

on natural history tell them that all animate objects are either animal or vegetable, and proceed directly to divide the animals into five branches, which are in turn subdivided into classes, orders, genera, and species. After some weeks or months of such weary plodding as may possibly give them a lifelong dislike for the subject, they learn of mammals, birds, and insects, with which they are or may become acquainted. Possibility of an awakening interest can hardly be until this long-deferred normal beginning is reached, but it would be strange if the darkness in which the first steps were taken had not so dulled the vision as to render imperceptible the many beauties which this study holds for every student.

Likewise, in botany, instead of beginning with flowers, which they may examine, analyze, and arrange in groups according to their resemblances, they spend many weeks delving among endogens and exogens, gymnosperms and cotyledons, until, with brains inextricably tangled with words they cannot think of applying to the flowers about them, they come to regard the study as dreary and tiresome, and when the text-book is laid aside with the term, neither it nor the science is ever thought of, except with emotions of aversion.

The order of studies being determined, it is important that the continuity should not be broken. Links missing in the chain will correspond to blank spaces in the mind, which will tend to render indistinct succeeding knowledge that hinges on that which is lost. By the study of psychology we become acquainted with those mental processes by which the knowledge we possess was gained, and thus learn how this may be presented to be grasped most readily by the child. The subjects presented are not independent, but, they rest on what has preceded, except something yet to come. To omit any part is to destroy the natural basis on which the expected knowledge should rest, and must greatly enhance the difficulty of comprehension on the part of the learner.

Independent facts—*i.e.*, facts having no bearing on what has preceded, and unrelated to that which is to come—have no place in the course of study. The normal order of presentation is that in which each step prepares the child for the next, and each new lesson is but the outgrowth of the old.

This, wisely followed, promises success with mathematical assurance.

I wish now to state most clearly a principle I have already indirectly referred to—the necessity of independence in study. The mind may possess itself of a thought, having received it clearly stated from another mind which has thoroughly digested it, and arranged the manner of presentation so as to clear the way of all difficulties and render the grasp of the thought an easy mental act. But in the beginning, some mind must have reached the same end slowly and loiteringly, itself removing obstacles and laboring with difficulties, obstinately laboring until the clouds are lifted. The difference between the methods is the difference of passivity and earnest activity. In the one the mind accepts the thought ready for assimilation, itself passive and inclined to action in the slightest possible degree: in the other all the powers of the mind go forth to healthful labor and find in activity that sturdy growth which is the characteristic of thoughtful men.

There is nothing so desirable as self-helpfulness, and there is no teacher like that one who, while presenting as little as possible of ready-made thought, stimulates that desire of acquisition which leads to independent thought. The ground is, even broader than this. Not only should the pupil not be dependent upon the teacher, but he should also be in the greatest possible degree independent of other sources. Knowledge is extremely desirable, and second-hand knowledge is infinitely preferable to ignorance; but we shall all agree that that knowledge which the mind has obtained through its own efforts, unaided, is of greater value and has contributed more to mental growth.

There are better methods of instruction than those which make of the pupils mere passive recipients—so many pages of a text-book assigned, so many statements on these pages committed, a time for repeating what memory has gathered, and a teacher to clothe in clear language, and fresher illustration that which is dimly understood. And the mind waits, sluggish, powerless, inane, like the encrinite accepting food, if food come to it, but powerless to seek for itself. Accustoming itself to knowledge fully digested, it courts a mental dyspepsia, which renders the assimilation of solid food an impossibility. A sad feature is this,