College President L.C. Seeyle, noted in 1908 that the increase in admissions standards to colleges would produce "a grievous loss if by postponing the time of graduation family life should be impaired. The longer marriage is delayed, the less likely men are to marry. A college education should not contribute to the modern tendency to celibacy." L.C. Seeyle, "College Entrance Requirements" Educational Review (April, 1908) p. 429.

⁴⁴ Wechsler, The Qualified Student, p. 55.

University, Thomas S. Fiske, in his role as chair of the "university committee on entrance examinations," wrote to President Seth Low in frustration requesting that Low inform faculty members that they must remain in town to grade the exams: "it is necessary, at the earliest possible moment, to notify those officers of instruction . . . that they should arrange not to leave the University until the work of the examinations has been brought to an end."⁴⁵

The uneven nature of examinations among departments on a single campus created problems for applicants which were compounded by the total lack of coordination or agreement among colleges regarding what should be taught in a college preparatory curriculum and what should be the content of the entrance examinations. Frank A. Manny illustrates succinctly the implications of this anarchy. He cites the case of a teacher who asked a student why he had not prepared his lesson for the day; "'You forget' responded the student, 'that I am going to Princeton, and we do not need the Ancient Mariner there.'"⁴⁶

Critics of the use of written institutional examinations for admission in large part favored the further development of a certification system. They argued that the examinations, even at their best, could never indicate, in a brief testing period, what a high school teacher or principal could learn in years of contact. The major changes that would come in admissions, however, did not reflect this desire for systems of certification; the changes reflected coordination of testing.

⁴⁵ Fiske to Low, March 17, 1900. Seth Low Papers, Seth Low Library: President's Office, Columbia University. One month later Fiske asks Low to disabuse a Professor Hamlin of the notion that the University will "express test answer booklets" to him in the country. Fiske stressed that he "unwilling to have any long-distance connection in the work of reporting the examination." Fiske to Low: (May 18, 1900) Seth Low Papers, Seth Low Library: President's Office, Columbia University.

⁴⁶ Frank A. Manny, "The Background of the Certificate System," Education 30 (December, 1909) p. 205.

The Formation of the College Board

At the turn of the century, the admissions policies governing access to American higher education were chaotic. Academics at the universities felt caught between two unattractive alternatives: trusting the judgment of unknown high school principals or trusting haphazardly drawn and hurriedly scored entrance examinations. From the secondary school point of view, the uncoordinated certification process meant being subjected to visits from more than one accreditation committee and thus the schools had to simultaneously respond to different demands of different colleges and universities. The uncoordinated system of examinations meant that secondary teachers had to anticipate and help their students prepare for varying institutional examinations.⁴⁷

Educators recognized this chaos and sought better coordination; by 1900 calls for reform had a twenty year history. The topic of reform was a focus of discussion at numerous conferences and a constant theme in publications.⁴⁸ Nicholas Murray Butler, a professor of philosophy at Columbia, acknowledged that a crisis existed and declared that colleges could agree "neither upon subjects to be offered or tested for admission nor upon topics within these subjects."⁴⁹ Thomas S. Fiske, chairman of Columbia's committee on entrance

⁴⁷ For a discussion of the impact of this chaos on the secondary schools, see Edward A. Krug. *The Shaping of the American High School: 1880-1920* (Chapter 7: "The Rise of Accreditation" pp. 146-168. Krug contends that the institutional examination system and the certificate each, in their own way, allowed for freedom for the secondary schools. "Under the accreditation system principals and teachers were freed from the pressure of getting pupils ready for examinations. They did not feel the compulsion to coach." (p.155) In contrast, the examination system, "freed the local school from conforming to defined standards of accreditation committees or other outside groups . . . the pupils were on their own." (p. 156).

⁴⁸ John W. Valentine, *The College Board and the School Curriculum*, Chapter One, "Eliot's Idea and Butler's Triumph" pp. 3-16. [Valentine gets his title from Krug.]

⁴⁹ Cited in Claude M. Fuess, *The College Board: Its First Fifty Years*, (New York: College Board, 1967), p. 6.

examinations, asserted that the "colleges, moreover, felt that there was a great waste of energy if each were maintaining an independent examination system while one could serve the purpose of all."⁵⁰

To bring order to this chaos, Butler, along with Charles William Eliot of Harvard, labored hard to establish a board that could coordinate college admissions.⁵¹ As a result of these efforts, but not without serious opposition from colleges that feared a loss of autonomy, the College Entrance Examination Board received its charter in 1899 and began to operate in 1900.

Initially the College Board had two purposes.⁵² First, owing to the early leadership of President Charles W. Eliot of Harvard, the early Board would

⁵⁰ Thomas S. Fiske to Mr. Alexander Berglund, Editor, *Tidskrift for Praktiska Ungdomsskolor*, Hudiksvall, Sweden. February 17, 1925. Copy of letter in Butler Papers, Seth Low Library, Columbia University. The date and destination of this letter is significant: Fiske is writing 25 years after the founding of the Board to a foreign newspaper editor. The six page letter is probably correct in indicating that colleges recognized waste; the vantage point of twenty five years, however, makes the process sound more smooth than was the case. For example, had colleges generally been bothered by the waste, it would not have taken Harvard, Yale, and Princeton fifteen years to begin to rely on the Board examinations without simultaneously administering their own tests.

