

DEVELOPING A PERFORMANCE WITH SPECIAL NEEDS STUDENTS:

A CASE STUDY IN CREATIVITY

by

DAVID SECUNDA

B.A., University of Florida, 1970

B.Ed., University of Ottawa, 1985

A THESIS SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS OF THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

Department of Visual and Performing Arts in Education

We accept this thesis as conforming

to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

November 1990

© David Secunda, 1990

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Visual and Performing Arts in Education

The University of British Columbia  
Vancouver, Canada

Date October 1, 1990

## ABSTRACT

This thesis advances the proposition that learning disabled students' participation in kinesthetic or dance and mime performance activities provides an alternative expressive mode to the verbally oriented activities through which creativity has traditionally been examined and evaluated. Between February and May, 1989, I designed and carried out a research project in an elementary school in Vancouver, B.C. A group of students, characterized as "learning disabled," participated under my direction in the design, rehearsal, and presentation of a performance of mime and movement to a narrated text developed mainly by the students. Techniques of participant observation and interview (as well as videotape recordings) were used to document both students' activities and the responses of students and their teachers. The technique of cognitive mapping was used to analyze observations of the students in kinesthetic activities. Results of this case study have implications for theory and practice. Theoretical implications relate to conceptions of creativity derived from Maslow's description of "peak experiences" and from analyzing Weisberg's definition of creativity. An applied outcome of this research allows practical generalizations about the use, design, and implementation of programmed kinesthetic activities as a means of encouraging creativity among learning disabled students.

## Table of Contents

Abstract .....	ii
Table of Contents .....	iii
CHAPTER I: INTRODUCTION AND STATEMENT OF PROBLEM .....	1
Introduction .....	1
Research Question .....	3
Overview of the Program in this Case Study .....	5
Theoretical Perspective .....	6
Dual Roles of the Researcher: Participant Observer/Program Animator .....	8
Design of the Study .....	10
Definition of Data .....	10
Participants .....	11
Time and Place .....	12
Interpretation of Data .....	13
Summary .....	15
CHAPTER II: REVIEW OF THE LITERATURE AND DEVELOPMENT OF THE APPROACH .....	16
Introduction .....	16
Positivist Conceptions of Creativity .....	17
Product Definitions of Creativity .....	17
Process Definitions of Creativity .....	19
Trait Definitions of Creativity .....	19

Summary of Positivist Conceptions of Creativity.....	27
Creativity of Learning Disabled Students.....	28
A Redefinition of Creativity.....	32
Use of Metaphors in a Redefinition of Creativity.....	35
Cognitive Mapping of Kinesthetic Creativity.....	38
Summary.....	44
CHAPTER III: SETTING, PARTICIPANTS, AND PROGRAM.....	47
Introduction.....	47
Setting.....	48
Participants.....	48
Phase I: Preliminary Kinesthetic Activities.....	51
Relaxation Exercises.....	52
Visualization Exercises.....	54
Isolations.....	54
Neutral Mask.....	55
Choreography.....	56
Mime.....	57
Phase II: Planning the Performance.....	57
Introduction to the World of Legends.....	57
Collective Creation of Legends: The Story Circle.....	58
Polishing the Legends.....	58

Mask making.....	60
Giving Birth to Masked Characters.....	60
Rehearsing the Performance Event.....	61
Phase III: Final Presentation.....	62
CHAPTER IV: INTERPRETATION OF DATA.....	63
Introduction.....	63
Kinesthetic Expressions.....	64
Relaxation: Adjusting to a New Way of Working.....	64
Relaxation: Implications for Performance Expressions.....	66
Kinesthetic Productions and Verbal Creativity.....	71
Individual Approaches to Creativity: Painting as a Kinesthetic Activity.....	74
Cognitive Mapping of the Performance.....	77
Introduction.....	77
Participants' Conception of Stage.....	78
Conventions of Mask Theatre and Everyday.....	
Social Spatial Arrangements.....	80
Spatial Awareness and Kinesthetic Memory.....	83
Participants' Creative Contributions:	
Transforming Kinesthetic Movements.....	84
Summary of Cognitive Mapping and Kinesthetic Expression.....	87

Social Interaction in the	
Rehearsal Situation.....	89
Introduction: Social Expectations of	
the Rehearsal Situation.....	89
Adult Conceptions of Rehearsal.....	89
Adult Versus Children's Definitions of	
Rehearsal and Play.....	90
Adult Versus Children's Definitions	
of Time.....	91
"Play" as Non-purposeful Activity.....	92
"Play" and Factors of Creativity.....	95
Socialization of the Participants and	
the Adult Conception of Rehearsal.....	99
Summary.....	101
Teachers' Evaluations of the Performance.....	102
Participation.....	103
Cooperation.....	104
Esteem.....	106
Hidden Talents.....	109
Student Evaluations of the Performance.....	110
Creativity is Fun.....	110
Commitment.....	111
Performance Aspirations.....	112
Summary.....	114
CHAPTER V CONCLUSIONS.....	117
Research Questions.....	117

Findings.....	117
Practical Conclusions.....	118
Relaxation: Ways of Being.....	119
Sequencing: Relaxation Exercises as	
Warm-up for Verbal Activities.....	120
Kinesthetic Activity Encourages	
Verbal Productions.....	121
Visualization of Spatial Relationships.....	121
Balancing "Play" with Performance Goals.....	122
Theoretical Significance.....	123
Definitions of Creativity.....	123
Implications for the Field of Teaching.....	125
Implications for Self Concept and	
Mainstreaming.....	125
REFERENCES.....	128
Appendix I.....	132
Appendix II.....	138



## CHAPTER I

### INTRODUCTION AND STATEMENT OF PROBLEM

#### Introduction

This thesis focuses on creativity. Much research into this topic reduces creativity to quantified traits which overlook the emotional involvement and the kinesthetic (movement related) sensitivities of a person absorbed in an artistic expression. The oppressive atmosphere often experienced during a paper and pencil assessment of creativity has little in common with that of an art class or a rehearsal studio. Many facets of creativity seem to escape quantification. Positivist conceptions of creativity inferred from statistically correlated variables may fail to encompass the unique and spontaneous nature of a creative experience.

