

Development of EDUDA as a Media to Build Students 'Self-Resistance in Preventing Drugs


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ABSTRACT

The use of drugs, especially in Sumatera Utara, Indonesia, has a fairly large increase and requires serious efforts. EDUDA is an application that can help students form their resilience assisted by counseling guidance teachers, parents, and peers in forming good character. The educational application has self-defense materials and direct assessment of students' self-resistance which can be seen by the counseling teacher as an evaluation material for improving the quality of student development. based on the results of the implementation of educational media in schools, namely in phase 1 the increase was 7.3 with an average of 84.55, in phase 2 the increase was 3.24 with an average of 87.73. whereas in phase 3 the increase was 3.27 with an average of 91.06. the increase in phase 3 has been proven in building students' self-resistance in preventing drugs.

Keyword : EDUDA; Self-Defense; Students.

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1. INTRODUCTION

The development of developed countries is not separated from education that has good quality. Quality education is education that can develop all the potential and knowledge possessed by Rasyid students (2016). Students' self-development is inseparable from their resilience in fighting drugs. The increase in the frequency of drug use cases in the city of Medan has occurred in students, especially high school students. In a press release from the Coordinating Ministry for Human Development and Culture of the Republic of Indonesia "Drug users in North Sumatra are even greater than the national prevalence," said Muhadjir during his visit to the Rehabilitation Workshop of the Badan Narkotika Nasional (BNN) in Deli Serdang, Indonesia.

Dewi's research result (2018) that the use of technology has a great influence on awareness of the dangers of drugs, students will become victims, by using technology to persuade them to use drugs, because applications are needed that can overcome this through the education application. According to Dalimunthe (2020), eduda is used as a learning medium if it has characteristics (1) functional, depicting, recording, storing events, (2) manipulative, media that can be presented which takes two or three minutes with the time-lapse recording technique, (3) distributive, can be developed repeatedly, (4) in the form of hardware or software, (5) used en masse. This Eduda application is a mobile application that can be used by students, parents, counseling guidance teachers, and even peers.

Self-resilience can be called significant adversity context adaptation (Luthar et al., 2000), in which self-resilience is not only at the level of individuals who interact in their social environment which includes family, class, school, peer group, environment and community and society. (Donald et al, 2010.) Self-resilience also has three aspects, namely a. commitments, challenges, and challenges. Through these three aspects students will experience developments that require hard work of students in dealing with the problems they are experiencing (Maddi & Deborah, 2005).

2. RESEARCH METHOD

The research method used is the classroom action research method in measuring the level of success of students in strengthening self-resistance to drugs, this method has stages, namely:

- planning: designing questionnaires, self-defense module materials, both printed and video, where research is needed in the implementation of educational activities in strengthening self-defense.
- implementation: carry out all the activities that have been arranged in the work plan, this implementation involves instructors, researchers, school heads, teachers, students and parents
- observation: instructors and researchers observe respondents by giving questionnaires to students, parents, and teachers to analyze the use of education for improvement
- reflection: the research team collects the results of observations to conclude what actions can increase the effectiveness of using the application, and measure the extent to which students' self-resistance is achieved for re-planning. The schematic of this research can be seen from the picture below Kemmis & Mc Taggart (1988).

