

DEVELOPMENT OF SPATIAL CRITICAL THINKING INTERACTIVE TEACHING MATERIALS IN IMPROVING STUDENT'S GEOGRAPHIC AWARENESS

by Muhammad Nursa'ban, Muhsinatun Siasah Masruri, Mukminan, Ariyanda Fitra, Heni Setianingsih

ABSTRACT

The results of the 2019-2020 study showed that the geographical awareness of students in eight samples of high school in Yogyakarta after studying geography was still weak. The students have difficulty thinking critically, one of which is due to "boring" learning resources. The purpose of this study is to produce an interactive module for spatial critical thinking containing 7E (elicit, engage, explore, explain, elaborate, evaluate, extend) on appropriate material "natural resources" for class XI SMA. This study uses a development research design with three main stages, namely: 1) preliminary study, preparing the initial construct of the interactive spatial critical thinking module through literature study, an initial observation. 2) module design and development through expert validation processes and small group trials. 3) Larger group trial as the final product. Research subjects: 1) initial validation by 2 expert lecturers: educational media and geography subject matter. Subjects assessed by practitioners: 2 geography teachers and 60 students in 2 public and private high schools. The subjects of the large group trial were: 8 teachers and 200 students in six senior high schools in Indonesia. Data collection techniques using a questionnaire. The feasibility of product quality is indicated by the validity of Aiken's formula and the estimated reliability of Cronbach alpha. The data is simplified into a percentage or categorization form. The research resulted in an interactive spatial critical thinking module containing 7E material on appropriate "natural resources". The characteristics of the 7E e-module use a flipped book application that can be embedded in Android smartphones and PCs. The results of the media expert's assessment had an average score of 4.60 and material experts had an average score of 4.78, so it was categorized as very feasible. The average assessment of the experimental subjects in the large group is 3.83 Includes: Readability (3.94), Integration (4.05), Interesting form (3.95), Coloring (3.77) Material understanding (3.80), Environmental care attitude (3.70), Problem-solution (3.71), Love the homeland (3.67). The feasibility of the electronic module based on the 7E learning cycle on students' spatial critical thinking skills is shown by the value of the relationship obtained with a correlation coefficient of 0.407 sig; 0.00 ($P < 0.05$), meaning: there is a significant positive relationship

Kata Kunci: *interactive module, spatial critical thinking, geographic awareness, 7E geography.*