## TRAINING OF TEST INSTRUMENT DEVELOPMENT AND ITS ANALYSIS FOR MODERN TEACHERS OF SMP

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## **ABSTRACT**

Community Service Activities (PPM) in the form of training in the preparation of test instruments for SMP teachers in science that aim to provide understanding and experience to teachers about 1) the preparation of a problem based on High Order Thinking Skills, 2) Drafting assessment for Curriculum 2013, 3) instrument formulation, and 4) analysis of the matter in modern (Item Response Theory). This PPM activity is carried out by training methods, followed by assignments, and mentoring in schools. The activities have undertaken consist of the training of assessment design and lattice-based problems of HOTS, assessment of the training of K-13, the practice of drafting, and training on grain analysis of problems using ITEMAN and Bilog MG software. The target audience in this activity is the teacher of the first school (SMP) in Sleman Regency, Yogyakarta, which amounted to 30 people. The result of this PPM activity, namely: 1) provide an understanding to the IPA teacher on the principles of the preparation of right test instruments, 2) provide understanding and experience to the IPA teacher in preparing a good test instrument, 3) give understanding and experience to the teacher in conducting analysis of grain problems in IRT, and 4) provide understanding and experience to the teachers in analyzing the ability of test-takers with IRT approach. Community Service Activities (PPM) in the form of training in the preparation of test instruments for SMP teachers in science that aim to provide understanding and experience to teachers about 1) the preparation of a problem based on High Order Thinking Skills, 2) Drafting assessment for Curriculum 2013, 3) instrument formulation, and 4) analysis of the matter in modern (Item Response Theory). This PPM activity is carried out by training methods, followed by assignments, and mentoring in schools. The activities have undertaken consist of the training of assessment design and lattice-based problems of HOTS, assessment of the training of K-13, the practice of drafting, and training on grain analysis of problems using ITEMAN and Bilog MG software. The target audience in this activity is the teacher of the first school (SMP) in Sleman Regency, Yogyakarta, which amounted to 30 people. The result of this PPM activity, namely: 1) provide an understanding to the IPA teacher on the principles of the preparation of right test instruments, 2) provide understanding and experience to the IPA teacher in preparing a good test instrument, 3) give understanding and experience to the teacher in conducting analysis of grain problems in IRT, and 4) provide understanding and experience to the teachers in analyzing the ability of test-takers with IRT approach.

Kata Kunci: training, assistance, preparation of questions, junior high school teachers