⁵¹ Butler would later say that he did "regard the College Entrance Examination Board as one of my educational children, since it was my own conception and I had to do all the hard work in getting it authorized and organized. The opposition, particularly from the colleges, was very great and the only president who gave me any help was President Eliot. He was unable, however, to influence his own faculty to join the Board or to accept its work for a long time." Butler to Fiske, March 6, 1925. Butler Papers, Seth Low Library, President's Office. The prevailing interpretation of the provenance of the Board is close to that of Butler. See for example: Krug, *The Shaping*, p. 146. Krug, in this general history, contends that the College Board must be considered "Eliot's idea and Butler's triumph.

⁵² Henry S. Dyer and William W. Turnbull, who would later become respectively Vice-President and President of Educational Testing Service, contend in a 1960 internal document that "In its early days the Board's purpose was really two-fold; first, to define what the college preparatory curriculum should be and then to ascertain by examination of the subjects defined how well equipped a student might be to handle college work." Dyer and Turnbull indicate that "The Definitions of Requirements, published annually by the Board up to 1942, exerted a powerful effect on the organization of secondary school matter." Henry S. Dyer and William W. Turnbull, "Growth and Change in College Admission Testing," April 19, 1960, p. 2. [E.T.S. Archives--Confidential] John W. Valentine, however, very effectively illustrates the ambivalence

inevitably attempt to prescribe an appropriate high school curriculum. As early as 1888, Eliot had directly concerned himself with the secondary school curriculum because of his interest in bringing more capable students to Harvard.⁵³ A believer in elective courses, Eliot did not seek uniform curricula in the secondary schools; however, he did aggressively seek uniform levels of attainment from those students who took specific secondary school subjects.⁵⁴ Second, the new board sought a single battery of examinations that would be centrally scored. Member institutions could then use the scores in any way they wanted. Soon it was clear that the focus of the Board and its leaders was not on curricular reform, but was most directly on admissions testing.

Approval of the College Board's coordinating role was neither immediate nor unanimous. The colleges guarded jealously their independence. Even before the Board was officially launched, some leaders in higher education expressed fears that such an organization would either lead to government

of the College Entrance Examination Board about its possible impact on secondary school curricula; he refers to this ambivalence as "a conflict between willing acceptance and utter rejection of a standard-setting role in secondary school education." Valentine aptly refers to his book as "a case history of a deeply embedded institutional dilemma." John W. Valentine, The College Board and the School Curriculum, p. IX.

⁵³ For a discussion of Eliot's involvement with the secondary school see Krug, The Shaping, Chapter Two: "The Committee of Ten." pp. 18-26. and Chapter Three: "Dr. Eliot's Report." Eliot's positions on admissions have provoked discussion; See, for example, Laurence R. Veysey, The Emergence of the American University, (Chicago: University of Chicago Press, 1965), p. 91. Veysey contends that "in an extreme mood" Eliot seemed to equate parental resources with aptitude for college. Veysey notes "Eliot asserts that 'The competency of his parents to support him' furnished a test of the student's own ability in college.

⁵⁴ Charles W. Eliot, "Undesirable and Desirable Uniformity in Schools," Proceedings of the National Educational Association (1892), p.90. Eliot specifically argued in this address that "at the close of the high school period, it is neither necessary nor desirable that all candidates for admission to colleges should have pursued the same subjects; but it is desirable that their attainments in those subjects they have pursued should represent a tolerably uniform number of year-week-hours, and should cover a definite number of selected topics in each subject studied in an agreed-on method."

control of colleges and universities or, at best, the loss of freedom for individual colleges. For example, at the 1899 convention of the Association of the Colleges and Preparatory Schools in the Middle States and Maryland, where Butler gave a paper calling for the association to sponsor an examination board, Princeton's President Francis L. Patton attacked the proposal as an attempt to place the colleges under state supervision. President Ethelbert D. Warfield of Lafayette College then expressed the fear that the freedom of his college would be undermined.⁵⁵

After the Board's formation, college independence was no less a concern. R. H. Chittenden, director of Yale University's Sheffield Scientific School, writing to Thomas S. Fiske, Secretary to the newly founded board, noted that they would be "treating the certificates in the same manner as has been the custom to treat entrance certificates from other colleges and universities of high standing." He added that, "we reserve to ourselves the right to put our own interpretation upon the marks reported by the College Entrance Examination Board."⁵⁶ The new

⁵⁵ For Warfield's account of this meeting, see Proceedings of the Association of Colleges and Preparatory Schools of the Middle States and Maryland: 1899, pp. 80-82. For another personal account of this meeting, see Nicholas Murray Butler, Across the Busy Years: Recollections and Reflections, Volume I, (New York: Charles Scribner's Sons, 1939-40), pp. 197-202. Butler credits Eliot with saving the idea of the College Board with the use of wit and sarcasm in his response to President Warfield. "Then President Warfield arose . . . [and said that] they would not be told by any board whom to admit and whom not to admit. Warfield went on to say that they might want to admit the son of a benefactor or the son of a trustee or the son of a member of the faculty . . . [and] they would not be prevented from so doing by any board." According the Butler, Eliot then arose in an impressive manner that had to be seen to be appreciated and noted that Warfield had misunderstood Butler's proposal; the Board would not either prescribe or proscribe admissions. Eliot then pointedly noted, "and, President Warfield, it will be perfectly practicable, under this plan, for Lafayette College to say, if it so chooses, that it will only admit such students as cannot pass these examinations. No one proposes to deprive Lafayette College of that privilege." Quoted in Butler, Across the Busy Years, Volume I. p. 199.

