VII.

THE STUDY OF PEDAGOGY AT CORNELL UNIVERSITY.

The department of pedagogy in Cornell University was provided for by the board of trustees toward the close of 1885, on the strong recommendation of the newly elected president, Dr. C. K. Adams. The writer, who had since 1879 been professor of geology in the University, but who had for twenty years previously been at the head of large secondary school in New York and Ohio, was selected to fill the newly-founded chair. The fact that a university professor of pedagogy has had practical experience in teaching in both secondary school and college, should be an advantage, since his theoretic views of what is desirable in such teaching are likely to receive a wholesome modification from a knowledge of what is practicable under existing conditions. At the outset it was obvious, from the experience of similar professorships elsewhere, that the least that ought to be attempted was to furnish those who might hereafter become teachers in colleges or secondary schools with the fundamental principles which underlie all good instruction, and also with a knowledge of the historical development of educational ideas, methods, and systems. Hence courses on the theory of education and on its history were announced.

The preliminary knowledge of the sciences of man,—physiology, psychology, and ethics,—which is needful for the study of pedagogy, was given in the university in the sophomore year by the professors of those subjects. Thus pedagogy was naturally limited to the last two years of the undergraduate course and to graduate students.

In the view that was taken, the theory of education has to deal with its aim, its laws, and its means. When considered historically and stated in its most complete form, the aim of
education would seem to be, not only to attempt a complete and harmonious evolution of all the powers and capabilities of human beings, that they may approximate to inward freedom, but so to put them in touch with all the legitimate interests of their race that, as men, they may feel that nothing which pertains to humanity is foreign to their sympathies.

A very considerable number of physiological and psychic sequences are sufficiently constant to entitle them to be considered educational laws. In treating these, my work is an application of psychology, with its physical implications, to the theory of education; and here, while strongly emphasizing the essential unity of the soul amid the multiplicity of its modes of manifestation, yet the order in which these spiritual manifestations rise into strength, and the manner in which they act and react on each other in the course of education, have served as a useful guide for the order in which they may be treated most clearly and effectively. Thus the order of relative development of the so-called faculties to the intellect and capacities of feeling, has been followed with apparent profit in discussing their educational aspects, and in suggesting the modes of treatment by which they might be brought into full and harmonious activity.

The consideration of the means of education is naturally a discussion of the educative efficiency of the studies and employments which are used in schools to promote the purposes of education. These may conveniently be discussed in five groups, viz., language, mathematics, history, the sciences of nature, and employments which call into play bodily capacities. These all differ widely in subject-matter, in essential methods of procedure, and in the kind of discipline they may give. They deserve, therefore, a careful and unprejudiced consideration; for it is only by the duly-proportioned co-operation of them all, with language as the central member of the series, at all stages of the work of disciplinary training, that the aim of education is likely to be fully reached, especially on the side of bringing the young into all-sided and sympathetic relations with all worthy human interests. A proper attention to
this grouping and to the relative worth in education of its members, will also be likely to be helpful in that most difficult and delicate of pedagogic duties, the selection, proportioning, and arrangement of studies in school programmes, which is now, in too many cases, a matter rather of individual preference in selection, and of haphazard in placing, than of clear pedagogic insight.

This classification and discussion of studies, with which education as a science ends, furnishes an appropriate introduction to the art of instruction. In this, the general principles of instruction, its useful expedients, and its modes of presenting various branches at various stages of progress, are all considered with reference to their basis in the science of education, of which they are only special phases and applications. In these days, when a passion for so-called methods prevails as panacea for all kinds of educational ills, it is well to emphasize the fact that the special kind of subject-matter and method of the group to which any study belongs should give the law to the mode in which it should be presented in instruction; and that, when this fact is kept clearly in view, any intelligent teacher may be trusted to devise expedients in his work, which are likely to succeed in his hands, but are hardly worth heralding as discoveries.

The manner in which educational institutions and systems should be organized, managed, and supervised, together with the subjects of school economy, school architecture, and school sanitation, has thus far been treated as a sequel to the art of instruction; though it might appropriately be made a distinct short course adapted to the needs of those who expect to be superintendents of schools.

As a supplement to the course just described, which has three lectures per week throughout the year, a conference has been established which has weekly sessions, and which, after successive modifications, has taken a form which seems well adapted to its purpose. One-third of the year is devoted to the investigation of selected educational subjects in the university library, the written reports on which form subtheses;
another third is given to the visitation of schools and discussion of their operations; and the remaining third is devoted to a discussion of the chief branches taught in secondary schools, of which each student selects one, leads in its discussion, and finally presents a written plan in accordance with which it should in his opinion be taught. Likewise, during the last half of the year, the time of one lecture per week is given to a quiz on previous lectures conducted by the members of the class. The two who are to conduct this each week, are appointed a week in advance, and the subjects of the quiz are assigned at the same time. The purpose of this exercise is to emphasize the necessity of thorough preparation for class-room work, to drill on the mechanism of the recitation, to give some practice in the formulation of appropriate questions and series of questions, and to afford some hint to the professor of the probable teaching power of the various members of the class. Incidentally, also, it secures a review of the lectures.

During the last three years, likewise, a pedagogical seminary has been offered to those select students who, having done all other work of the department, desire to go farther and discuss some of the thorough German works on pedagogy. The Allgemeine Pädagogik of Th. Waitz has usually been chosen; but at present, while one man contents himself with Waitz, another is working up a comparative view of the ideas of Bencke, Waitz, and Schrader. It is hardly necessary to say that these men are postgraduates.

To the history of education, forty lectures were at first assigned; but it was soon found that this allotment was by no means sufficient. Their plan contemplated, not only an account of the working out of national ideals of life in educational arrangements among the most important nations of earlier times, and of the gradual evolution of our present systems of education and means of culture, but also an analysis of the educational views of representative authors from Plato down to Herbert Spencer. At present, two lectures per week throughout the year are barely sufficient to accomplish this; and it is easy to see that a seminary could profitably be added
to this course, in which a few promising students might prosecute a thorough study of various phases of educational history.

Few students who did not intend to teach have hitherto selected any of the courses in pedagogy; and the tenacity of the old idea that success in teaching depends solely on knowledge of the subjects taught, or on a supposed inborn capacity to teach, is testified by the fact that not all who look to teaching as an occupation, consider it essential to make any professional preparation therefor. Of those who have had such courses, usually about forty each year, most are known to be teaching with gratifying success in secondary schools and colleges, or as superintendents of schools.

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