

## CHAPTER 5

### CONCLUSION AND RECOMMENDATION

#### A. CONCLUSION

Refers to the general aim of the research that is to compare interdisciplinary thinking skill between the students of experiment class and students of control class with connected teaching and instructional framework based on learning dimensions. Base on the result of the research, analysis, and discussion, it can be concluded that 'there is a significant difference of interdisciplinary thinking skill between students in experiment class and control class. In the experiment class, normalized gain (n-gain) value of interdisciplinary thinking skill is 0,44 and in control class n-gain values is 0,38 and both includes to the middle category. Specifically, the conclusion can be explained as follow.

There is no significant difference of *disciplinary grounding* between students in experiment class and control class. N-gain 'middle' category in experiment class and 'low' category in control class. For the three *disciplinary grounding* components, that are biology, chemistry, and physics can be concluded as follow. There is no significant difference of *disciplinary grounding* between students in experiment class and control class, except in *biology grounding*. In biology grounding, students in experiment class have higher average value than students in control class. For the second component of interdisciplinary thinking skill, there is no significant difference of *advancement through integration* between students in experiment class and control class. It is gained n-gain in the 'middle' category in both classes. In contrary, there is a significant difference of *critical awareness* between students in experiment class and control class. N-gain in the experiment and control class, both of them are included to 'middle' category. But, experiment class has higher n-gain value than control class. Correlative analysis shows that all correlation among components of interdisciplinary thinking skill is not significant.

It describes that students are stated to be not able yet to think interdisciplinary as whole. Students just achieve awareness about the importance of contribution of others disciplines to solve problem through framing in multiperspectives but are not able to integrate many relevant disciplines. On other words, students are still in the level of *multidisciplines* or even in the *awareness of other discipline* level.

## **B. RECOMMENDATION**

The result of research shows that students do not achieve interdisciplinary thinking skill yet, but they still in multidisciplinary level. Thus, teachers should pack material in context because contextual teaching can stimulate students to think about fact and enhance their *prior-knowledge* before they get new information. Besides, it must be noticed about teaching strategy that is used to decrease students's learning load because materials taught are much enough, deep and demanding integrating skill of relevant disciplines.

Instructional framework based on learning dimensions can help teachers in facilitating students to think logically step by step. Thus, data gained will be good if time of research is lengthen. Besides, it should be known data about students' learning result in chemistry and physics especially in the concepts related to excretion system and so teachers' opinion toward each student to express more grounding disciplines as a capital for integrating process. This analysis is necessary to do so that it is gained accurate descriptions about students' grounding disciplines.

For teachers and educators in field, it is expected to apply *connected* teaching strategy so that students are aware about the existence of contribution others disciplines in explaining a phenomenon or problem that is faced. Besides, it is necessary to emphasize about the importance of contextual teaching and active learning activities to give comprehensive learning experience. Through good facilities of learning experience, hopefully finally students can achieve the meaningful learning.