⁵⁶ Letter from R.H. Chittenden, Director of the Sheffield Scientific School to Thomas S. Fiske, March 10, 1902. Yale University Archives.

board, in response to such statements, stressed that the member school could retain the right to "make such allowances as it wishes for character and capacities on the part of students applying for admission."⁵⁷ The College Board certificate merely stated that the student had been examined in specified subjects at a stated time and place and had received a specific rating. No college which accepted these certificates in lieu of separate institutional examinations surrendered its right to set any standard of excellence that it pleased.

Reluctance to surrender any institutional autonomy continued throughout the first two decades of the Board's existence.⁵⁸ Harvard, Princeton and Yale continued to administer simultaneously their own examinations with the Board's through 1915.⁵⁹ In his November 16, 1913 letter of resignation as chairman of the Board, Butler was specifically critical of member institutions that had not yet merged their examinations with those of the Board. He called continued use of institutional examinations "a mark either of weakness, or of perversity, or of mere parochialism, or of the stubborn persistence of educational inertia."⁶⁰ The change Butler sought did not come immediately. For example, Yale's Robert N. Corwin, Chairman of the Committee on Admissions, wrote to College Board secretary Fiske in 1914:

⁵⁷ College Entrance Examination Board, Examinations Questions: 1903 (Boston: Ginn and Company, 1903), 6.

⁵⁸ This is an ongoing concern among the Boards leaders. Fiske refers to this "difficulty" in a 1910 letter to Butler. Thomas S. Fiske to Nicholas Murray Butler. November 3, 1920. College Board Files, Butler Papers.

⁵⁹ Thomas S. Fiske to Alexander Berglund, February 17, 1925. Butler Papers, Presidential Papers, Seth Low Library, Columbia University. Fiske considers 1915 to be one of the five most important years in the Board's first twenty-five years because of this change.

⁶⁰ Nicholas Murray Butler to Members of the College Entrance Examination Board. November 5, 1913, College Board Archives.

I am sure that here at Yale we should be very glad to spare ourselves all the trouble and expense of separate examinations, but it has not seemed either wise or possible for us to do so as yet. . . . Whenever we have discussed the discontinuance of our examinations there has been a general protest throughout the schools.⁶¹

Yale did accept the Board exam, but, with the exception of special cases candidates were applying from "outside the largest centers," it simultaneously required its own examinations.⁶²

College Board Exams Vs. Secondary School Certification

Members of the new Board did not abandon immediately their use of admissions by certification. Many schools combined examinations with certification. In fact, although clearly opposed to admissions by certificate, early leaders of the College Entrance Examination Board chose initially to argue simply that no system of college admissions on the basis of secondary school certificates could be successfully administered "without an examination system as an auxiliary."⁶³

Colleges used multiple approaches to admissions because they were, for the most part, seeking to find qualified students. George E. Maclean, President of the State University of Iowa, asserted in 1905 that:

bluntly stated, all colleges are so anxious to get students that no system is consistently lived up to. They mix the certificate and examination plans, they distribute examinations in time and space,

⁶¹ Robert D. Corwin to Thomas S. Fiske, January 26, 1914, College Board Archives. Corwin placed this policy in a positive light by noting that "the feeling has been strong that two sets of examinations were much better than one, and that each corps of examiners kept the other alert. I am sure that our examiners here at Yale have learned much from the board.

⁶² Ibid.

⁶³ College Entrance Examination Board, Annual Report, 1903, pp. 38-39.

they annex local preparatory schools, or have quasi-certified schools of individual tutors and coaches.⁶⁴

In New England the Certificate system actually grew during the early years of the College Entrance Examination Board; in fact, in 1902 nine New England colleges formed, in cooperation with secondary school, the rival College Entrance Certificate Board.⁶⁵ Although this organization only lasted until 1917, its existence was a brake on College Entrance Examination Board growth.⁶⁶ Not until 1918 did such schools as Mount Holyoke, Smith, Vassar, and Wellesley abandon their use of the Certificate system and begin to rely on the Board Examinations.⁶⁷

The College Board Essay Examinations:

The College Board selected chemistry, English, French, German, botany, French, geography, Greek, history, Latin, mathematics, and physics as topics for its examinations. The definition of requirements and the specific topics closely

⁶⁴ George E. Maclean. "Which is Better: The Western Plan of Admitting Students to colleges and Universities By Certificates from Duly Inspected Secondary Schools, or the Eastern Method of Admitting Only by Examinations Conducted by Representative Boards or Otherwise?" Proceedings of the National Educational Association, 1905, pp. 501. Maclean's tone, even in his extended title, conveys a mid-western attitude toward the "eastern" examinations.

⁶⁵ Henderson, Admission to College, p. 100. This competing Board grew slowly however: By 1912, when Henderson wrote the membership consisted of only thirteen institutions. Smith, Brown, Mount Holyoke, Wellesley, and Williams College were members of both the College Entrance Examination Board and the College Entrance Certificate Board.

⁶⁶ Thomas S. Fiske to E.H. Henderson, Aldephi College, November 12, 1913. College Board File, Butler Papers. Fiske used the example of Smith College to show the decline in candidates tested between 1909 and 1913. He noted that the "decrease in the number of candidates during the past few years is due to the fact that the efficient and businesslike administration of the certificate system has raised the standards of the New England schools so that a larger proportion of candidates can now qualify for admission on the basis of certificates."