When traditional testing techniques are administered, learning disabled students consistently score lower on creativity quotients. Creativity test items elicit verbal responses. Because these students may have difficulty verbalizing, even though they may be able to visualize or imagine innovative responses, such measures of creativity are not sensitive to the creative potential of learning disabled children. Because creativity scores are quantitative measures of verbal responses, it can be argued that learning disabled students are short-changed by these tests. This research project, carried out in a natural

setting, was undertaken to investigate creativity and, in particular, kinesthetic creativity among children with learning problems.

To look at the creativity of these special students, I participated in and coordinated a performance event with students who have been assessed as learning disabled. Over a twelve week period, from February through May 1989, performing the dual roles of researcher and artistic collaborator, I led a group of learning disabled students in a Vancouver, B.C. elementary school through the development and presentation of two performance pieces.

Phenomenology is the theoretical approach used in this study. This approach assumes that the individual's behaviour is influenced by the settings in which it occurs, and that if we are to understand a phenomenon, we must understand the experience of that phenomenon for the participants. This theoretical approach enabled me to undertake a qualitative investigation and analysis of kinesthetic creativity among learning disabled students.

Qualitative analysis is research based on mentalist, rather than materialist data; the outcomes are hypothetical constructs that represent the experiences of the observed, based on evidence. This qualitative approach allowed me to develop, observe, and analyze a flexible program of mime and dance activities and story-telling games in order to examine the topic of creativity. I focused my research on the

participants' creative activities as revealed in the rehearsals and performance, which I documented in field notes and on videotape.

### Research Question

My original research topic was to be "the nature of creativity, expressed through the circumstances surrounding and comprising a performance event among students who have been assessed as learning disabled." During the course of this research, I inductively came to focus the research topic on how specific techniques might be used to encourage learning disabled students to express creativity kinesthetically (through mime and dance) and how, in turn, these kinesthetic productions might enhance their verbal creativity. As the project progressed, I came to focus on theoretical and pragmatic research issues. The pragmatic question asks: What are some of the ways that creativity might be encouraged through dance and movement and how can kinesthetics support the verbal productions and creativity of learning disabled students? The theoretical question asks: In light of the findings, what are the implications for the definitions of creativity I bring to this case study? One of those definitions involves the "peak experience" (as defined by Maslow, 1968). The second of those definitions is a reformulation of Weisberg's (1986) definition, which stipulates that creativity involves an outcome that is: 1) novel, and 2) significant to the

individual. Both definitions focus on the "life-world" of the individual, and consider the context and activities through which expressions evolve. While choosing the above definitions, I recognize there are many available definitions of creativity outside of psychology that have been developed by artists or inventors. For this study, I have focused on psychological approaches to creativity, because they have continued to exert a strong influence on educators. (The reasons for focusing particularly on the psychological approaches of Weisberg and Maslow are discussed in Chapter II.)

On a practical level, I hope to contribute to knowledge of creativity and propose some pragmatic suggestions for programs which might encourage creativity among learning disabled students.

This research is also notable in that it examines the social aspects of creativity. A performance event is a group interaction. Students may share visions, propose goals, offer direction, or solve problems. I looked at how the participant in a creative event experiences the support or limits of the group.

Thus, my research questions give rise to the following research objectives:

- 1) to apply the techniques of qualitative analysis to research on creativity in an educational setting

involving largely inarticulate learning disabled students,

2) to develop and test approaches to (definitions of) creativity useful in working with learning disabled children,

3) to test and outline a program of kinesthetic activities which might encourage creativity in learning disabled students,

4) to look both theoretically and pragmatically at the social context of rehearsal and performance situations (i.e., student and teacher expectations as to behaviour and goals) with an objective of making suggestions for other programs of this type.

#### Overview of the Program in this Case Study

So that the reader may visualize the course of the program on which this research is based, I include an outline. Details and discussion of the "Program" follow in Chapter III.

#### 1) Preliminary Kinesthetic Activities

Relaxation Exercises

Isolations

Neutral Mask

Visualization Exercises

Mime

Choreography ("Cycle of Life")

## 2) Planning the Performance Event

Introduction to World Legends

Collective Creation of Legends: the Story Circle

Polishing the Legend (going from oral version to  
written performance script)

Mask Making

Giving Birth to the Mask Characters

## 3) Rehearsing the Performance Event

Choreography (rendering the story images through mime  
and dance)

Timing (synchronizing the action to the narration)

Polishing (critiquing and developing qualities of  
movement and voice)

Discussion (encouraging verbalization of the  
experiences as a sharing group)

## 4) Performance

## 5) Follow-up review (viewing and discussing videotape of the final performance)

### Theoretical Perspective

Qualitative methodologies are founded on the phenomenological assumption that individuals see the world through the colored windows of their life experiences. Thus, as the researcher, it is of interest to discuss my own presumptions and presuppositions about creativity that shape my understanding of the rehearsal and performance activities that comprise this study. I approached this research with a

conception of creativity which I devised during fifteen years work as a professional artist and teacher.

This approach to creativity assumes that the whole person - including his or her cognitive, emotional, kinesthetic, and evaluative faculties - is inseparable from the creative activity. Creative work often produces a peak or extraordinary experience for that individual. (Here I draw from Maslow [1968].) During such a peak experience, perceptual faculties are heightened, and visual, auditory and kinesthetic sensations are readily absorbed. The experience of the creative activity produces a transformation of the "life world" of the individual, so that subsequent perceptions, sensitivities, evaluations and aesthetic experiences are enriched. Thus, my own approach to creativity which, as I say, I developed through my experience as a professional artist, defines the concept of creativity in terms of a transformation of awareness through the creative act. In focusing on transformations, I have been inspired by Jerzy Grotowski's vision of the artist as shaman. This perspective evolved through my creating and collaborating on performance art pieces which were structured around ritual and mask theatre. I found my own explorations, borrowing from Grotowski's method, enabled me to develop authentic theatrical works that call upon the actor to melt his or her own sensitivities and emotional background into those of the character. This acting

approach also emphasizes intensive physical and vocal training, supported by concentration and relaxation exercises. The heightened awareness of physical movements and emotional states that results from this approach to performance parallels Maslow's view of the creative act as a peak experience. This definition of creativity enables the researcher to discuss *creativity as experienced* because it emphasizes the social context of creativity and recognizes the individual's awareness of the activity (and is thus consistent with the assumptions of the theoretical perspective of this case study). I will return to this issue at the end of Chapter II.

