

THE PROBLEM OF COLLEGE PEDAGOGY

BY ABRAHAM FLEXNER

THERE is no question that the American college is under fire. Let us freely admit that it has accomplished a great deal. It has broken down the classical monopoly that first restricted, then threatened to destroy, its influence; it has successfully assimilated every type of scientific and scholarly activity that modern conditions have started up. It has thus produced for itself a far larger, more varied, and more vital function than it discharged in days when it was criticised less, — a more varied function than has been won by the English university, the German *gymnasium*, or even the German university. Each of those institutions has encountered limits beyond which it has thus far been unable to adapt itself. New species of schools, secondary and advanced, have had to be devised abroad to provide for interests that the American college has proved elastic enough to accommodate.

This very expansion has, however, developed problems new and unforeseen. To my thinking, the college faces them rather helplessly. It is bewildered. This will prove in the end of little consequence to the college, if, in the meanwhile, the situation does not get away from it. There lies the justification of urgency and plain speaking; for, unless I greatly err, the college has already lost a trick or two.

Our college problems are, roughly classified, of two kinds: pedagogical and administrative. To some extent they interlace. On the one hand, lack of clear pedagogic thinking unnerves the administrative arm. The teacher or executive who does not realize quite clearly the end at which college education aims can hardly pursue either a very straight or a

very vigorous line toward his problematic goal. On the other hand, absence of administrative vigor confuses the pedagogical situation. Many causes combine to account for this administrative weakness. Partly it is a matter of principle: the indifferent student is tolerated on the ground that he is "getting something." More important, however, are the following considerations. Our colleges are practically all over-extended. They rely too largely on fees to carry them through. The raised hand is therefore halted by thought of the balance-sheet. There are, moreover, too many colleges competing for the existing body of competent students. They are therefore driven to swell their enrollment by competing with the High Schools and by excessive tolerance toward their own students. Any other policy would put up the shutters of some of them, and close up certain wings of others for many years to come. Somewhat lax enforcement of standards is thus the condition of survival without retrenchment.

In the present paper, however, I wish to abstract from the administrative problem thus suggested. I want to discuss the pedagogic problem, just as if our difficulties were all soluble on that basis. I need not emphasize the statement that such is not the case; that even pedagogical reorganization will not alone redeem the situation.

The problem of college pedagogy did not explicitly arise under the old college régime. Its concern was with an accepted and practically constant subject-matter; the educational aim was sunk in this unquestioned body of material which the student was expected to master; and such mastery was naïvely as-

sumed to involve a beneficent, and the only beneficent, discipline. Of course, this was not all make-believe. Things did really happen to the student as he worked through his tasks. But the task was itself the thing; the performance was itself the conscious aim. Latin was Latin, Greek was Greek, moral philosophy was moral philosophy. There they were, and that was an end of the matter. I say that in such conditions no pedagogical issue, as such, is raised. I do not mean that there was no effective teaching. On the contrary, the teaching was often highly effective, and I shall in a moment endeavor to ascertain the source of its unique efficacy. But there was an absence of what I may call pedagogical self-consciousness. The teaching point of view was not explicit. It was sunk in, or dominated by, a subject-matter that had as yet undergone little of the minute dissection which has, in these days, fairly pulverized the grand divisions of history, belles-lettres, science, as our fathers knew them.

The rise of the investigative technique has displaced this objective method with something which, however different, is equally objective. The old-fashioned college aimed at the mastery of the existing fund, or some well authenticated portion of it. The new aims at refining or adding to it. Here again I do not mean that one can draw a sharp line, as though under the old régime no one ever tried to find out anything, and under the new no one ever tries to do anything else. But the difference in emphasis and attitude is nevertheless so marked that one does not mistake the two situations, if the former is conceived, as Professor Tufts has so clearly pointed out, in terms of authority, the latter in terms of interrogation. In both alike, however, teaching is absorbed in the act of knowing: knowing what some one else knows, in the first case; getting to know what no one else yet knows, in the second case.

The boy, as such, never became prominent in the old-fashioned college,

because, in the first place, its endeavor was limited in range; and because, within the limits of this endeavor, it succeeded pretty well without raising any questions about him. Its procedure was, moreover, reinforced by strong social and domestic pressure. But the limitations within which it worked do not alone account for its relatively great efficiency. That is largely due to the fact that the material which it employed lay close to current human interests and activities. It was literary, untechnically philosophic, or quite concretely scientific, if scientific at all; the treatment was larger, vaguer, less differentiated, and hence really truer.