⁶⁷ Fiske to Berglund, February 17, 1925, College board File, Butler Papers. It is noteworthy that Vassar maintained this independence despite being one of the founding members of the Board.

followed recommendations of professional organizations. As noted in an early publication of the board:

The definitions of the subjects in which examinations are held are not framed arbitrarily, but are those agreed upon by the committee of the National Educational Association in consultation with leading organizations of American Scholars.⁶⁸

For example, the Board coordinated its requirements in history with the American Historical Association, while those for Latin with recommendations from the American Philological Association. The first examinations were divided into forty-four different sessions ranging from one and one-half hours to two and one-half hours. Scheduled from 8:30 in the morning through 6:00 p.m. the tests lasted for five successive days beginning Monday, June 17, 1901.

The Board subdivided the major disciplines quite finitely. For example, the battery of tests consisted of five different mathematics sessions ranging from the one and one-half hour "Mathematics A Exam" (elementary algebra to quadratics) through the two and one-half hour "Mathematics E exam (trigonometry). A candidate completing a particular examination received a certificate indicating his score. Each individual college could determine which specific tests it required; typically the number selected ranged from eight to ten. Additionally, each college could determine its own requirements of scores on particular sections.

The Nature of the College Board Questions

The original College Entrance Examination Board examinations had several characteristics that were common to all discipline areas. Three examiners in each subject developed questions which they believed would determine a candidate's knowledge of the discipline. Candidates could obtain

⁶⁸ College Entrance Examination Board, Examinations Questions: 1903 (Boston: Ginn and Company, 1903), 17.

notice of Examinations areas in advance upon submission of "ten cents in stamps."⁶⁹ Therefore, any candidate entering an examination could know the general content area to be covered. For example, those taking the Greek "C" examination could know in advance that the questions would cover Homer's Illiad, Books I-III, or those taking the Latin "G" exam could prepare specifically in Cicero's DeAmicita.

All of the tests were content based and focused largely on recall of specific material. In that sense, they were quite similar to the typical institutional examinations.⁷⁰ In the "Chemistry Examination," for example, candidates answered seven of ten questions such as: "Describe a method of preparing oxygen in quantity, and make a sketch of the apparatus used. State the important chemical and physical properties of oxygen and its uses."⁷¹ In the "Roman History Examination," candidates wrote essay answers in which they responded to such tasks as: "State what territory was added to Rome under the Republic and show how this was united to Rome."⁷² The "Mathematics C Examination," a two and one-half hour instrument testing geometry, had students

⁶⁹ Ibid., p. 7.

⁷⁰ The introduction of the Board's examinations invited comparisons with existing examinations. These comparisons, however, are strictly based on the specifics of how an item treats a topic, e.g. comparisons of those questions on Virgil. Edward J. Goodwin, of the Morris High School in New York City, compared various entrance examinations in 1903. His comparison of the exams of Yale, Harvard, Princeton, Pennsylvania and the Board is best typified by his discussion of the Latin examination: "Princeton calls for the principal parts of five verbs of common occurrence, representing different types; the Board, for the principal parts of paro, pareo, pario." Edward J. Goodwin, "A Comparison of College Examinations," Educational Review, (December, 1903) p. 449.

⁷¹ College Entrance Examination Board, Examinations Questions: 1903 (Boston: Ginn and Company, 1903), p. 15.

⁷² Ibid., p. 69.

complete eight tasks such as: "Prove that in the same circle or equal circles equal chords are equally distant from the centre, and conversely, chords equally distant from the center are equal. Show from this that equal chords of a circle are tangents to a concentric circle."⁷³

Thus, the original College Board essay examinations addressed the problems caused by a multitude of different institutional examinations. They were not, however, specifically based on theoretical innovations; like the institutional essay examinations, these Board examinations tested recall of content previously learned. This general approach to testing soon faced criticism.

The Introduction of a "New Plan" of Essay Exam: A Reform

Initial growth of the Board was slow. By the end of its first decade, membership had only grown from an original fourteen colleges and universities to thirty.⁷⁴ This did not nearly match the aspirations of the Board's leadership. Moreover, the Board's coordinating impact on testing procedures was not all that had been hoped. Inquiries about board examinations came from all types of institutions, but formal requests for membership often did not follow.⁷⁵ In 1910 the American Medical Association, for example, inquired about the possibility of using the Board examinations for admission to medical school but did not subsequently establish a formal relationship with the Board.⁷⁶ Many Institutions

⁷³ Ibid., p. 102.

⁷⁴ Eleventh Annual Report of the Secretary, 1911 (New York: College Entrance Examination Board, 1911), inside page of front cover.

⁷⁵ Fiske to Butler correspondence on each request for information. College Board File, Butler Papers.

⁷⁶ Thomas S. Fiske to Nicholas Murray Butler: November 3, 1910, College Board File, Butler Papers.

were reluctant to abandon completely their own examinations. This meant that the number of applicants taking the tests did not increase at a rate that pleased the Board's leadership.

The growth of the examination program and that of the Board itself were inextricably bound; acceptance of the Board's examination meant acceptance of the Board itself and vice versa. Within two years of its formation, the College Entrance Examination Board faced a competitor--the New England Entrance Certificate Board. Modifying the certification process, this New England organization certified schools based upon their graduates' performance at particular colleges and universities. Thus, the College Entrance Examination Board, in its infancy, was in competition both with institutional examinations and with continued interest in certification. The Board rose to this competition and unabashedly explained the virtues of its program:

The manifest advantages of the examinations held by the board are: 1) That they are uniform in subject-matter. 2) That they are uniformly administered. 3) That they are held at many points, to meet the convenience of students at one and the same time. 4) That they represent the cooperative effort on the part of a group of colleges, no one of which thereby surrenders its individuality. 5) That they represent the cooperation of colleges and secondary schools with respect to a matter of vital importance to both. 6) That, by reason of their uniformity, they aid greatly the work of the secondary schools. 7) That they tend to effect a marked saving of time, money and effort in administering college admissions requirements.⁷⁷

