

## CHAPTER III

### METHODOLOGY AND FINDINGS

#### 3.1 Introduction

The purpose of this study is to explore the role of group dynamics in the group and team tasks of the NEMP for music (1996). As discussed in earlier chapters, group dynamics is a considerable field of study in itself, therefore this paper focuses on four key areas. These are the importance of; 1.0) peer influence in a group setting, 2.0) the gender of the group members, 3.0) the effects of the spatial arrangements in the group and 4.0) the physical and musical attributes of the group leaders.

#### 3.2 Method

The research technique used is observation. As noted by Bell, this method 'can often reveal characteristics of groups or individuals which would have been impossible to discover by other means.'<sup>1</sup> However, it should be taken into account that a limitation of this research technique is that it can be prone to a high level of subjectivity. Cohen and Manion stated that it is common for observation studies to be 'subjective, biased, impressionistic, idiosyncratic and lacking in the precise quantifiable measures'<sup>2</sup> Being made aware of this danger, this researcher has attempted to overcome it by undertaking a structured observation and saw her role as one which was to observe and record in as objective a way as possible.

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<sup>1</sup> Bell, J. (1993) *Observation studies, doing your research project: A guide for first time researchers in education and social science* (2<sup>nd</sup> edition), Buckingham: Open University Press, p. 168-174.

<sup>2</sup> Cohen, L. and Manion, L. (1989) *Research methods in education*. London: Routledge, p129.

In addition, Ms Rachel Lim, a Masters in Education student, assisted by taking on the role as an independent observer to provide inter-observer reliability. Ms Lim was asked to watch four videotapes<sup>3</sup>; two from each level. With the sample provided, a reliability level of 92.3% was found by using the formula<sup>4</sup> of

$$A \div (A + D) = \%$$

There were a number of ways to record the events. Four main areas of behaviour were observed. These areas were further divided into more specific categories. These categories are as follows:

### **1. Peer influence in a group setting**

#### 1.1) Were group dynamics present?

Group dynamics included eye contact, nods, smiles or other forms of verbal or body language which suggested that the pupils were aware of each other's presence in the group.

#### 1.2) Was peer influence present?

Peer influence was considered present if any pupil's actions, musical responses or reactions were followed by any others in the group.

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<sup>3</sup> They were 4TC S007, 4GB S104, 8TA F003 and 8GA F007.

<sup>4</sup> **A** stands for agreements and **D** stands for disagreements.

1.3) Did peer influence affect the movements and actions of the group members?

Were the *movements* and *actions* of any group member followed by the others? This included the dance movements, the way they handled the musical and any other body gestures.

1.4) Did peer influence affect the musical responses of the group members?

Were the *musical responses* of any group member followed the others? Musical responses included rhythmic patterns, keeping beat and pulse of the given piece, choice of musical instruments, melodic patterns and pitch patterns.

## **2. The gender of the group members**

2.1) Did the gender differences affect the dynamics of the group?

Were there same-sex cliques formed within the group? Did the pupils show visible awareness of the presence of opposite sex in the group, either in their standing positions, musical responses or any other actions.

2.2) Which gender tended to dominate the group?

Did the boys or the girls play a more domineering role in speech, movements or musical responses?

## **3. The effects of the spatial arrangements in the group**

3.1) Did spatial differences affect the dynamics of the group?

Were the group interactions of the pupils affected by their sitting or standing positions?

3.2) How many group members were there?

The number of pupils recorded on the videotape.

3.3) Did their sitting arrangements show group dynamics?

Did the pupils sit closer to the group members they prefer? Were there *seating cliques*?

3.4) Did spatial factors affect the movements and actions of the group members?

Was the pupil's *movements* and *actions* affected by his/her position in the group or the distance between the other group members and himself/herself.

3.5) Did the spatial factors affect the musical responses of the group members?

Was the pupil's *musical responses* affected by his/her position in the group or the distance between the other group members and himself/herself.

#### **4. Leaders**

4.1) Was there a leader in the group?

Was there a pupil who stood out among the group. The group members followed his/her actions, directions or musical responses.

4.2) Were the group members influenced musically by the leader?

Did the group followed his/her musical responses or musical directions?

4.2) Was the person a good leader?

Did he/she lead the group well musically? His/her directions resulted in the group providing good musical responses.

These fourteen questions were used as categories during the observation of the videos. For each of these questions, a tick was used to indicate the presence of the specific behaviour and a cross was used indicate the absence. The observations were charted onto a table each time the event occurred. The database programme, Filemaker Pro was used to record this information and to achieve the statistical results which follow.

These observations were based on a random sample of ten percent of the entire programme. A total of one hundred and thirty-five tapes were used in this study. Sixty-eight at Year 4 and sixty-seven at Year 8. Each of the videotapes was watched closely with a similar procedure. Firstly, the videotapes were played and any significant answers to the questions were noted. In the event that the actions were not too obvious, the videotapes were played a second time with special attention given to certain sections.

The researcher had numbered the seating plan for each group. The person on the extreme right of the screen was numbered as B1 or G1 (depending on the gender of the group member). Moreover, apart from the structured categories of observations, the researcher also noted any interesting or unusual point for each videotape and included these observations in the discussion of the findings in the following chapter.

### 3.3 Findings

**Table 1 : An overview of the results of this study<sup>5</sup>**

#### 1.1 Peer influence in a group setting

Description	All	Year 4	Year 8
a) Group Dynamics	100	100	100
b) Peer influence	100	100	100
c) Action affected	100	100	100
d) Musical response affected	100	100	100

#### 1.2) The gender of the group members

Description	All	Year 4	Year 8
a) Gender differences	82.2	86.8	77.6
b) Boys dominate	42.2	42.7	41.8
c) Girls dominate	40.0	44.1	35.8
d) None dominates	17.8	13.2	22.4
e) Not applicable	11.1	8.8	13.4

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<sup>5</sup> All findings are presented in percentage form.