The acute logical fastidiousness which has by this time slowly worked over the whole field of human knowledge, taking things to pieces, defining sub-divisions with terrible precision, and threatening dreadful penalties for wobbling or poaching, had not yet begun its deadly work. A few large undivided geographical divisions still usurped the map, and over them a few teachers freely roamed. Hence, within each topic there was necessarily a varied interplay and cross-reference.

In teaching Latin, a generation of scholars, who had not been trained more or less exclusively in some one philological specialty, taught a somewhat primitive, but for that very reason efficacious, mixture in which ancient history, ancient philosophy, and modern applications were somewhat uncritically combined. They read their Sallust and Cicero with less conscientious philological scrutiny, but they found time to discuss, even if in amateur fashion, social conditions, philosophical problems, and suggestive similitudes. Doubtless our more searching — or researching — modern method proves that they were wrong at most points; their history was mythical, their philosophy prejudiced, and their modern instances fanciful. Nevertheless, the boy got a certain stretching of intellect and interest, a certain consciousness of complexity, variety, and reality that he

does not now get from the most unimpeachable syntactical and philological drill.

What is true of the classics is true elsewhere. Fifty years ago a practicing physician could serve a few terms without qualms of conscience as professor of anatomy; and then fill other chairs by rotation for fear of becoming narrow! Nowadays, we qualify the anatomical professorship, to which one non-practicing scientist devotes his life, so as to distinguish from it the professorship of histology, the professorship of neurology, the professorship of embryology, etc. The same process has been carried out even more thoroughly in every other department of the university. Overlapping has stopped. The teacher of Latin can no longer make his work stimulating and suggestive by incidental excursions into abutting territory. His conscience would not permit it, even if his range of interest did. He knows too keenly his own limitations; he values expert knowledge too highly. He denies to the philosopher the right to express an opinion on etymology; of course, he claims no right to express an opinion or give incidental instruction in philosophy. The old cloth has been cut into ribbons.

In other words, the criterion which we now satisfy is logical. And in the effort to satisfy this criterion, and to extend the dominion within which it holds good, our treatment of subject-matter has become colorless, abstract, and remote. We no longer call anything knowledge or fact unless it is prepared to conform to the logical requirements which all sciences, even those into which the humanities have been converted, presuppose; and into our college curricula we admit nothing that has not the words "logically approved" blown in the bottle. I am not quarreling with the logic of science, — far from it. It has given us a new and better world, and far larger hope; but I point out that if the efficacy of the old college was partly due to the vital, organic, and composite character

of its appeal, then it is not strange that no reaction results when its ultimate elements are separately administered. We are dealing in education with organic — not with inorganic — chemistry; and it need occasion no wonder that things occur with vital agents that do not occur with the separate inorganic factors into which those vital agents have been resolved.

There would thus appear to be at bottom a logical incompatibility between college education and research, — the two functions which current practice has somewhat unreflectively assigned at one and the same time to a single institution. On the one hand, the institution is charged with the task of refining and resolving knowledge as such. It views this mass of material as somewhat apart, — an "object," as Professor Münsterberg is wont to call it. This object the investigator wants to break up; he wants to ascertain its structure, to establish within it relations which will make of it a mechanical, self-centred, self-complete system. When he has achieved this, the thing is, as we say, "known;" and then he goes on to extend the relations in question, to follow them further into the outlying, undifferentiated fringe, which is still vague, formless, unrelated, or, as we say, "unknown." It is preëminently and purely a logical endeavor.

The college attitude ought to be fundamentally different. It disclaims at once the very disjunction that research presupposes. Its business is practical and human; pedagogic, not logical. It operates on and with composite, living, organic combinations and wholes. It deals with complex masses, — languages, literatures, sciences, philosophies. It lacks methodological rigor. It has no theoretic interest in breaking things up, or keeping apart things that normally agglutinate. Such distinctions as it makes are empirically based. They fall far short of the logical extreme. The kind of history in which philosophy, biography, art, are still inextricably involved proves

unmistakably more infectious, more stimulating, than any of the several single-thread specialties into which researchers break it up. That settles the sort of history which satisfies pedagogical rather than logical criteria.