Despite these touted advantages, there were critics of the college board examinations. Even as the College Board began its examination program, some educators were looking for alternatives. In 1900 Yale's President, Arthur T. Hadley, argued:

⁷⁷ College Entrance Examination Board, Examinations Questions: 1903 (Boston: Ginn and Company, 1903), p.4

We are not restricted to the choice between examinations to tests extent of knowledge, on the one hand, and admission by certificate, on the other. May not the examinations be brought back nearer to its old function as a test of power? May we not have, in the place of a large number of examinations which are intended to test the range of student's knowledge, a relatively small number of papers which tests the ability of the student to perform the work which he is subsequently called upon to do?⁷⁸

Columbia's Edward L. Thorndike, who fifteen years later would be a leader in the emerging field of psychometrics, published a critique of the examinations in 1906. In an early and rudimentary use of the statistical methods that would later characterize his work, Thorndike contended that "it will be proved that even so carefully managed examinations as these are an extremely imperfect means of estimating an individual's fitness for college."⁷⁹ Thorndike was no proponent of certifying schools, but he proposed evaluating schools by the performance of their graduates and "crediting schools on the basis in each case of an examination of the actual success in college of the candidates indorsed [sic] by that school."⁸⁰ In this same 1906 article, the Columbia psychologist asserted, in

⁷⁸ Arthur T. Hadley, "Conflicting Views Regarding Entrance Examinations," School Review (December, 1900), p. 587. Hadley's use of the term "power" in this context is the earliest such use that this researcher could find.

⁷⁹ Edward L. Thorndike, "The Future of the College Entrance Examination Board" Educational Review (May, 1906), p.471. Thorndike's argues that the examinations are such imperfect predictors that the College Entrance Examination Board should abandon testing. There is no evidence of a response to this argument from Thorndike's Columbia Colleagues, Butler and Fiske, who had founded the Board. The President of the New England College Entrance Certificate Board, Nathaniel F. Davis, of Brown University, did, in contrast, respond to Thorndike. Speaking before the New England Association of Colleges and Preparatory Schools, in 1906, Davis reviewed the benefits of the "certificate" process, and then, with some apparent sarcasm, asserted "In fact, from the beginning, the board has honestly tried to bring about the ideal condition so recently discovered and described by Professor Thorndike in the Educational Review for May, 1906." Nathaniel F. Davis, "Is the Present Mode of Granting Certificate-Rights to Preparatory Schools Satisfactory," reprinted in The School Review (February, 1907):146.

⁸⁰ Edward L. Thorndike, "The Future of the College Entrance Examination Board" Educational Review (May, 1906), p. 475.

almost an offhanded manner, that "college is dependent on capacity ten times as much as upon mere amount of high school training."⁸¹

By 1910 proponents of a new approach to examinations and college admissions were speaking out. In 1911 Professor Clifford H. Moore of Harvard characterized the existing essay examinations thus:

Under the old plan of admission the candidate has been tested subject by subject. When he had scored a sufficient number of points--the time required being generally in inverse proportion to his ability--the committee on admission has been obliged to accept him, altho he may never have shown that he could rise in any subject above the minimum exacted, and in spite of the fact that he may be admitted burdened with conditions.⁸²

These educators sought testing procedures that would measure a student's "ability" rather than strictly content "knowledge" and that would reflect the loose relationship between secondary and college curricula. Further, as indicated by Moore's criticism above of the "burden" of conditions, these educators sought a basis for selective admissions, with only the most able candidates allowed to matriculate. Yale's Robert N. Corwin noted that, "the old style paper was inclined to ask what had been done rather than determine what could be done."⁸³ Allowing "admissions with conditions" of those who had not previously learned enough meant that there was little basis to actually reject a candidate.

⁸¹ Edward L. Thorndike, "The Future of the College Entrance Examination Board" Educational Review (May, 1906), p. 477. Thorndike's reference to "capacity" is one of the earliest uses of this term.

⁸² Clifford H. Moore, "A New Plan of Admission to Harvard College," Educational Review (June, 1911), p. 75.

⁸³ Robert N. Corwin, "Comprehensive Examinations of the College Entrance Examination Board," Education 37 (January, 1917) p.307.

Educators in both higher education and secondary education had reasons to seek changes. In 1904 Francis Ramaley, a secondary schoolmaster in Boulder, Colorado, contended that because "work in the university no longer fits on to the high school course in any definite way," specific course content knowledge was not necessary in order for a student to "pursue a course [of study] intelligently."⁸⁴

In 1914 the Board, under the titular leadership of Butler's successor, chairman Byron Hurlbut, but always with the direct involvement of secretary Fiske, began a process of modifying its program. These leaders were responding in part to criticisms of the old examinations but most directly to the slow growth and even threats of retrenchment in the number of students taking Board examinations.⁸⁵

Board leaders began to consider changes in their examination processes as a means to enlarge their impact on college admissions by convincing important institutions to cooperate.⁸⁶ Although leadership and early membership in the new board came primarily from Ivy League colleges, several key institutions were less than full participants in the Board's testing program. The unwillingness of Harvard, Yale and Princeton to abandon their own examinations

⁸⁴ Francis, Ramaley. "Some Thoughts on College entrance Requirements," Education (January, 1904), p.280.