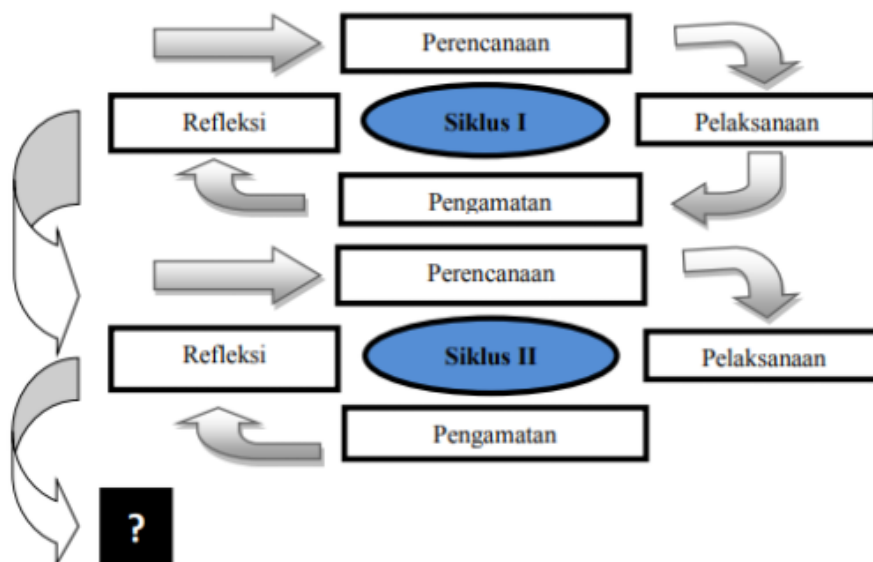


Figure 1. Research Steps

When the reflection stage is needed, data analysis techniques are needed to calculate the final score of students with a formula, namely Darmayanti (2012).

$$final\ scores = \frac{student\ scores}{maksimum\ score} \times 100 \quad (1)$$

Furthermore, we can calculate the class average value using the formula, namely Arikunto (2013).

$$Mean\ scores = \frac{\sum Total\ students\ Scores}{total\ student} \quad (2)$$

Whereas in developing the software the researcher uses the development method. This method is very suitable for capping the classroom action research method where this method provides collaboration between the research team and the software development team, through the reflections that have been obtained during the Classroom Action research cycle. The stages are carried out namely:

- Plan: receive a design from the research team to create a concept starting from the interface, mechanism and code to be used.
- Code: write coding in android and web programming based on the results of the planning that has been made.
- Create: build the application through the code that has been created.
- Application testing: testing the application whether it is in accordance with the planning that was made otherwise the action will return to the authorship of the code. If it is appropriate then go to steps package.
- Package the application for release.

- Release: launch the application via the Google Playstore via the Android platform. Search keywords using the name EDUDA.
- Guide the application operation so that it can provide a clear understanding to the user.
- Monitor the development of data through the application and record findings for re-planning. The research scheme can be seen from the following figure (Sikender, 2017).
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Figure 2. Step of Development System

3. RESULTS AND DISCUSSION

A. Student development results

The results of this study there are two output objects, namely to improve students' self-resistance and to focus on the application to users. This is done to provide accurate identification of student problems and student handling when there is confusion. Implementation is carried out through cycles 1,2 and 3. By providing training about self-defense against drugs both to students and to parents and counseling guidance teachers. The results of the development can be seen in the graph below