Science teaching affords additional illustration. Doubtless there is danger hereabouts. In the medical schools, for example, a presentation of chemistry, notable only for its inadequacy and superficiality, was formerly supposed to be vindicated when it was called "medical chemistry." I am not pleading for that sort of thing; but I insist that between this thin lukewarm science-gruel on the one side, and the colorless abstract on the other, there lies a realm of sound teachable science, — a chemistry, a physics, a physiology, that relates itself to and interprets the student's experience, and, wherever and whenever possible, touches fearlessly his prospective activity.

It is absurd to throw away the inestimable advantage of kneading experience, application, intersecting interests into the very tissue of theoretic knowledge in process of acquisition. Knowledge is not corrupted that way! Teachers of practical branches in technical and professional schools stand aghast at the helplessness and apparent ignorance of their trained students. The teaching has been so "pure" that it has shrunk from attaching itself to experience at one end or use at the other. As against such practice I urge that pedagogical vitality, pedagogical necessity are just as valid in education as are logical validity and logical necessity in their appropriate domain. Logical canons govern a world that lies for the most part beyond the pedagogic level, whatever one locates within that line, — high school, college, or professional school. There should be, then, properly no issue between education and research, for there is no issue between training minds and organizing facts. The situation which eventuates in the conflict is itself a false one.

Meanwhile, the thing has been done;

the iridescent fabric has been unraveled: here are the single threads. The work cannot be undone. The naïve and once inviolate totals, which we knew as the classics, as history, as literature, are in the same plight as Humpty Dumpty, whom,

All the king's horses and all the king's men
Can never put together again.

For the moment the situation is therefore deadlocked; the college cannot, on the one side, recover what time and progress have taken away; nor can it, on the other, as has been abundantly proved, succeed simply through anticipating the special and appropriate standpoint of research.

Here, as I view it, the problem of modern college pedagogy is born. I suggest that, in the place of natural organic combinations which the old-fashioned college found efficacious, the modern college must effect rational combinations, whose organic character is vouched for by social need and experience. Pedagogy, whether secondary or collegiate, becomes thus a subtle chemistry which, far from regretting or antagonizing, finds its present opportunity in utilizing the achievements of research. This suggestion, if sound, takes advantage of the differentiation of function that I have already discussed; it shows further how the complete development of research has been the essential precondition of the reconstruction of the college on a basis really adequate to social need. The old-fashioned college could, in a word, take its material as it found it, just because it was concerned to build only such a house as could be built in that way. But the task set to the modern college is both more various and more definite. To comply with the different specifications, the material must come, not in its natural blocks, but in an elemental form which permits all the necessary kinds of combination. And the art of recombination, with a view of meeting conditions determined by the individual constitution of the boy on the one hand, and by the structure of society on the other, — that is the intellectual

chemistry which I mean by college pedagogy.

I have elsewhere undertaken to find in differentiated social types the principle upon which the college may proceed in recombining the elements which investigation has put into its hands. At first blush, such a suggestion seems to run counter to the fundamental purpose of the historic college. If the college has an eye to vocation, what is to become of culture? The answer to this inquiry I shall presently suggest; let me first indicate why, in any event, I consider such reconstruction of the college curriculum on the basis of ascertained social types, — professional, technical, scholarly, industrial, or other, — to be quite inevitable.

President Eliot has demonstrated once for all that selection — how safe-guarded and organized, it matters not for the moment — is bound to prevail in the modern college: the field is too broad to be covered by any one individual. If, then, choice is to be allowed, it is good sense to enlist through election the boy's maximum interest and power. So far, the college. Now, subsequently, in practical life, we proceed on the very same theory. In exactly the same interest, — that of economy, effectiveness, happiness, — we concede to the boy the privilege of freely determining the direction of his own career. Here then is the situation: If the student's college choices were pertinent, they represent permanent interest or capacity. When the boy emerges from academic tutelage, the same forces, however strengthened or modified, utter themselves, making his development continuous, not discrete. If, then, the two phases thus run and are meant to run in the same channel, the college must be long-headed enough to treat the inevitable vocation, not as an obstacle, but as an opportunity, by developing its cultural implications and significance.

The part of the college under the fluid conditions now existing, is not therefore, as President Hadley recently proposed,

deliberately to disrupt the boy's development, so that coming out from under the academic ether he finds himself in possession of a freedom which his unsteady gait forbids him to use, but rather to ensure the intelligent and significant selection of a vocational function, which he has been trained to comprehend in all the fullness of its social and historic relations. The breadth and flexibility of intelligence which we call culture has nothing to dread from vocation thus conceived; its enemy is a self-centred, detached pursuit, in which relations, implications, perspective, ideals, are ignored. And from such pursuits, culture is almost equally in danger, whether the pursuit be Greek roots or selling shoes.