⁸⁵ Claude M. Fuess, in his clearly "whiggish" commissioned history of the Board treats these themes very differently, seeing board innovation as simply a reflection of further sophistication of its measurement principles.

⁸⁶ Robert N. Corwin contends that the board's action "demonstrated its adaptability." see: Robert N. Corwin, "Comprehensive Examinations of the College Entrance Examination Board," Education 37 (January, 1917), p.302. The evidence suggests that it would not be unfair to infer that the board's pedagogical adaptability was directly caused by practical, political considerations.

and to rely exclusively on the Board's examinations had consistently bothered Board leaders.⁸⁷ A 1914 proposal arranged for those schools to drop their own examinations if the Board introduced a "new plan" examination. Harvard faculty members would contribute their time and expertise to the Board to produce examinations based on that university's "new plan" examinations.⁸⁸ These "new plan" examinations were specifically designed to "give boys the opportunity to show their power, whether they have had the maximum or the minimum amount of training given in school."⁸⁹

These educators sought a program of "comprehensive examination" in only four major subject areas. In contrast to the existing examinations, the proposed alternatives would not sub-divide the disciplines and would not emphasize recall of material. Advocates of this new approach stressed that these new instruments should measure more than a candidate's ability to "cram" for a test. These proponents of a "new plan" wanted instruments that would measure the "mental power of individuals."⁹⁰ Moreover, they proposed that the results of these new entrance examinations be only one component of an admissions decision; they asserted that a student's previous academic record

⁸⁷ Thomas S. Fiske to Mr. Alexander Berglund: February 17, 1925, College Board File, Butler Papers.

⁸⁸ Valentine, The College Board, p. 26.

⁸⁹ College Entrance Examination Board, Annual Report of the Secretary 1915. (New York: College Board, 1915), p. 5.

⁹⁰ Claude M. Fuess, The College Board: Its First Fifty Years (New York: College Board, 1967), p. 84. In using the term "power" Fuess is adopting a term that was commonly used at the time these tests were introduced to describe what they measured. Yale University, for example, in its official legislation adopting the "new plan" of admissions testing recognized that a wide variety of subjects may be taught in secondary schools and stated that "the college tests results or power." Robert N. Corwin, Chair of Sheffield's Entrance Committee, quotes this legislation in his: "The New Alternative Admission Plan," Yale Alumni Weekly, 30 (April 16, 1915), p. 1.

and his recommendations should weigh just as heavily as the tests in an admissions decision.

The calls for these new comprehensive examinations came first and primarily from the institutions that would shortly be in a position to implement truly selective admissions. In 1911 Harvard introduced a "new plan" to replace its entrance requirements that had been in place since 1898. Under this plan, Harvard allowed greater flexibility in the specific courses that prospective students could take; then, if the "school record was satisfactory, the applicant [was] allowed to present himself for examination in four subjects."⁹¹ The areas of these examinations were broadly prescribed; one had to be in English, a second had to be in either Latin or a modern language, a third had to be in either mathematics or physics or chemistry, and the fourth had to be in either Greek or history. Harvard University presented this new approach to the National Educational Association as follows:

These four examinations are not intended to check up either the extent or the efficiency of his high-school course--the documentary evidence is accepted as covering all that completely--they are rather intended to test whether or not the boy can think. They are to be examinations for power, and therefore, we hope different in kind from the present examinations for attainment.⁹²

The Harvard innovation met with generally a favorable reaction.⁹³ Nation magazine characterized the plan favorably as a response to "the chorus of

⁹¹ Harvey N. Davis. "The New Harvard Plan for College Admission," Journal of Proceedings and Addresses of the National Educational Association, (1911), p. 570.

⁹² Ibid.

⁹³ See for example Henry T. Fowler's "Entrance Requirements and the College Degree," Education (January, 1913), pp. 269-275. Fowler, a faculty member at Brown applauded the approach and indicated that it showed that "there was a better solution in sight." p. 269. For a secondary schoolman's viewpoint, see Charles H. Forbes. "Entrance Requirements and the College Degree." Education (January, 1913) pp. 263-268. Forbes, a professor at Phillips

complaint and protest going up from those who had among their tasks that of preparing candidates to meet whatever might lie in wait for them at the University Portal," and indicated that:

The oldest university in the country has officially recognized the desirability of a rapprochement between the forces of secondary and higher education. . . . There is no letting down of the bars, but on the contrary, a simplification without sacrifice that is in thorough keeping with the new insistence upon high scholastic attainment."⁹⁴

Arguing that the purpose of education should be to teach students to develop "the ability to analyze a complex body of facts, to disentangle the essential factors, to grasp their meaning and to perceive their relations one to another," President Abbott Lawrence Lowell of Harvard became a leader in the quest for a new approach to testing.⁹⁵ Lowell contended that the existing examinations encouraged an over emphasis on teaching toward the tests. In an Atlantic article, Lowell asserted that "a knowledge of facts is a small part of education" and advocated tests that would measure reasoning ability: "the ability

Academy noted that "the scheme has many advantages and is in strict accord . . . the upbuilding of a continuous, rationalized, and progressive education." p. 265. Franklin W. Johnson, Editor of the School Review applauded the curricular freedom the new plan would provided schools. He editorialized: "Secondary-school men have been accustomed to complain of the domination of the college. The secondary school is here offered an opportunity to work out for itself . . . a program of its own." Franklin W. Johnson. "The New Harvard Entrance Requirements," School Review, June, 1911, p. 413.

⁹⁴ "Harvard's New Entrance Tests," Nation (January 26, 1911), pp. 80-81.

