

CHAPTER V

CONCLUSION AND REKOMENDATION

5.1. Conclusion

Considering the whole process of learning and the learning outcomes identified in this research, the researcher found strengths and weaknesses of the didactical design. The strengths are:

1. The design was able to bring contextual real life situations that bridge the concept of absolute value and its application
2. The design was able to give stimulation of thoughts that lead the students gradually construct their understanding toward the topic
3. The design was able to provide clear ideas of how to represent absolute value as distance on line number and vice versa that helps the students working on absolute value equations and inequalities without being dependent of using formulas.

The strengths above have made the developed design powerful to create meaningful learning experience on the students.

The weaknesses of the design are:

1. The design failed to provide means for the students to solve more complicated form of absolute value equations and inequalities. For examples absolute value that appears in quadratic and fractional form, or absolute value that appears on the left and the right side of equations or inequalities. This happened due to the limitation of geometrical interpretation of absolute value.
2. The design failed to cover all learning obstacles since some obstacles are related to the students' misunderstanding on previous topics. For example, the students' misunderstanding on how to solve equations and inequalities and how to work on real number, have become source of obstacles for students to solve absolute value equations and inequalities.

1.2. Recommendation

This research found that the students' knowledge about real number become a prerequisite to study absolute value equations and inequalities. However the students seemed to know nothing about it for they still work on integer when they are supposed to work on real number. An understanding about real number also put the basic idea when studying function, limit, and further concepts of calculus. Therefore, the material about real number is strongly recommended to be included as important content in mathematics curriculum at junior high school.

For teachers who want to adopt the didactical design to be used in their class are strongly suggested to learn in detail report of this research to catch the whole picture of how the design is implemented in the classroom. For teachers who want to adapt the design are suggested to examine the compatibility of the contexts used in this research to the environment their students have. Teachers could modify the contexts, the structure of the material and the teaching approach to meet the characteristic of their students.

For researchers who are interested to study further about didactical design of absolute value, the findings of this research could become consideration in developing the design. The weaknesses of this research could become additional issues to address. There is still a wide area of concerns to be studied further. For examples developing didactical design of absolute value by putting emphasis on its graphical approach or developing didactical design of absolute value by putting emphasis on its algebraic definition.