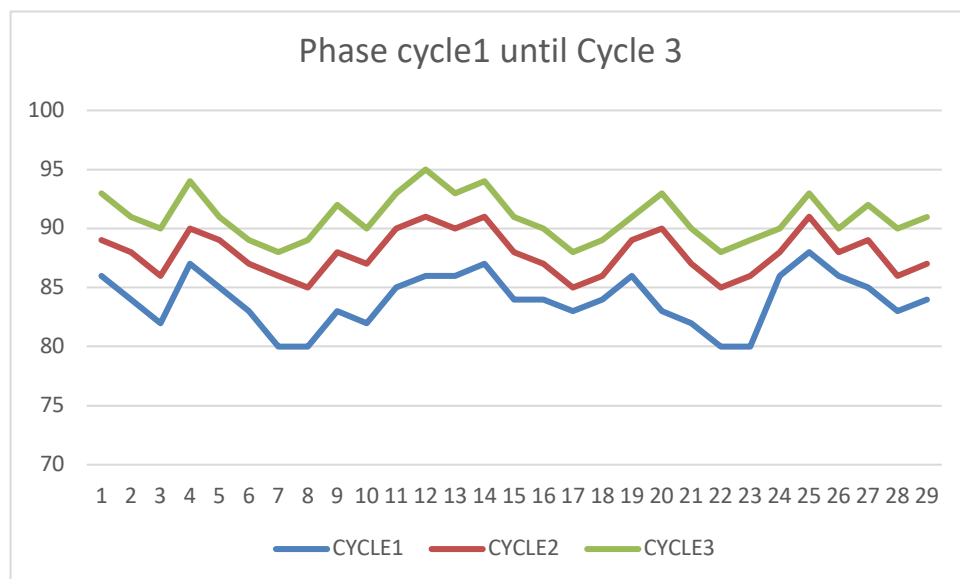


Figure 3. Phase Cycle 1 until 3

It can be seen that in phase 1 there is an increase from the posttest that has been given before the total value of the increase is 9.93 with an average of 83.93%, in this phase students and parents are very

enthusiastic because this is felt by the benefits students can easily consult and train themselves through application so that training and mentoring is carried out in stage 2, in stage 2, the results of increasing self-resistance are as much as 3.36 with an average of 87.89. while in stage 3, an increase in self-resistance results was 3.03 with an average of 90.93.

B. EDUDA Application Development Results

The development of educational applications is eagerly awaited by teachers, especially counseling guidance teachers. This is because the development of an Android-based application or also called an application can be run through a cellphone. In its development, it goes through three stages, namely cycle 1, cycle 2, and cycle 3 by providing a feasibility questionnaire and application development suggestions. The result can be seen in the image below

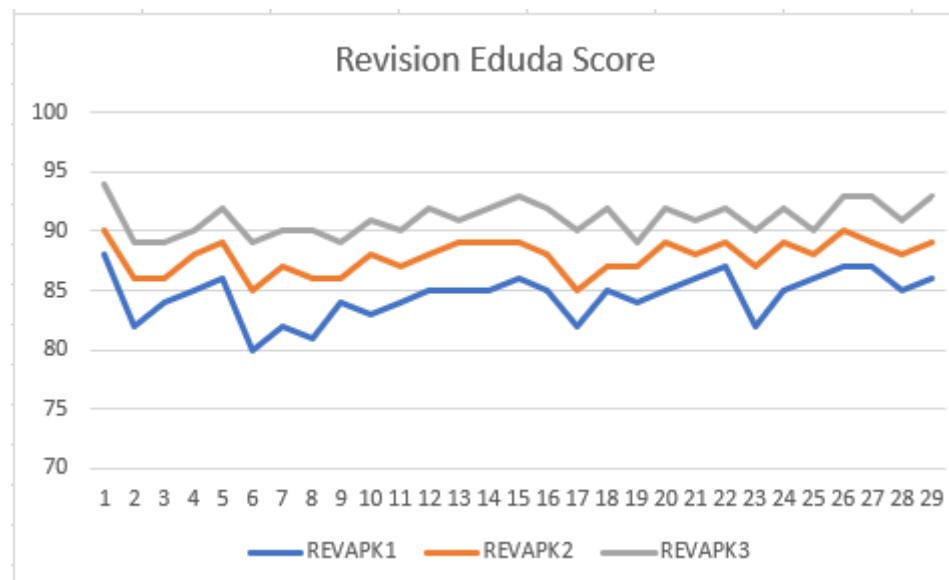


Figure 4. Revision EDUDA Score

The data above shows that the most significant increase in Posttest (basic application) is in phase 1 the increase is 7.3 with an average of 84.55, in phase 2 the increase is 3.24 with an average of 87.73. whereas in phase 3 the increase was 3.27 with an average of 91.06.

4. CONCLUSION

Based on research conducted at Medan Junior High School from cycles 1,2, and 3. Development of educational applications can increase the results of self-resistance until it reaches a score of 90.93% and the score for application development reaches 91.06%. the increased self-resistance of students is accompanied by the attitude of students away from drugs and increasing their learning achievement.

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