⁹⁵ Fuess, The College Board, p. 81. Fuess casts President Lowell's activities in a very positive light. Lowell's motives, however, are the subject of historical debate. Marcia Graham Synott, links Lowell's attitudes toward testing and his advocacy of restrictive admissions at Harvard to anti-semitism. Synott contrasts Lowell's support of quotas to policies of his predecessor, Eliot, who until his death in 1926 vehemently opposed quotas. Synott asserts that "Lowell's role was crucial in determining the direction that the controversy took." Marcia Graham Synott, The Half-Opened Door: Discrimination and Admissions at Harvard, Yale, and Princeton, 1900-1970 Contributions to American History, Number 80 (Westport: Greenwood Press, 1979). p. 27. Synott's second chapter "Portraits and Philosophies of Two Harvard Presidents: Charles W. Eliot and A Lawrence Lowell" provides an excellent interpretive comparative biography.

to analyze a complex body of facts, to disentangle the essential factors, to grasp their meaning and perceive their relations to one another."⁹⁶

Shortly after Harvard adopted its "new plan," Princeton and Yale made similar changes. In 1912 Princeton changed to examinations that addressed four broad areas. Yale changed in 1913 and established a provision through which the secondary school teachers participated in the preparation of the questions. Although, in some educator's eyes, this practice did not "necessarily produce perfect papers . . . it aid[ed] in bringing school and college nearer together."⁹⁷

In 1915 the members of the College Board introduced their own "New Plan" for admissions. Modeled after the admissions approach by the same name implemented at Harvard, this innovation in examinations was based on comprehensive examinations in a limited number of fields. Under the "New Plan," officially introduced as only a coexisting alternative to the traditional exams, teachers would no longer be given information in advance on specific questions. Furthermore, candidates would not be given the specific results of their tests; they would only be told whether they were admitted or rejected by a particular college. To some educators this new plan introduced a beneficial freedom in preparatory curricula; no longer would secondary teachers have dictated to them the particular passages of Homer to be taught. To others it brought dismay; Claude Fuess, in his history of the Board, cites the case of a Latin instructor who had specialized in preparing candidates for the old type of examination. He complained, upon hearing that the new exams would require

⁹⁶ Abbott Lawrence Lowell, "The Art of Examination" Atlantic Monthly (January 1926):62-63.

⁹⁷ Adam Leroy Jones. "Some New Methods of Admission to College," Educational Review (November, 1913), p. 360.

"sight translation" of unannounced material, "how am I going to know what passage they will choose?"⁹⁸ Critics of the comprehensive exams believed that refusing to reveal test items in advance would place "a premium on superficial cleverness rather than thoroughness of preparation."⁹⁹

Beginning in June 1916, the "New Plan" was an official option that institutions within the college board could select. This option gained popularity after it was adopted by the most prestigious of the colleges that had been critical of the earlier College Board Exams. Robert N. Corwin, Chairman of the entrance Committee of the Sheffield Scientific School, praised the new examinations, writing in 1915 that the change indicated a recognition that "preparation for college, then, is not necessarily synonymous with fitness for college work."¹⁰⁰

The College Board's "new plan" not only brought Harvard, Yale and Princeton fully into the Board's examination program, it directly challenged the "certificate" approach to college admissions by stressing the importance of considering the examination scores along with the school record.¹⁰¹ Of the 580 "New Plan" candidates in 1917, 516 were either Harvard, Princeton or Yale bound.¹⁰² In 1918 four prestigious New England women's colleges--Smith, Vassar, Wellesley, and Mount Holyoke--dropped the use of certificates for

⁹⁸ Fuess, The College Board, p. 85.

⁹⁹ *Ibid.*, p. 86.

¹⁰⁰ Robert N. Corwin. "The New Alternative Admission Plan," Yale Alumni Weekly (April 16, 1915), p.6.

¹⁰¹ Some critics, in fact, were led to say "that this is but a disguised method of admitting by certificate." See: Robert N. Corwin, "Comprehensive Examinations of the College Entrance Examination Board," Education 37 (January, 1917):304.

¹⁰² College Entrance Examination Board, Annual Report of the Secretary: 1917, (New York: College Board, 1917), 34.

admissions; they all opted to use exclusively the new "comprehensive" examinations.

Strictly speaking, the Board itself took no stand on the relative merits of the two approaches to testing. In fact, in the decade following the introduction of the new approach, the board published arguments on both sides of the issue. One such argument was a reprint of an article from the Harvard Alumni Bulletin. In it Morgan Barnes, a preparatory school instructor, explains how he took the old style exams incognito in order to form a first hand opinion of their value. He concludes that the grading of the ten sections he took was uneven and that the tests formed an inadequate basis for admissions decisions. He argued, further, that the "tests cannot take into account the personality and character of the candidates, or make allowances for possible unfavorable conditions when taken . . . they are artificial assessment."¹⁰³ Barnes then endorsed the "New Plan" of admission. Like many proponents of the reform, Barnes was not so much endorsing the efficacy of new comprehensive examination as he was saying that the new approach had benefits because the role of the exams in the admissions process was balanced by other factors. Many educators continued to call for limitations on the role of any type of examination.¹⁰⁴

The "new plan" introduced new flexibility in the relationship between the high school and the colleges. In both the certificate approach to admissions and

¹⁰³ Ibid., p. 40.