#### Dual Roles of the Researcher: Participant Observer/Program Animator

In this case study, I have had two roles. Firstly, I was the participant observer. I observed and recorded student behaviour. Secondly, I was the animator. I delivered a program of activities which enabled the students to produce the performance event. In taking on these dual roles I was aware of the danger of the subjectivity of participation invading the objectivity of the researcher role. In reviewing and analyzing the videotapes and field notes, I distanced myself from the rehearsal events.

The advantage of the dual role, in this particular case study, is that I was able to maintain an inductive flexibility - offer new or alternative activities to test



hunches, ideas possibilities, or interpretive possibilities which emerged from the data. Romanyshyn summarizes the role of research methods in a phenomenological study: "Method becomes an integral part of the problem studied, and it develops in accordance with, rather than independent of, the ways in which the problem is approached" (1971, p. 97).

This relationship between the method and the research problem enabled me to modify the research questions and to identify approaches and activities germane to the creativity of learning disabled students.

Suggestions or requests for expressive activities often came from the participants. Keen (1977) argues that the treating of research participants as "co-researchers," rather than "subjects," recognizes their ability to choose. This differentiates phenomenological research from positivist research. The researcher shares his or her understandings and expects the participants will share their understandings of the event. There are no secrets. In one study of creativity, extremely relevant to this current study, Baum and Kirschenbaum (1984) described a case study of a learning disabled student who demonstrated a special talent in photography. The researchers asked the case study participant: "What do you think creativity is?" In the present study the participants shared their understandings of the activities and, at times, lent insight to the phenomenon of creativity. By taking on the dual roles of

researcher and participant, I was able to follow the path originated in the Baum and Kirschnebaum study, as I incorporated the students' reflections.

### Design of the Study

This is an ethnographic study of the experiences and reactions of participants to a series of mime, dance, and storytelling activities leading up to and including a performance before an audience. The methods used were participant observation, interview, and cognitive mapping. Most of the rehearsals and the final performance were videotaped and later analyzed for evidence of creative behaviour.

### Definition of Data

The data consist of descriptions of the activities and the contexts of these activities as well as the reflections of the participants as they planned, rehearsed, performed, and evaluated the performance event. (The students, teachers, and I were the participants.) The data were obtained from: 1) my handwritten field notes recording events and activities of the students' work and the teachers' remarks, 2) interview texts transcribed from tape recordings of students talking about their experiences in the rehearsals and the performance, 3) videotapes of the rehearsals and the final performance.

## Participants

Participants in this study include a "performance group" and their teacher. The performance group consisted of twelve intermediate level students from one special education class selected through negotiations with school officials. These students had been previously designated as learning disabled. Learning disabled refers to a student's relative dysfunction with respect to the acquisition of cognitive or psycho-motor skills. For the purposes of this study, the students' placement in a special education class defined them as "learning disabled". The students ranged in age from nine to twelve years. They represented a wide ethnic mix: two Native Indians, two Chinese Canadians, one Lebanese-born student, one Filipino-born, and six Canadian-born students of European origin. In choosing the class for the performance group, I discussed with the special education consultant, the research assessment officer, and the drama consultant for the school district, the students' interest in participating and the students' learning disabilities. The articulateness of the students within the group, as determined in interviews with the students and in discussions with their teacher, was also considered.

Prior to selecting the particular group under study, I investigated several learning disabled class groups. With each principal (representing a potential participating

class) I discussed the mixture of students, their interests, and the nature of the students' learning disabilities. I visited other classes and engaged the students in theatre games. After narrowing my selection down to two classes from separate schools and observing both classes, Riverview Public School was chosen over Mountainview. During a preliminary visit, "Mrs. Smith", a teacher at Mountainview, continually cued her students with what she thought were correct responses to my open-ended questions concerning an improvisation which the students had completed. However, "Ms. Ainsley", a teacher at Riverview, seemed better able to work within the open structure of the collective creation we were about to begin. I selected Ms. Ainsley's class at Riverview for the project.

#### Time and Place

The performance event was created at Riverview School over a twelve week period with an average of three 2-hour sessions per week between March 6, 1989 and May 23, 1989. Interviews were conducted during this period and continued through June 9, 1989.

The program of activities, detailed in Chapter III, consisted of relaxation, dance, mime, and movement exercises, as well as the story telling improvisations used for developing the narrative text and choosing mask designs. The activities took place in the classroom. For this project the space in the centre of the classroom was

enlarged by moving the desks. That space proved adequate for the eleven students participating in the above activities. The rehearsal sessions were carried out both in the classroom and on the stage in the school gymnasium. The stage, which faces a gymnasium, was the space for the final performance, witnessed by an audience of 214 students and seven teachers, plus three parents.

#### Interpretation of Data

Analysis included comparing and contrasting reports, observations, and video records of the planning, rehearsing, performing, discussing, and evaluating of the performance event. The video tapes were reviewed and notes were taken of the students' kinesthetic and verbal expressions. In viewing the video tapes, I recorded the sequence of activities, social interactions, dialogue, qualities and rhythms or movements, facial expressions, and tones of voice. After the final performance, I reviewed the videotapes, and ordered and collated field notes and earlier notes taken from videotapes among five areas of interest: 1) kinesthetic expressions, 2) participants' cognitive maps of the performance, 3) social interaction, 4) teacher evaluations of the performance, 5) participant evaluations of the performance and rehearsals.

The technique of cognitive mapping was used to analyze the participants' kinesthetic expressions. This technique enabled me to depict the participants' conception of the

stage, their understanding of the sequence of movements that comprise the choreography, and the knowledge and kinesthetic sensitivities welded to the movement sequences. The Downs & Stea (1979) formulation of cognitive mapping provides a method of describing a person's understanding and cognitive representation of three-dimensional space.

