

## **CHAPTER V CLOSING**

### **5.1. Conclusion**

Based on research that has been carried out by research, namely the development of digital student worksheet based on Contextual Teaching and Learning to improve students' critical thinking skills using the ADDIE development model, which has 5 stages, namely: (1) analysis, (2) design, (3) development, (4) implementation and (5) evaluation. Based on this research, the conclusions obtained include the following:

1. The critical thinking abilities of students who were given learning using digital student worksheet based on Contextual Teaching and Learning obtained an average score increase of 28 from the initial ability test (pretest) where the students' average score was 52.5, increasing to 80.5 on the final ability test (posttest). Based on the results of the N-gain analysis, an average of 0.78 was also obtained for an overall increase in students' critical thinking skills, where 36% of students experienced an increase in the medium category and 64% experienced an increase in the high category.
2. The quality of digital student worksheet based on Contextual Teaching and Learning which has been developed to improve students' critical thinking skills on probability material has met the validity aspect. Where the digital student worksheet developed has met the validity criteria based on material and media validator assessments, with average scores of 4.28 and 4.14 respectively with very valid criteria for material validation assessment and valid criteria for media validation assessment.
3. The quality of digital student worksheet based on Contextual Teaching and Learning which has been developed to improve students' critical thinking ability

on probability material has fulfilled the practical aspect. Where the digital student worksheet developed has met the practicality criteria based on (1) practical assessment (experts) of the product developed, (2) practical assessment (teacher) of the product developed and (3) practical assessment (students) of the product developed with a percentage practicality respectively amounted to 88.56%, 90.90% and 88.33% so it can be concluded that the digital student worksheet based on Contextual Teaching and Learning that has been developed is very practical.

4. The quality of digital student worksheet based on Contextual Teaching and Learning which has been developed to improve students' critical thinking skills on probability material has met the aspect of effectiveness. The developed digital student worksheet has met the effectiveness criteria. This can be seen from (a) the achievement of classical student learning completeness, namely 35 students (97.22%) in the final ability test (posttest) who carried out learning were able to reach a minimum score of 70, (b) posttest achievement on each indicator of completeness more than 65% of all students in the class succeeded in getting a minimum of 75% of the formulated learning objectives and (c) students gave positive responses to the digital student worksheet with an effectiveness value of 94.44% in the very effective category.

## 5.2. Suggestion

The suggestions that researchers can give include the following

1. The digital student worksheet developed using the Contextual Teaching and Learning approach has met the criteria of being valid, practical and effective so that researchers suggest teachers can utilize the digital student worksheet that has been developed to help improve high school students' ability to think critically on probability material. .
2. The digital student worksheet based on Contextual Teaching and Learning that has been developed can be used as a reference for developing digital student

worksheet with other material which aims to improve students' critical thinking skills, at different educational levels and can help the learning process.

3. Students are encouraged to answer pre-test and post-test questions for each indicator of critical thinking ability in a structured manner to achieve the goal of critical thinking ability.



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