¹⁰⁴ See for example Bancroft Beatley's "The Relative Standing of Students in Secondary School on Comprehensive examinations, and in College." School Review 30 (February 1922):141-147. Beatley, a Harvard professor of education concluded his study with the statement that although, "the comprehensive examinations are superior to the Old Plan examinations in determining fitness for college. . . The school record gives a somewhat better indication of the quality of work that men will do in college than does the record on the comprehensive examination." (p. 147).

in the old style examination, the relationship between entrance requirements and high school curricula created tensions.¹⁰⁵ As admissions committees sought to test more the "power" or ability of a candidate to reason, and less the candidates recall of specific content material, the high school curricula were freed significantly from the specific dictates of college admissions requirements.

Conclusion

The introduction of the "New Plan," with its commitment to using the essay style examination to measure a student's ability to think and reason rather than simply recall material, was a significant reform. However, it was a reform with ambiguous results. The new approach had the potential to democratize higher education by allowing consideration of students with academic potential who lacked the financial resources necessary for the private schools that offered the correct courses. However, the reform, which included elimination of admissions "with conditions" of underprepared students, provided a step toward truly

¹⁰⁵ Problems thus created were a constant theme among secondary educators. For example, Wilson Farrand, Headmaster of the Prestigious Newark Academy, a national leader among secondary educators, and a founder of the College Board spoke and published frequently on the topic of course requirements between 1895 and 1909. [See bibliographic entries for Farrand.] See also: L.W. Rapeer. "College Entrance Requirements--The Judgment of Educators" School and Society, January 8, 1916. pp. 45-49. or F.D. Boynton's "College Domination of the High School," Educational Review, February, 1914. pp. 154-164. [This is a reprint of a 1912 speech to Association of Academic Principals by Boynton, the Superintendent of Schools for Ithaca, New York.] William C. Bagley, in a 1910 speech to the General Conference of the Academies and High Schools in Relations with the University of Chicago, makes clear that the term "college domination" is a common expression and complaint among secondary educators. See: William C. Bagley, "Entrance Requirements and 'College Domination' as Sources of Motivation in High-School Work" The School Review, February, 1911. For an example of a response from the College point of view, see: Alexander Meiklejohn, "Are College Entrance Requirements Excessive? The College Point of View." Education (May, 1909) pp. 561-566. Meiklejohn, then Dean of Brown University, attempts to sum up the college point of view by rephrasing the question in his title "are our students too well trained when they come to us?" (p. 566). For a general overview of the College Boards involvement in this curricular issue, see John W. Valentine's recently published monograph which specifically deals with this relationship and tension. Valentine, The College Board.

selective admissions. The colleges had taken a significant step away from--in the language of present day educators--criterion-referenced testing for admissions toward normative-referenced testing. The institutions that led this movement to a "new plan" were the schools that immediately after World War I would be using truly selective admissions.

For the most part, even through the end of World War I, college admissions nationally were marked by a general lack of formal standards. Dartmouth, Princeton, Pennsylvania, Swarthmore and Harvard, a group of institutions that provided leadership to the College Board, were the first schools to introduce selective standards that were not compromised by "conditions."¹⁰⁶ Within a decade after this change was introduced, however, its magnitude would pale in comparison to a true revolution in testing.

The introduction of intelligence testing into admissions procedures after World War I was not as abrupt a transition as could be inferred by the rapidity of the process. As Ben Wood pointed out in 1923, mental "capacity" or "power" had been a concern for some time. The introduction of the "New Plan" in the College Board Examinations in 1916 was an attempt to measure a student's ability to reason with information and to integrate themes rather than simply to prepare for content examinations through rote memorization of specific factual material. Wood notes that "the peculiar merit ascribed to the Comprehensive Examination was that it measured mental capacity as well as content."¹⁰⁷ Wood contends,

¹⁰⁶ Levine, The American College, pp. 139-140. Levine notes that in 1920 Dartmouth rejected 1,600 applicants; Princeton rejected 1,500; Pennsylvania rejected 750; and Harvard rejected 229. In 1922, at Swarthmore 800 students applied for 170 places and in 1926, 1,500 students applied for 150 openings.

¹⁰⁷ Ben D. Wood, Measurement in Higher Education, (Yonkers-on-Hudson, New York: World Book Company, 1923), 18.

moreover, that "the introduction of the intelligence test into the admissions machinery represent[ed] a large and significant change as to means, but not as to theory."¹⁰⁸

Wood is correct, but the "change in means" he referred to was complex. The change was based on completely new concepts of psychometrics that gained credence during the war. Further, the new instrument was explained and justified using new, almost mysterious, concepts of predictive validity and statistical correlations.¹⁰⁹ The "psychological examinations, based on esoteric statistical concepts of validity, would soon replace the essay examination, which in all of its various forms had possessed an obvious relationship to the academic tasks that would be required in higher education. As John Valentine aptly puts it: "Enter the Psychologists."¹¹⁰

¹⁰⁸ Ibid.

¹⁰⁹ As is discussed in the following chapter, the use of statistical correlations to provide the predictive validity of entrance examinations became widespread only after World War I, with the introduction of "aptitude" tests and predictive statistics. There is, however, at least one example of such use of correlations in the pre-war period. Although not in possession of such tools as the "Pearson Product Moment 'r' correlation coefficient, Columbia's Adam Leroy Jones, attempted, in 1914, to correlate examinations with college Records. Jones figures look simplistic and strangely quaint; he provides rows of ranks in class and ranks in the examinations both indicated in Roman numerals. See: Adam Leroy Jones. "Entrance Examinations and College Records: A Study in Correlation." Educational Review, (September, 1914):109-122.

¹¹⁰ Valentine, The College Board, p. 31.