

CHAPTER VII

CONCLUSION

7.1 Conclusion

This work completely fulfills all objectives that has been proposed. The “Engineering Metallurgy CAI tutorial (phase I)” is successfully developed with a remarkedly advantage of simulation. The software shows its effectiveness as confirmed by the evaluation results. Statistical t-test shows that mean test score of CAI group is significantly higher than control group. The meta analysis result indicates that the difference of mean test score in control and CAI group has an educationally significant. In addition, most of the students employed CAI are satisfied with the tool and 77% of them indicate that learning with CAI is different from traditional learning (from the questionnaire results). All of these results lead to the conclusion that the EM-CAI developed is effective for use as a teaching aid.

However, some suggestions from open-end questions obtained from questionnaire result such as the CAI should be in Thai version and the voice of explanation should be added to the CAI are interesting and lead to the recommendation of this software.

7.2 Recommendations

The recommendation for further research are:

1. The voice for explanation should be add to the EM-CAI.
2. Program should be able to store some data of the learners such as name, time or the pathway of the learner in order to provide appropriated suggestion to the learners. Database system may be the solution for this case.
3. The EM-CAI should be able to access via internet. The solutions for this recommendation is to recompile source code to an alternative format which can be accessed through the web browse. However, the file size should be optimized prior to distribution and utility software called “web player” must also be provided to the learners.