

psychology, and philosophy. For this reason classical students are likely to be strong logical reasoners.

Furthermore, grammatical and mathematical studies are the easiest to teach. They become powerful pedagogical instruments of mind-training, even with poor teaching. The reason for this is that they are perfectly definite, and are for the most part logically arranged. This being the case, it is comparatively easy to present at each lesson just enough surmountable difficulties for the pupil to overcome. A lesson in Latin or Greek has so many sentences to translate, so many expressions to be noted. A lesson in mathematics has so many problems to solve. These difficulties are perceptible, definite, and surmountable. They are of a nature to make themselves felt to the student; he cannot help seeing them, and, if he learns his lesson, overcoming them. There is consequently in these subjects a movable fulcrum of difficulties upon which the pupil may exert his mental power. This is the reason why linguistic and mathematical studies have always been such incomparable instruments for exercising the intellectual powers of students. It is still their warrant for a large place in the modern curriculum. The college has not yet learned how to teach modern subjects, even modern language, in such a way as to make them equivalent to the old subjects as intellectual disciplines. There are difficulties, to be sure, in the dissection of a bird, but they do not force themselves upon the student, compelling him to master them in order to proceed. There is nothing that the professor of modern subjects needs to study so much as the pedagogy of his branch of instruction, for the probability is that a poorer teacher in the old studies will show better results in the line of strictly intellectual drill.

So much for the old curriculum under

the old methods. We need now to see in what particulars the modern college has departed from the road our fathers trod. The departure has been a double one. Both methods and subject-matter have greatly changed.

Methods have become more concrete and inductive; less dogmatic, formal, and deductive. Instead of spending one or two years in detached grammatical study, before beginning to read a language, the teacher now sets the pupils to reading as soon as they have acquired even the most elementary notions of grammar. He calls attention to regularity of forms and structure, thus building up a knowledge of the grammar from the concrete matter of the text. The result is that the pupils read much earlier than they used to, gaining at the same time a much warmer interest in their study than was formerly possible. The same is, or may be, true in mathematics. This subject also is feeling the influence of the inductive sciences, which have taught us that it is better to proceed from facts to principles, than to attempt an application of principles before they are thoroughly understood.

But the point in which the present current idea of liberal education differs from the formal one just described, lies in the subject matter. It might be inferred that the modern college curriculum differs from the old only in the number of subjects taught, when the question might at once be raised whether a few subjects well studied might not be better than a large number more superficially taught. The difference is more than quantitative—it is one of kind. Not only were the old subjects taught in a formal manner, but they themselves were largely formal in character. Mathematics is not modern science, yet it underlies modern sciences as a form common to them all. We got a little