Improvement of TPACK for teachers in an Indonesian School Abroad by online workshop with regard to literacy and numeracy ability

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ABSTRACT

Initial analysis revealed that Indonesian schools abroad has implemented an anticipated curriculum but these schools still needed assistance to be more focused in achieving learning objectives, especially for mathematics subject. The aim of the workshop in this community service activity (PPM) was to facilitate teachers to increase their understanding of TPACK (Technological, Pedagogical, and Content Knowledge) through discussion and practice of digital media oriented towards literacy and numeracy skills. Understanding TPACK helps teachers to adapt to changes in the curriculum and mathematics learning needs in this technological era. There were five steps in PPM: (1) Dissemination of information from the implementation of PPM to Indonesian school partners abroad, through the deputy principal. (2) Topic planning and assistance needed by partners. (3) Implementation in online mode and outside of working days. (4) Evaluation by interview and filling out a self-efficacy questionnaire. (5) Follow-up takes the form of collecting digital media for literacy and numeracy learning as a reference for future mathematics learning. There were 18 teachers, 6 students, 5 lecturers and 2 assistants in this activity. Enrichment of the required material consists of: (1) the concept of TPACK development by independent teachers; (2) the urgency of literacy and numeracy skills; (3) current national education assessment policies, (4) the basics of preparing learning media in accordance with the basic competencies, and (5) the practice of developing learning media in the form of digital media on open platforms such as Quizziz and Liveworksheets. The evaluation results concluded that the teacher's response was guite good regarding the content workshop and the teacher's response was very good regarding the presentation of digital media material that was oriented towards student literacy and numeracy.

Kata Kunci: Anticipated curriculum, digital media, literacy, numeracy, TPACK