Modern educational system was started in 1872 in Japan in order to foster the development of industry and culture through the introduction of Western learning. Many elementary schools, higher elementary schools, middle schools, normal schools, universities were founded. As for Physics education, several western physics textbooks were introduced and translated textbooks were used. After a decade or more, Japanese original physics textbooks were published and widely used. These historical facts were recorded by law and published textbooks.

In 2010, we found the students' science notebooks, examination results and textbooks at the middle Meiji era, when physics education had been changed from western style to Japanese original style. Students' notebooks and examination results are primary documents to reveal educational situation at that time, what and how they were taught. Experimental figures are also drawn in the notebooks.

In 1980s, science education reform were promoted in the United States[1,2] and first Active Learning physics textbook by Alfred P. Gage was published in 1882[3]. Many questions were asked in connection with the experiments that tend to make the student active. In Japanese students' notebooks, we could find descriptions of this Gauge's textbook contents. Later on, Japanese teachers developed their own physics education based on Japanese culture and also hands-on experiments for students to construct physics concepts actively.

This work was supported by KAKENHI Grant number 25560072 and 25750071.