

Let's enjoy 'If You could See an Atom'! : Innovative Science Teaching through HEC Enables Early Exposure to Atomic Theory

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Foreword:

How old were you when you learned that the world is made up of atoms?

Aya is a teacher at a public elementary school in Japan. This is a record of a few days in the classroom when first-grade elementary school children stepped into the world of science with her.

Dr. Kiyonobu Itakura, who advocated HEC* in 1963 based on his research regarding the formation of scientific cognition, wrote a picture book for children in 1971 that enabled them to have a fun encounter with atoms and molecules. The HEC Classbook "If You Could See an Atom" (IYCSA) was compiled based on his book. The Association for the Studies

in Hypothesis–Experiment Class members have been using this Classbook for over 50 years. And Aya is not only a teacher who can draw comics, but also one of the practitioners of HEC.

Children in this class come to be familiar with the 100-million-fold molecular model as if it were a plaything. They enjoy making models, drawing pictures, and once they have studied IYCSA, they begin to analyze and explain phenomena around them using the ideas of atoms and molecules.

Read this manga and remember that learning about atoms and molecules is an exciting experience that opens up a new world to you. And if you want to experience that again, you too can pick up this HEC Classbook, or the app "If You Could See an Atom".

Mariko Kobayashi Manager of Translation Committee @ASHEC

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* <https://www.kasetsu.org/>

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