Colaizzi's (1973) method for describing the structure of a psychological phenomenon relates individual consciousness and experience to situational and social contexts. By investigating the participants' shared and competing meanings and interpretations of the events and activities comprising this performance project, I hoped some generalizations about the experience of creativity might become apparent. I examined the meanings the participants gave to aspects of the project such as 1) the meaning of "play" in the improvisations, 2) social and behavioral expectations of the rehearsal situation, and 3) activities such as concentration and relaxation.

In interpreting the findings, I remained cognizant of the major premise of this study: An individual's behaviour is influenced by the setting. Thus, the participants' (creative) expressions are discussed within their social context (rehearsals, etc.) and viewed as social interactions.

The statements of teachers and students indicate that the students' participation in the performance event was

felt to be a significant creative accomplishment. The students themselves developed much of the material for the performance. On the day of the performance, they organized themselves on the stage. Through the analysis of data, I examined the events and activities leading up to these two accomplishments. I compared and contrasted the teachers' and the students' (and my own) observations and evaluations of the performance and the activities and events leading up to it. Themes and hypotheses from the literature review (Chapter II) are compared with those that emerge from the data.

### Summary

In this chapter, I have reviewed the personal and theoretical motivation for this study and the design of the research. My topic is creativity and my approach is to look at it phenomenologically. Based on my own experience as an artist, in theatre and in the visual arts, I approached creativity with a goal to setting up an experimental creative experience for students defined as "learning disabled."

## CHAPTER II

### REVIEW OF THE LITERATURE AND DEVELOPMENT OF THE APPROACH

#### Introduction

In this chapter I first review some of the prominent positivist conceptions of creativity. My critique of positivist conceptions of creativity does not deny that they might be applicable to particular individuals or to facets of creativity. I do argue, however, that different conceptions of creativity might be applicable to the expressions of learning disabled students. Secondly, I review studies of the creativity of learning disabled students. I argue that approaches to creativity derived from quantitative measures have limited applicability to learning disabled students. Thirdly, I review studies from the literature of phenomenological methodology pertinent to creativity research. It is also useful to consider studies of children's understandings of metaphors, because I drew upon metaphoric descriptions to inspire the participants' search for dance and movement qualities. Finally, as this study largely focuses on the kinesthetic expressive forms of dance and mime, I review studies of cognitive mapping. I will discuss how a conception of cognitive mapping enables us to codify the individual's visualization of themselves in three dimensional space and enables us to categorize and discuss kinesthetic expressions.



### Positivist Conceptions of Creativity

Positivist conceptions of creativity have followed one of three veins: 1) creative 'processes', 2) psychological or personality traits associated with creative individuals, and 3) creative products.

#### Product Definitions of Creativity

Weisberg (1986), in discussing the "products" vein, points out two common factors used by several authors in their definitions of creativity: 1) "the solution must be novel for the person..." and 2) "the solution must indeed solve the problem..." (p. 4). Weisberg's first stipulation, that the solution is novel to the particular person, directs the analyst to consider the experience of the student in the creative situation. However, to define creativity in terms of problems and solutions can be limiting. To offer a solution presupposes a problem. Although this may often be the case, in some instances (such as when a person elaborates a previous idea or image), when no problem is perceived, a creative contribution may simply be another aesthetic choice. In addition, this conception of creativity sees it solely as a cognitive phenomenon and, thus, would omit such expressive activities as dance improvisation and action painting.

For the purposes of my research, Weisberg's definition would become useful if it were slightly refocused. By stipulating outcomes rather than solutions, a concept of

creativity emerges which is applicable to activities that do not involve problems. Weisberg's two stipulations for a concept of creativity can, thus, be usefully restated: 1) the outcome must be **novel**, 2) the outcome must have **significance** to the person involved in the expression.

Other work on creativity has not proven to be useful to assessing or inspiring creativity among learning disabled students. Bailin (1988) stipulates that creativity be in the excellence of the creator's products, as judged by standards of the genre. "Creativity is not, then, highly mysterious, irrational, or unique, but involves, rather, the excellent use of our ordinary processes of thinking in so far as they issue in outstanding products. Creativity is achieving extraordinary ends" (p. 85). Bailin's concept of creativity is significant because of her argument that creativity involves ordinary thinking processes. This formulation of creativity denies that people move through a particular process unique to creativity. However, it begs the question as to who will specify the standards of the genre. Some products might go beyond predefined standards. Artistic standards may be useful, for example, in aesthetic criticism, but it does not replace the value of other conceptions of creativity for education. It rejects a conception of creativity which would allow for unique standards of special students. Such a conception of creativity that includes predefined standards of "creative

products" does not recognize that students might be able to specify conditions of their own creativity. Bailin's definition has little use for many learning disabled students, given that they might not have the opportunity or interest to learn what the standards are within a particular genre. To focus the definition of creativity on the genre is to shift educators' attention from the ways particular students may be working and creating onto the products that educators program them to make.

#### Process Definitions of Creativity

In the 1930's, Wallas first proposed the illumination metaphor as a step in the creative process. Wallas (1976) delineated four stages in the process of creativity: 1) In the preparation stage the problem is defined. 2) Incubation refers to the stage of unconscious pondering. 3) Illumination is the sudden flash in which the solution becomes clarified. 4) In the final stage, verification, the validity of the solution is tested. Many creative people can be observed to have followed these designated four steps. No evidence exists to argue that all creativity follows these steps.

#### Trait Definitions of Creativity

Many positivist investigators such as Guilford (1979) and Torrance (1962) accepted the four steps mentioned in the previous paragraph, a priori, and then embarked on a search

for ideal, creative people who manifested the traits that would enable them to complete the stages.

"In examining a large number of definitions of creativity and creative thinking, it was observed that almost all of them involved the production of something new or original as a result of a process of sensing some kind of deficiency, formulating ideas or hypotheses, and communicating the results. In order to assess the abilities involved in creative thinking, it is necessary to develop and apply tests which are different from those now commonly used in assessing mental functions." (Torrance, 1962, p. 42)

These quantitative studies have shed light on the relationships between cognitive functioning, personality traits, and motivation of so called creative and non-creative individuals (Dellas & Gaier, 1970).