If, now, such reconstruction is theoretically unobjectionable, the sole remaining point is as to its practicability. I am not ready to submit the outlines of the required typical curricula; but I see no reason to doubt that they can be constructed. An initial difficulty touches the feasibility of intelligent action on the student's part. I have recently begun an inquiry which may throw some light on this subject. A brief preliminary investigation, among law and medical students in various sections of the country, appears to indicate that something like sixty-five or seventy per cent of the college graduates now studying law or medicine knew in college just what their subsequent vocation would be. And the college made no use of that significant fact! So complete may be the divorce between an elective college course supposedly bearing toward the student's career and that career itself, that a well-known theological seminary, whose students are largely college graduates, finds itself compelled to institute a beginner's course in Greek, because so few intending theological students now enter the seminary with a knowledge of that language! If, now, under conditions in which the college does little or nothing to assist the boy to know himself, a large proportion are nevertheless clear as to their ultimate destination,

little as they profit by that knowledge, is it not likely that proper emphasis would greatly increase their number? A minority may, indeed, never know; of these, enforcement of proper standards would eliminate some; the others would get a better education if, even under a little coercion, they pursued some organized form of instruction, than if left to drift as now.

The proposed organization of curricula does not necessarily aim to fill the student's entire time; it provides an organized core, not inconsistent with a certain leeway outside, which will permit the boy to gratify or try-out impulses or tendencies which may define themselves in his new environment. The college student enters upon a stimulating experience; it is altogether likely that some trail hitherto dark may light up; some fuse that has not yet burned may now catch. That consideration needs to be borne in mind.

Of course, even this is not everything. There are important phases and aspects of experience not open to choice at all. There are certain fundamental things about which, once for all, the boy has nothing to say. We do not ask him whether, for example, he chooses to speak English; nor ought we in reason to leave it to him, so far as we do, just what sort of English he shall speak. It is, I think, fairly clear that every elective system must operate subject to certain fundamental conditions and qualifications involved in the constitution of our society itself. Our main task just now is to persuade our educational rulers that nothing is to be feared from such pragmatic reference, if I dare use the word, to social organization. What I am urging in behalf of studies recently admitted into good academic society, is really countenanced by the history of classical study, now so strangely misinterpreted. For Latin and Greek got their start in modern life because they were useful, not because they were mere æsthetic luxuries. The immense cultural importance they sub-

sequently attained means that men went beyond the primary purpose, in order to seize and to transmit the total import of a fertile heritage. They owe none of their vogue through the centuries to their uselessness; that has never been anything but a drawback, and now proves their undoing.

Culture neither fears use nor stops at it. It accepts what is instrumentally necessary, and subdues it to larger, more humane, more truly rational purpose. There is no conflict under modern conditions between culture, even in the academic sense, and use, unless we arbitrarily stop short. The classics, realized in their total significance, "quickened a new birth;" but they were embraced, in the first place, because they served a useful purpose. The instrumental basis was thus in time covered beneath a rich cultural development. For a long time, these ancient literatures were alone eligible to this treatment; we must to-day seek their successors in vehicles that are similarly pertinent to our needs. That is exactly the process that college pedagogy has to work out with each of the rival claimants to a share of the "old dominion." And here we unexpectedly encounter again the fundamental antagonism between education and research; for education, as I have just been pointing out, reckons inevitably with organic social composites, and strives constantly to apprehend relations, significance, function, — whereas research abstracts from function, isolates, reduces, analyzes, succeeding just in the degree in which it satisfies logical statutes.

Whether now one teacher can best do both has, to say the least, not yet been proved. Until it has been proved, ardent believers in research — of whom I count myself one — will seek jealously to protect the investigator against exhaustion, interference, and waste. If instances occur in which he finds stimulus or relaxation in genuine undergraduate teaching, nothing forbids such indulgence; but an occasional case justifies no general in-

ference to the effect that all college teachers will be inspired by research, or that all investigators gain through college service. The boy with his perfectly definite pedagogical needs remains always the centre of reference. That factor safeguarded, it is relatively indifferent just how or whence the teacher derives his inspiration, so he but have it. He must absorb, by all means. Beyond this, he is free — to research, if he chooses; to recover and maintain his spirits, vitality, largeness of outlook and interest, in any or all of a dozen ways. No evidence justifies the assumption that vitality can be maintained by research alone; it has sometimes been lost that way. Nevertheless the universities continue to penalize college teachers who derive their power from other sources.

