



## CHAPTER V

### SUMMARY AND SUGGESTIONS

#### Objective

The development of teaching model based on metacognition for improving music improvisation ability.

#### Hypotheses

1. The music improvisation performance score gained at the end of the treatment session and at 4 weeks after finishing the treatment session is higher than that gained before the treatment session for the experimental group.
2. The music improvisation performance score of the experimental group is higher than that of the control group both at the end of the treatment session and at 4 weeks after finishing the treatment session.

#### Methods

The research uses the pretest-posttest control group design. The tests are conducted at the end of the basic-knowledge/techniques of improvisation session (pretest), at the end of the treatment session (posttest 1), and at 4 weeks after finishing the treatment session (posttest 2).

The subjects are the persons who have been qualified in Grade 6 of Electone Yamaha Grade Examination. They are matched on the music improvisation performance scores gained from the test at the end of the basic-knowledge/techniques of improvisation session, then they are randomly assigned to either the experimental group or the control group. Each group consists of 5 subjects.

### Materials

1. Testing materials : selected from Grade 5 improvisation of past Electone Yamaha Grade Examination (1986 - 1988).

2. Improvisation exercises : selected from Electone Improvisation Workbook Grade 5-4-3.

3. Basic-knowledge/techniques of improvisation : the contents have been arranged by the researcher.

4. Marking sheet.

5. Self-regulating form.

6. Feedback information form.

7. Music instrument : Yamaha Electone model HS-8.

8. Microfloppy disk : 3.5 inch double-sided double-density (2DD)

9. Stop watch.

### Procedures

This research study was conducted in 2 major parts :

1. Basic-knowledge/techniques of improvisation session

1.1 Subjects were taught relevant factors in improvisation.

1.2 At the end of the basic-knowledge/techniques of improvisation session, subjects were tested (pretest), thereafter divided into 2 groups : the experimental group and the control group.

## 2. Treatment session

2.1 Subjects were trained to do the improvisation performance

(a) control group - exercise training

(b) experimental group- metacognitive training plus exercise training

2.2 Subjects were tested at the end of the treatment session (posttest 1) and at 4 weeks after finishing the treatment session (posttest 2)

### Data analysis

1. Test for mean differences of music improvisation performance score in the experimental group and the control group for the pretest by using t-independent test.

2. Test for mean differences of music improvisation performance score in the experimental group and the control group for the test at the end of the treatment session (posttest 1) by using t-independent test.

3. Test for mean differences of music improvisation performance score in the experimental group and the control group for the test at 4 weeks after finishing the treatment session (posttest 2) by using t-independent test.

4. Test for mean differences of music improvisation performance score in the experimental group for the pretest, at the end of the treatment session (posttest 1), and at 4 weeks after finishing the treatment session (posttest 2) by using one-way analysis of variance with repeated measure. When differences between means occurred, test on differences between pairs of means by using Newman-Keuls method would be applied.



5. Test for mean differences of music improvisation performance score in the control group for the pretest, at the end of the treatment session (posttest 1), and at 4 weeks after finishing the treatment session (posttest 2) by using one-way analysis of variance with repeated measure. When differences between means occurred, test on differences between pairs of means by using Newman-Keul method would be applied.

All of the data analysis utilized Statistical Package for the Social Science : SPSS-X; except the test on differences between pairs of means which had been separately calculated.

### Results

1. No differences were discovered between means of music improvisation performance score in the experimental group and the control group for the test at the end of the treatment session (posttest 1) at .05 level of significance.

2. The mean of music improvisation performance scores in the experimental group was higher than that in the control group for the test at 4 weeks after finishing the treatment session (posttest 2) at .05 level of significance.

3. In the experimental group, tested at .05 level of significance, the means of music improvisation performance scores for posttest 1 and posttest 2 were higher than that of the pretest, and also the mean of music improvisation performance scores for posttest 2 was higher than posttest 1.

4. In the control group, tested at .05 level of significance, the means of music improvisation performance scores for posttest 1 and posttest 2 were higher than that of the pretest, but no differences were discovered between the means of posttest 1 and posttest 2.

### Suggestions

1. The study should be done for a longer period of time in order to clearly determine the effectiveness of meta-cognitive training plus exercise training compared to exercise training alone.

2. Metacognitive knowledge and skills should be also tested in order to determine whether they have differences in the development between the experimental and control groups. This would help clarify and explain the results of the research study more clearly.

3. To determine deliberately over the effectiveness of this developed teaching model whether it could be used or applied to improve music improvisation ability to any level of music learners. Further studies might be undertaken with the high, average, and low levels of musical ability persons.

4. This developed teaching model might be applied to improve music improvisation ability in other musical instruments.

5. The idea, method, and result from this research study might stimulate other researchers in the field of music education and related fields of knowledge to determine for teaching approaches in improving learners' achievements.

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