Positivist researchers use multivariate analysis to isolate these traits or factors assumed to encompass creativity. Multivariate analysis establishes statistical correlations between variables hypothesized to relate to creativity. Guilford (1970) identified over 100 intellectual traits and abilities. Using factor analysis he found some of these traits to be related to creative ability. Guilford and his associates formulated test items to measure these traits and abilities. Correlation coefficients were calculated between the factors.

Within his *classification of intellectual factors*, Guilford (1962) identified two kinds of thinking operations that produce ideas or images from "known or remembered information." In *convergent* thinking the available information would lead one to think of conventional responses. For example, if asked: "How do you carry water." People generally respond: "in a bucket." This is *convergent* thinking. If asked to give a number of definitions of "low", responses such as "depressed", "degraded", or "cheap" are correct and they exemplify *divergent* thinking (Guilford, 1970, p.180).

Guilford and Merifield (1960) hypothesized that creativity involves three thinking abilities, each of which is measured by several factors: 1) divergent productions and transformations, 2) convergent productions, 3) evaluation. "Factors are distinct abilities but they are often parallel in terms of content." For example, there are three parallel factors related to cognition: Discovery, comprehension, and recognition factors can each relate to three classes: figural (perceived objects), symbolic (classes of pure symbols), and semantic (classes of meaning) (1973, p.238). These thinking categories are assessed by thirteen factors, each operationalized in terms of several test items. For example, a symbolic transformation would be necessary to transform the phrase "there do live" to "the red olive" (1973, p. 239).

Guilford's statistical approach spawned interest in creativity among numerous researchers including Torrance, Getzels and Jackson, and Wallace and Kogan. They assume that an individual's creativity can be expressed by scores on a series of measures of traits. Romanyshyn's (1971) critique of contemporary traditional psychology can also be applied to Guilford's factorial analysis of creativity. Romanyshyn notes that the objective approach suited the idea of a physical reality in which the researcher was a passive observer of events:

The reality which he observed "answered" him only in response to questions which he put it... When psychology adopted this same approach, it introduced a set of conditions which assumed that the relation between the observer psychologist and the reality of the observed, man, was similar to, if not the same as the relation between the observer, physicist, for example, and the reality which he observed, matter (p. 96).

Guilford (1970) took the position of the objective observer of physical reality in his investigation of human creativity. He defined a trait as "any distinguishable, relatively enduring way in which one individual differs from another... Traits are properties of individuals" (p.169). For Guilford and the other positivist researchers previously discussed, creativity is a set of traits or factors which

individuals possess in different degrees. Guilford stipulates factors "prior to proof" (Houts, 1977, p.36) and offers explanations of results which are completely removed from the individual or the context in which people would be creative.

This is typified in the steps Guilford took to validate the "fluency", "flexibility", and "originality" factors. Positive correlations among these three are used to imply that the factors are all related to creativity. Guilford went on to find low positive correlations between original or creative persons' (artists' or scientists') separate scores on the "fluency", "flexibility", and "originality" dimensions. (1970, p.177) Guilford used the fact of the low correlation to imply that these factors are separate. By aiming his multivariate shotgun at creativity, Guilford obtained correlations which satisfy statistical assumptions, but "has ruled out the person from the scientific process" (Romanyshyn, 1971, p. 93).

The manner in which Guilford separates emotional, aesthetic, and cognitive aspects of experience from the person in a creative act is typified in his development of the "fluency" and "flexibility" factors. He defined "flexibility" as "the ability to change directions in problem solving as new conditions are confronted." "Flexibility" is distinct from "fluency", defined as the ability to come up with many words or ideas. "Verbal

fluency" was measured by asking subjects to think of as many different uses for a brick as possible. "Ideational fluency" is measured by counting the items research subjects list (within predefined categories such as "things that are round"). "Originality" was measured by subjects listing "clever story plots." This method of operationalizing creativity traits ignores two important facets of a person's involvement in expressive activities. First, when people conceive or visualize ideas or images, they are simultaneously evaluating and eliminating some choices. The measurement of "fluency" does not count the aesthetically valuable or functionally appropriate use of the brick any higher than a banal response. There is no credit given for qualitatively superior responses. When researchers ask subjects to make lists and then use the number of unorthodox responses as a measure of a creativity factor, they are ignoring the phenomenon that people normally evaluate as they think, paint, dance, etc. In the context of a studio or other creative context, the person might be more concerned with appropriate, instinctively fitting images, ideas or solutions than the number of responses. Secondly, aesthetic criteria may be transformed through the persons's involvement in the expressive activity. In positivist definitions of creativity metaphorical description is subordinated to statistical "symbols", and something valuable is lost in the process.



Guilford's reliance on samples of verbal behavior diminishes the significance of other expressive modes such as transformations of visualizations, imagined sounds, or imagined kinesthetic relationships. Guilford recognized that "athletes and expressive dancers deal with kinesthetic figural content" (1973, p. 238). Yet, his testing procedures, which rely on verbal responses, ignore the consciousness of the dancer. In their daily work, dancers use terms such as "muscle memory" to refer to the ability to produce the dance sequence with the subtle array of qualities and sensitivities that are part of the dance. Dancers claim that "thinking" about a movement while dancing impedes the artistry of dance. Creative expression in dance can be seen as the dancer amalgamates sensitivities and feelings into the sequence of movements. Dance involves awareness of the muscles and the position of the limbs. Imagination enables the dancer to communicate fine nuances, internal tensions, or unique qualities. Torrance and Guilford's conceptions assume that creativity is a cognitive event. The dancer's working knowledge of the body and its use as a tool of creation are missed by Guilford's "discovery factor" "oriented" to "figural kinesthetic content".

