

## A research on the sustainability of science learning with cooperative learning - An application of portable learning credit

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## **Abstract**

A Portable of Learning Credit (PLC) is referred to the Teams Game Tournament (TGT) affixed to the Cooperative Learning (CL) at the site of information science education museum. The major proceeding of the PLC is "diversified grouping – taking lecture whole class – competition 1 among groups - coding score on the PLC - re-diversified grouping-competition 2 among groups-coding score on the PLC-(ditto)-accumulating the total scores - Awards" so as to let all of participants can sustain its attraction on learning. 24 participants from in-service teachers were in-depth interviewed and surveyed after the completion of science courses with PLC. Results are shown that participants support the PLC that can efficiently sustain the students 'attraction of learning of science.

**Keywords:** Portable of Learning Credit (PLC), Sustainability, Teams Game Tournament (TGT), Cooperative Learning (CL), Informal Science Education