### 1.3 The effects of the spatial arrangements in the group

Description	All	Year 4	Year 8
a) Spatial differences	95.6	91.2	100
b) Number of pupils (2)	2.2	0.0	4.5
c) Number of pupils (3)	21.5	19.1	23.9
d) Number of pupils (4)	76.3	80.9	71.6
e) Seating cliques	30.4	36.8	23.9
f) Actions affected	94.3	88.2	100
g) Musical response affected	93.3	86.8	100

### 1.4 Leaders

Description	All	Year 4	Year 8
a) Leader (boy)	91.2	42.7	49.3
b) Leader (girl)	41.5	47.1	35.8
c) Leader (none)	12.6	10.3	14.9
d) Influence musically	80.7	80.9	80.6
e) Good leader	61.5	60.3	62.7
f) Bad leader	19.3	20.6	17.9
g) Not applicable	17.8	17.7	17.9

**Table 2 : Year 4<sup>6</sup>**

**2.1 Peer influence in a group setting**

<b>Description</b>	<b>Group A</b>	<b>Group B</b>	<b>Group C</b>	<b>Team A</b>	<b>Team B</b>	<b>Team C</b>
a) Group Dynamics	100	100	100	100	100	100
b) Peer influence	100	100	100	100	100	100
c) Action affected	100	100	100	100	100	100
d) Musical response affected	100	100	100	100	100	100

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<sup>6</sup> 68 videotapes were viewed.

## 2.2 The gender of the group members

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Gender differences	77.8	100	66.7	91.7	100	83.3
b) Boys dominate	33.3	58.3	33.3	50.0	63.6	25
c) Girls dominate	44.4	41.7	33.3	41.7	36.3	58.3
d) None dominates	11.1	0.0	16.7	0.0	0.0	0.0
e) Not applicable	11.1	0.0	16.7	8.3	0.0	16.7

### 2.3 The effects of the spatial arrangements in the group

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Spatial differences	33.3	100	100	100	100	100
b) Number of pupils (2)	0.0	0.0	0.0	0.0	0.0	0.0
c) Number of pupils (3)	11.1	25.0	25.0	8.3	9.1	33.3
d) Number of pupils (4)	88.9	75.0	75.0	91.7	90.9	66.7
e) Seating cliques	33.3	25.0	75.0	8.3	27.3	50.0
f) Actions affected	11.1	100	91.7	100	100	100
g) Musical response affected	11.1	100	100	100	100	100

## 2.4 Leaders

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Leader (boy)	44.4	58.3	16.7	58.3	63.6	25.0
b) Leader (girl)	44.4	41.7	33.3	41.7	36.4	75.0
c) Leader (none)	11.1	0.0	50.0	0.0	0.0	0.0
d) Influence musically	88.9	100	0.0	100	100	100
e) Good leader	44.4	66.7	0.0	100	63.6	83.3
f) Bad leader	44.4	33.3	0.0	0.0	36.4	16.7
g) Not applicable	11.1	0.0	100	0.0	0.0	0.0

**Table 3 : Year 8<sup>7</sup>**

**3.1 Peer influence in a group setting**

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Group Dynamics	100	100	100	100	100	100
b) Peer influence	100	100	100	100	100	100
c) Action affected	100	100	100	100	100	100
d) Musical response affected	100	100	100	100	100	100

**3.2 The gender of the group members**

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Gender differences	80.0	90.9	50.0	91.7	90.0	91.7
b) Boys dominate	70.0	18.2	33.3	58.3	10.0	50.0
c) Girls dominate	10.0	63.6	16.7	33.3	60.0	41.7
d) None dominates	10.0	0.0	50.0	0.0	30.0	0.0
e) Not applicable	10.0	9.1	0.0	8.3	0.0	8.3

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<sup>7</sup> 67 videotapes were viewed.

### 3.3 The effects of the spatial arrangements in the group

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Spatial differences	100	100	100	100	100	100
b) Number of pupils (2)	0.0	9.1	0.0	8.3	10.0	0.0
c) Number of pupils (3)	20.0	9.1	16.7	25.0	30.0	41.7
d) Number of pupils (4)	80.0	81.8	83.3	66.7	60.0	58.3
e) Seating cliques	0.0	18.2	33.3	33.3	20.0	100
f) Actions affected	100	100	100	100	100	100
g) Musical response affected	100	100	100	100	100	100

### 3.4 Leaders

Description	Group A	Group B	Group C	Team A	Team B	Team C
a) Leader (boy)	80.0	27.3	25.0	66.7	20.0	75.0
b) Leader (girl)	10.0	72.7	0.0	33.3	80.0	25.0
c) Leader (none)	10.0	0.0	0.0	0.0	0.0	0.0
d) Influence musically	90.0	100	0.0	100	100	100
e) Good leader	50.0	63.6	0.0	100	100	66.7
f) Bad leader	40.0	36.4	0.0	0.0	0.0	33.3
g) Not applicable	0.0	0.0	100	0.0	0.0	0.0

### 3.4 Conclusion

The results obtained in this chapter were achieved through observations of the videotapes of the NEMP for music (1996). A total of one hundred and thirty-five videotapes were observed for the purpose of this study. This is done using a structured checklist which consisted of questions focusing on the four main areas of group dynamics. Based on the results reflected, an analysis and discussion of these results follows in the next chapter.