

SCIENCE

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THE SCIENTIFIC TEACHING OF SCIENCE

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SCIENCE, with its introduction of the laboratory, was expected to revolutionize teaching. But the ever-recurring distrust of the new has given us a curious combination in our scientific departments of the modern laboratory, the medieval lecture, and a degenerate form of the Socratic quiz. And the student feels them about as far apart in content as in origin. While the head of the department is lecturing to him on chlorine, the second man in the department is directing him in the manufacture of sulfur dioxide, and some assistant, once a week, is extracting from his brain all it contains of hydrogen sulfide. An unsavory mess it is!

If we could accept as the purpose of education the développement—perhaps it is more accurate to say the restoration—of the right mental attitude in the student, we could bring order out of this chaos. For we should then see that the dogmatic handing on of facts through lecture and text-book inculcates the wrong attitude of mind in the student. A student will much more rapidly develop the right mental attitude by discovering facts for himself, even though they were known before, than by memorizing a multitude of facts discovered by other people. Men prate a good deal these days about the conservation and development of our natural resources, and are curiously neglectful of our greatest resource, humanity's power of creative thinking. The little child is, of course, the scientist, par excellence, curious, experimental, creative. Our education must retain and build on the curiosity and experimental eagerness of the child, and develop his power of creative thought. We can never know what the new generation has to contribute to us till we give it greater opportunity to express itself. We think when we have let a student choose his