I took occasion, not long ago, to ask a college dean who was the best teacher in his institution. He named a certain instructor.

“What is his rank?”

“Assistant Professor.”

“When will his appointment expire?”

“Shortly.”

“Will he be promoted?”

“No.”

“Why not?”

“He has n't *done* anything!”

This policy not alone tends to force the graduate treatment down into the college, — it overlooks the inexhaustible variety of youthful response, the constantly shifting interaction of discovered truth with practical interests. At this point the modern law school has a lesson to teach the academic department. The law is surely a rather definite and fixed body of material; the teacher of law is teaching things known, decided, recognized. If the present theory of college procedure is sound, law teaching is bound to be stale; is it? Not if the law teacher has teaching-insight and interest. Legal education has, it is true, serious defects; these are not now in question. The point is that the enthusiasm and effectiveness of the law teachers at Harvard, Columbia, Chicago, dealing, as they do, with an already determined subject-matter, completely disprove the contention that vigorous teaching is inseparable from research. Nor does the legal mind, trained by teachers who are content to teach, compare unfavorably in point of flexibility and power with the scientific or linguistic type, trained by teachers too solicitous for their own mental sprightliness and academic advancement to lose themselves more or less completely in their pedagogic function.

THE SOCIALISM OF G. LOWES DICKINSON

BY PAUL ELMER MORE

It chanced that two sociological books published this spring fell into my hands at the same time; Morris Hillquit's *Socialism in Theory and Practice* and G. Lowes Dickinson's *Justice and Liberty*;¹ and reading them together, I was led to ask myself how men of so diverse tempers could hold, or profess to hold, the same doctrine. Mr. Hillquit, I saw, was at least consistent with himself; his reconstructed society of the future is a natural outgrowth from his attitude toward that of the present. Whether he really understands the present, and whether his reconstruction of the future is humanly possible, are, of course, other questions.

Orthodox economy, in the person of the doughty M. Leroy-Beaulieu, contends that no communistic exploitation of labor would be sufficiently productive to maintain civilization; the economists may decide. So, too, the psychologist alone can determine whether any equalized system of distribution would create a condition of content among the individuals capable of stability. The historian must say whether evolution from a slave-holding régime,

¹ The order of Mr. Dickinson's publications will be found significant: *From King to King: The Tragedy of the Puritan Revolution* (1891); *Revolution and Reaction in Modern France* (1892); *The Development of Parliament during the Nineteenth Century* (1895); *The Greek View of Life* (1896); *The Meaning of Good: A Dialogue* (1901); *Letters from a Chinese Official: Being an Eastern View of Western Civilization* (1901); *Religion: A Criticism and a Forecast* (1905); *A Modern Symposium* (1905); *Justice and Liberty* (1908). Since then, he has delivered at Harvard his Ingersoll lecture, *Is Immortality Desirable?* which was printed in the *Atlantic Monthly* for May, and which is to appear this spring in book form. The important development of his ideas begins with *The Greek View of Life*.

through the dominance of the feudal baron and of the "captain of industry," points logically to a self-guiding society, or merely to another change of masters. And, finally, it remains for the moralist to ask whether a revolution based avowedly on class-hatred would not result in a grosser form of egotism, rather than in Mr. Hillquit's beatific vision of a "world-wide solidarity," and of a state in which "the question of right and wrong is entirely obviated, since no normal conduct of the individual can hurt society, and all acts of society must benefit the individual."

These are brave matters, indeed, and whilst the debate goes on with words, and sometimes with blows, the mere man of letters might do well to hug the wall and chant his "*Ailidon! ailidon!* — sing woe, sing woe, but may the Good prevail."

With Mr. Hillquit and the honorable economists of his type, I have no argument; they are out of my range. But Mr. Dickinson, who is himself really just a man of letters, however high he may stand in the craft, I am able to follow; and I seem to detect an inconsistency in his procedure, something more than a logical fault, which, if I am wrong, he may some day in his suave manner quite explain away. Meanwhile, I should have supposed that he belonged to the class of M. Anatole France rather than of Mr. Hillquit, with less of irony and more of moral earnestness, no doubt, than the wicked Parisian, but still moved at bottom by the same irritated refinement of taste. If that be so, his descent into the political maelstrom ought to have ended in some such débâcle of horror as closes M. France's *L'Île des Pingouins*, wherein