

Diversity concept of the new curriculum "Inquiry learning" was made by matching "student" and "researchers"

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In the United States, STEM (Science, Technology, Engineering and Mathematics) educational model, which has been implemented as a national strategy since 2007, has been introduced. It is considered to have a great effect on a future human resource development as PBL (Project-Based Learning). In Japan, it will be introduced as “Inquiry learning” in high school education in 2020 (MEXT). In the future, “Inquiry learning” is expected that it will affect the educational activities of elementary and junior high schools. However, because teachers have limited their field, it is difficult for teachers to teach students in learning activity. Therefore, we matched “researcher” and “student” in our activity. Students directly can be advised by researcher. We are trying to provide a new educational system which student can independently do a research activity. For example, a junior high school teacher majoring in biophysics when he was in an University, trying to treat his own field, using an X-ray flux (XGT) to measure the metal elements accumulated in students' popular beetles, The specialized biology society and the their paper was accepted (Horikoshi et al., 2019: Advances in X-ray analysis). In addition, a category called "Disaster Inquiry learning" was held, with the aim of teaching knowledge about disaster science and conducting on classes (Goto et al., 2020: NL of The Society of Environment Project-based Research). When incorporating a school visit by a researcher into the learning framework of the inquiry learning, it is desirable that the researcher be involved in some form up to “evaluation”. For example, it is effective to use a common rubric and an evaluation sheet based on the PC cross R cycle (Tokyo Educational Board; Mukoh et al., 2020: Japan Society for Biological Education). A system that connects students and researchers is made possible by “Open Science” that it can be avoided teacher’s hard work. We would like to ask for researchers who active in the field, so that teachers will not pick up the inquiring mind of students. The multi-disciplinary diversity learning initiatives support students full of hope for future science.

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