Getzels and Jackson (1970) confirmed Guilford's findings and conclude that divergent thinking is the most significant factor in creative thinking (p.201). As Clifford (1973)

notes, Getzels and Jackson associate creativity with divergent thinking, "production of novelty," original ideas, "exploring the undetermined, going off in diverse directions, and "revising the unknown," while intelligence is associated with recall and convergent thinking. Clifford argues that the Getzels and Jackson creativity/intelligence dichotomy is "culture-bound" and a recapitulation of the stereotype of the iconoclastic artist versus the intellectual, pedantic, conservative scholar (1973, p. 330). This can be seen in Getzels' and Jackson's analysis of subjects' drawings. Individuals who scored high on creativity tests (and who were not considered accomplished artists) were asked to do drawings. Getzels and Jackson refer to the "non-representational" quality of the drawings as if it reflects on the creativity of their research subjects. The choice of a non-representational drawing style in itself is not evidence of creativity. According to Clifford, the remarks only reflect a stereotype of artistic vision (1973, p. 330-331). Another example of the culture bound character of creativity research is the "problem solving/product" orientation which is taken by Guilford (1960, 1970, 1973, 1983), Torrance (1962), Getzels and Jackson (1970) Wallach and Kogan (1970), and De bono (1973).

Wallach and Kogan (1970) question the internal validity of the studies by Torrance, and by Getzels and Jackson, who developed measures stemming from Guilford's methodology.

Wallach and Kogan note these statistically-oriented researchers administered tests to large groups of students in a classroom under a time restraint. They raise the question that testing respondents in an atmosphere where failure looms may not be appropriate for studying creativity. In a "playful, entertaining environment" (p. 239) the researchers (in the Wallach & Kogan study) examined creativity through tasks that involved both visual and verbal modes of apprehension. Before administering the measures, the experimenters (who were introduced as interested in children's games), spent two weeks in the classroom getting to know the children and "gaining rapport" (p.240), all of which may have encouraged the students to give a wider array of responses to the researchers' tasks.

#### Summary of Positivist Conceptions of Creativity

Positivist research in creativity has failed to look at the individual performing in a natural setting or engaging in expressive activities. Product definitions of creativity are tied to culturally defined evaluations of material creations; process definitions focus solely on problem solving; and trait definitions of creativity encompass only cognitive phenomena. Weisberg's (1986) formulation, in recognizing that the "solution" (or as restated for the present study, outcome) must be unique to the individual, proved useful in this study. The work of Wallach and Kogan (1970) points out the importance of developing rapport

between experimenters and participants in a creativity study. Romanyshyn's (1971) differentiating studies of physical reality from human experience underlys the assumption of the present research that an inductive study carried out in a natural setting would be useful to uncover aspects of creativity omitted by previous studies.

### **Creativity of Learning Disabled Students**

Interest in the creativity of learning disabled students grew through the 1980's; however, most of this research has been quantitative studies. Although several of the studies found correlations between learning disability and particular aptitudes, because of the broad spectrum of individuals who may be classified as learning disabled, such correlations may not be relevant to individual cases. However, the following studies suggest avenues for inductive investigation. Witelson's (1977) study shows learning disabled students to be superior in visual/spatial abilities in comparison with students of average ability. This particular finding is important to the present study because one aspect of kinesthetic memory and expression involves the visualization of one's self in three dimensional space (central to the learning of the mime and dance sequences in the program, see Chapter III). In the present study the technique of cognitive mapping was used to describe the participants' visualization of themselves in the performance.

In a study of the creativity of learning disabled students using Torrance's constructs of creativity, Tarver, Ellsworth, and Rounds (1980) summarize studies that link creativity and learning disability; they found correlations which indicate that a broad, unfocused attention is related to certain aspects of creativity "referred to as *originality* or *uniqueness*" (p.11-12). The authors review studies which show that "learning disabled students recall information incidental to tasks, but are deficient in recall of information central to task" (p.11-12). The generalization that "a broad unfocused attention" is related to creativity typifies how the quantitative approach isolates features of creativity from human experience, abstracts them to the level of statistical correlations, and then abstracts the abstractions further as claims are made about learning disabled students. The unfocused attention that Tarver et. al. (1980) observe in learning disabled students could be a response of boredom with the testing instrument.

Argulewicz, Mealor, and Richmond (1979) found that learning disabled children fell within the same range as non-learning disabled children on the dimensions of "fluency, originality, abstract titles, and resistance to closure" (p.32). Only on the dimension of "elaboration" did the learning disabled students fall below the average range. "Elaboration" measures the individual's tendency to go beyond the absolute minimum required to complete the task.

These researchers note that the learning disabled students demonstrated less task persistence. According to the authors, this finding raises questions about learning disabled students' abilities to persist or maintain high energy levels. The "lack of persistence" is a theme that should be seen in light of the significance of the task to the learner. Researchers might consider asking learning disabled students about it.

Jaben (1983) assessed the effectiveness of the Purdue Creative Thinking Program in teaching learning disabled students "how to think" (p.264). This program trains students in the divergent thinking dimensions of fluency, flexibility, and originality. The program has three parts: 1) teaching a "principle for improving creative thinking", 2) a 10-12 minute audio-taped story, and 3) verbal exercises related to content. The subjects were pre-tested and post-tested with forms "A" and "B" of Torrance Tests of Creative Thinking. The author concluded that the creativity program was successful in stimulating the learning disabled group's creativity. Students were trained to think along the dimensions of fluency, flexibility, and originality, the same dimensions that are tested by the dependent variable. Within this research design, it cannot be ascertained whether students are in fact learning to be creative or learning to take a test. Thus, it is impossible to determine whether the divergent thinking that students

"learn" could be transferred to other activities outside the testing situation. Looking at these same students' creativity in a natural setting would have been useful to see how their divergent thinking could be transferred to other situations. In addition, training students to think along predetermined dimensions, as the Jaben (1983) study did, limits individual choice.

The (phenomenological) assumption that individuals are free to make choices which the experimenter cannot anticipate differentiates qualitative from positivist methodologies. Baum (1984) reports some instances where students joined several separate items on a creativity test into one figure. "On several occasions, the authors have observed students combining many pairs of lines into a composite figural forms of the Torrance Tests of Creative Thinking. When questioned, they responded that their main reason for doing so was to avoid making so many pictures" (p. 95). Torrance's scoring procedures offer no room for quantifying such creative rule-breaking responses.

These criticisms of the positivist approach to creativity do not imply that the quantitative approach is without value. The positivist view of creativity could have heuristic value, providing hypotheses for qualitative research.

