Development of an Independent Learning Curriculum-Based Educational Game Portal in Building Resilience and Digital Literacy of Elementary School Students

by Siti Irene Astuti Dwiningrum, Samsul Hadi, Rukiyati, Tika Aprilia, Amalia Rizki Ardiansyah

ABSTRACT

Proactive and innovative curriculum by integrating creative learning based on edugame. Game-based learning (GBL) can be played using gadgets anywhere and anytime. To realize this, this research collaborated with a partner, namely PT Animars Demikita Metamedia. Partners have the ability in digital media content to target elementary school students. Educational game content based on the independent learning curriculum and the 2013 curriculum for the elementary school level has not been produced much even though it is urgently needed. The solution offered in this proposed program is the development of a curriculum-based educational game portal for them to learn in building resilience and digital literacy of elementary school students.

The Matching Fund program is designed in five main activities, namely: 1) independent studies: 2) research activities: 3) community service activities; 4) teaching assistant activities; 5). Entrepreneurial activities. The first activity, independent study is a program carried out to practice the competencies that have been obtained during lectures into a real project specifically and practically and in direct contact with experts to understand its application. Independent studies are carried out at the end of the fifth month to the sixth month of independent study implementation followed by 20 students including 5 students of the Education Policy Study Program, 5 students of the PGSD FIP Study Program, 6 students of the Information Technology Study Program, and 4 students of the Information Technology Education Study Program FT UNY. The second activity, research on the development of educational game portals has produced 12 edu-game packages that are feasible and appropriate to use to improve the resilience and literacy of elementary school students. Edu-game is equipped with a guidebook for elementary school teachers in the form of an interactive e-book. The stages of development research that have been passed are the analysis stage, namely field studies and document studies related to educational game portals based on the independent learning curriculum, the design stage, namely designing an edu-game portal design based on the independent learning curriculum, the production stage, namely producing edu-games using several software developed by partners (PT. Animars Demikita Metamedia, the implementation stage, namely making guidebooks, limited trials, field trials, and dissemination. The results of trials and dissemination show that educational games have succeeded in building the resilience and digital literacy of elementary school students. The third activity, the results of research conducted by the academic community in universities are socialized through community service activities (PkM). Training on the Use of Educational Game Portals in the Disdikpora Bantul. This activity was carried out by a research team of five lecturers and involved 10 PGSD students. The material presented in this activity was Creativity and Innovation with Edu-game, followed by the presentation of educational game portals and assistance in the use of educational game portals. This activity was attended by 40 participants. The Fourth Activity, Teaching Assistance Activities 5 people carry out teaching assistance in schools using edu-game application products that are integrated in the educational game portal. The methods used in the implementation of Teaching Assistance include the Demonstration Method and the Guided Practice Method. Fifth activity, the role of students in Matching Fund entrepreneurial activities provides input to Partners in product development and marketing strategies. Based on the results of the study, observations in the studio and assessment of edu-game products carried out by students, there are several thoughts that are inferred from the entrepreneurial activities of the Matching Fund program, especially in an effort to develop products to have a selling value including a) Conducting market research; b) Develop creative and innovative products; c) Develop more interesting and meaningful story content/substance; d) Strengthen interactive dialogues; e) Develop an effective marketing strategy. The implementation of the Matching Fund program provides benefits to universities, partners, Higher Education personnel, students and the community. In general, there are no obstacles, because all targets have been met, and some targets have reached more than 100%, namely 617% of Partners, the number of students getting experience outside the capacity is 296.7%, the receiving community, langsung (students) 896.7%, the direct recipient community 213.3%, teaching practitioners on campus 500%, guest lecturers 400%. Activities in the Maching Fund program are determined and relevant to the objectives of MBKM, namely the achievement of 8 ICUs. Progam Matching Fund is carried out adaptive and progressive learning, because it provides opportunities for students to prepare creative prospective teachers, progressive teachers with activities based on learning to do

Kata Kunci: Educational Games, Independent Curriculum, Digital Literacy, Resilience, Elementary School Students

and learning to live together obtained from Matching Fund activities that directly invite students to collaborate with DUDI.