### A Redefinition of Creativity

As discussed above, Guilford (1960, 1962, 1970), Torrance (1962, 1966), Getzels and Jackson (1970) and Wallace and Kogan (1970) assume that creative people possess traits that facilitate creative production. Wallas delineated four steps in a process of creation. Jaben (1983) assumes that a process of divergent thinking was taught to learning disabled students.

In contrast to these process and trait approaches to creativity, Maslow sees creativity, not as a "characteristic process", but as a "characteristic of a process." "Creativeness", as Maslow refers to it, cannot be categorized as an event or process within a phenomenon. Creativeness or creativity could be an aspect of practically any behaviour (Moncrieff, 1972, p. 267).

Maslow (1968) found it useful to differentiate the kind of creativity we might find in geniuses like Van Gogh, Byron, or Mozart from "self-actualizing creativeness." Drawing from observations of, and discussions with hundreds of clients, Maslow portrays people who demonstrate self-actualizing creativeness: They live in the "real world of nature rather than in a verbal world of concepts and abstraction." Their creativeness seemed to be characterized by an "innocent freedom of perception and uninhibited spontaneity and expressiveness" (p. 138). "Self-actualizing people are relatively unfrightened by the unknown, the



mysterious, the puzzling over, and often are positively attracted by it..." (p. 139) The traits which Maslow identifies such as "spontaneity" and "expressiveness" are not traits identified with a particular personality complex as in the theories of Guilford or Torrance, nor are they associated with definite stages in a process of creativity. The person cannot be abstracted from his or her feelings, acts and thoughts of expression. The phenomenological perspective, in viewing the person as defining his or her world through acts of expression, does not separate the traits from the process, but looks at how they are part of the person engaged in expressive activity.

Maslow's discussion of the "*cognition of being* in peak experiences" points out how the person's fascination with the experience opens the senses to a more detailed apprehension (1968). "Peak experiences" are those overwhelmingly powerful moments through which the person's understanding and experience of the world is transformed. The peak experience does not involve a final purpose. It is beyond justification. It is one that expands the consciousness through opening the senses and deepening concentration. The fascination could be focused on an activity, object of love, or an aesthetic experience. "In *B-cognition* the experience or the object tends to be seen as a whole, as a complete unit, detached from relations, from possible usefulness, from expediency, and from purpose. It

is seen as if it were all there was in the universe, as if it were all of Being, synonymous with the universe." (1968, p. 74). Maslow's conception of the cognition of being in the peak experience parallels the definition of creativity underlying this research. Maslow's conception of the peak experience in creativity provides substance and depth notably lacking in Tarver et. al.'s (1980) finding that creativity is related to "a broad, unfocused attention."

Maslow's conception of creativity, as an aspect of potentially any activity, is useful for planning educational activities and for encouraging spontaneity, adventurousness and expressiveness. It assumes that students may operate creatively in any activity. Because Maslow's conception of creativity is not tied to specific, predefined traits, it can be expanded or deepened in light of descriptions, stories or metaphorical accounts of how people express themselves creatively.

It is an assumption of this study that to perform creatively is to learn in a way that transforms the learners' perceptions of themselves. Students' stories of their expressive activities can detail the transformation of their perceptions and understandings of their "life-world". Students' choices of, and their understandings of metaphors can provide insight into how they view their own creativity.

### Use of Metaphors in the Redefinition of Creativity

In this present study metaphors were used to initiate, mold, and label qualities perceived in dance and mime expressions. As well, we discussed metaphorically the feelings or sensations we experience in particular movements. We talked, for example, of "watery" and "fiery" gestures, "ghostly" walks, and "gravelly" voices. It is therefore appropriate to review a selection of studies of metaphors which focus on the experience of metaphors and on children's understanding of metaphors.

Metaphors impact on our recollection and understanding of experience (Colaizzi, 1973). Metaphors can function as labels for memories. These memory labels have personal significance and take on value to the person above and beyond recollections of particular events. As the events fade from memory, the metaphors remain. Metaphors transform consciousness. This transformation of consciousness through the experience of the metaphor, described by Colaizzi (1973), parallels this case study's focus on the experience of moving in mime and dance and their imaginative transformation.

Yoos (1971) roots the phenomena of metaphor in the experience of the metaphor. This conception of the metaphor is applicable to the present study because it recognizes that the experience of a metaphor is not solely an interpretation, it has cognitive, perceptual and emotional

dimensions. Metaphors drive the imagination. Metaphors enable one to perceive in them qualities that have been perceived elsewhere (p. 78-88). During rehearsals, spoken metaphors conveyed a quality which students interpreted and performed using mime or dance. Movement improvisations were used to generate narration. Metaphors were used to label the same quality in different modes of expression, (for example, a ghostly walk and a ghostly voice).

Winner's (1988) work is significant to this present study because of the evidence she compiled of children's understanding of metaphors. Winner cites studies which show that five year olds had no difficulty paraphrasing the similarities between concepts related in a metaphor, such as sensory-based metaphors like "marshmallow clouds". Children at this age can also select the most appropriate explanation for relational metaphors such as "family roots" or "your face is an open book." Children's difficulty in comprehending metaphors is not developmentally limited, but results from their lack of knowledge or experience with the concepts related in the metaphor (p. 66-67).

Children also produce metaphors spontaneously in play. Within a year or two after they begin to name objects, they are able to extend words intentionally through expressing metaphoric relationships (Winner, 1988, p.109).

Winner's research covered both students' understanding of metaphors and their spontaneous production of metaphors

in play. In this present study, both these different phenomena (comprehension and production) were observed. Winner's study confines its focus to cognitive understandings, whereas the present study examines metaphorical bridges between kinesthetic and verbal modes of expression.

A study extremely relevant to our understanding of the transformations between modes of expression by Aylivin (1977) notes that verbal, kinesthetic, and visual forms of (imagined) representations have different "structures and properties." In Aylivin's study, subjects were given animal names and instructed to respond to each animal name in three ways: 1) semantic, (verbal free association after the animal name), 2) visual, (drawing the animal), 3) kinesthetic, (pretending to be the animal). Subjects discussed and commented on their representations in each mode. Aylivin concludes that the three forms of representation are encoded in the memory within different semantic structures. Kinesthetic imagery is expressed in an actor-action-object framework; visual imagery is expressed in a whole-part framework; and verbal representations contain abstract knowledge surrounding the memory. The Aylivin study lays the groundwork for the present study's investigation of transformations between modes of representation. It provides the theoretical basis for bolstering learning disabled students' creativity in weaker,

verbal productions by those from alternative (possibly kinesthetic) forms of representation.

### **Cognitive Mapping of Kinesthetic Creativity**

Most creativity studies draw data either from the subjects' mental manipulations of geometric figures or the subjects' verbal responses. In this study, I observed and recorded behaviour, image making, and kinesthetic activities (the participants' dance and mime movements in three dimensional space). It is not out of place to provide here a review of the literature on cognitive mapping as it relates to creativity, because much of the data from this case study relates to the participants' understanding and visualization of the performance space and themselves in it. I was drawn to consider the value of the technique of "cognitive mapping" as a discovery and analytic procedure. The concept of cognitive mapping is the performers' mental representation of three dimensional space and the projection of themselves in it. Cognitive maps include, besides physical objects and spatial relations, culturally shared and personal knowledge which the person associates with the area or activity being depicted. For example, a cognitive map of my morning trip to the university includes the personal significance of landmarks and topographical features. I have a different cognitive map, depending upon whether I drive or ride a bicycle. If I drive, the traffic lights take on a greater significance. If I ride a bicycle,

the hills and the narrow streets with parked cars where a driver might open his door, take on greater significance.

In the education literature the use of the term cognitive mapping has not always been consistent and has been used to refer to a particular skill, a teaching technique, and a means of graphically representing concepts. Studies of cognitive mapping focused on verbal, problem solving, or spatial skills. D'Antoni (1984) uses "cognitive mapping" to refer to graphic presentations of concepts. D'Antoni found that the "cognitive mapping" technique fosters perceptual and verbal comprehension. Gold (1984), who also defined cognitive mapping as information depicted in a graphic form, reported that "cognitive mapping" helped non-readers improve reading, listening, speaking, and comprehension skills.

Studies that define cognitive mapping as a skill are consistent with the mental modeling of space formulations of cognitive mapping proposed by Downs & Stea (1977) and Oakley (1985). Anooshian (1984) summarizes studies of preschoolers that show that "route mapping" (finding the way to school) provides a basis for organizing spatial information and internal representations necessary for problem solving. Mathews (1987) found that boys' early life experiences encompass more extensive explorations of the environment than those of girls. These environmental explorations provide the basis for their superior spatial ability.

Millar (1988) reports the study of "Kelli," a congenitally blind toddler who was trained to walk clockwise around four landmarks set in a diamond configuration. In tests of her walking across the "diamond," she succeeded better than would be expected by a random search. Cognitive mapping accounts for Kelli's success. The Millar study inspired me to have my participants try choreographies with their eyes closed.

The Crowley (1986), Downs & Stea (1977), and the Oakley (1985) formulations of cognitive mapping have been useful to the present study. Crowley defines cognitive mapping as "the process by which people acquire, store, and recall information about relative locations and attributes in the environment" (1986, p. 67). Downs & Stea refer to cognitive mapping as a person's modeling of the environment, which provides a record of his or her position in the environment (1977, p.6). Cognitive mapping refers to those *abilities* which enable the person to "collect, organize, store, recall, and manipulate information about the spatial environment... A cognitive map is a person's organized representation of some part of the spatial environment" (Oakley, 1985, p.103).

Cues for representing one's position in space can come from many sources and through several senses. For example, the Downs & Stea (1977) ethnography of the Puluwatan navigators describes how culturally transmitted knowledge



about the environment enables the Puluwatan navigators to cross vast distances of the Pacific to reach tiny islands. Movements of the stars, shadows of submerged reefs, and tidal forces are the sign posts of the Puluwatans' cognitive maps. The ethnographers have used cognitive mapping as a conceptual tool to portray the Puluwatans' knowledge of the environment.

Dancers navigate themselves through a musical score in ways which compare to the navigation of the Puluwatan islanders. The dancer, like the Puluwatan navigator, constructs a transforming mental picture of himself or herself moving through space. This cognitive map of the dance is not a two dimensional diagram of imaginary lines on the floor. The dancer's cognitive map, like the Puluwatan islanders mental picture of the transforming night sky, might embody sensations akin to the surging canoe or visions of submerged sea monsters; it involves visual, kinesthetic (including sensations of movement and balance), auditory, and affective dimensions, as well as memories of dance sequences.

In this study, a cognitive map is a mentalist representation of how all the sensory modes interact with memory to give the dancer a picture of his or her position in space at any moment in the choreography. In constructing a mental image or cognitive map of the dance, a dancer first learns the bare bones of a choreography, and then welds

finer qualities and nuances into the movements. The sources for these finer nuances, for example, could come from observations of nature or from remembered aesthetic experiences. This transformation of the dance, from a dancer doing a series of movements to an aesthetic experience, typifies the workings of kinesthetic imagination. In Chapter III evidence of the hypothetical cognitive maps of the participants' understanding of the performance and the performance space will be discussed.

Three types of spatial coding (Lee, cited in Millar, 1978) provide useful dimensions of a dancer's cognitive map of a dance. The three types of spatial coding are:

- 1) *exteroceptive*, for coding external relations of objects to each other, 2) *proprioceptive*, for coding information about the position of body parts to each other, 3) *exproprioceptive*, for relating information about the position of the body to the environment. In addition to these three types of spatial coding defined by Lee, I have differentiated between external proprioceptive and internal proprioceptive. Internal proprioceptive coding involves the awareness of breathing and organ sensations such as heart beat in relation to the position of the body parts. These four types of spatial coding are described to guide observations of the students' kinesthetic expressions.

The learned content of the dance may be transformed by the imagination. Sardello's phenomenological definition of

imagination allows us to relate cognitive mapping to imagination. In summarizing Gaston Bachelard's phenomenological conception of imagination, Sardello portrays imagination: 1) as the "deforming of images" provided by perception, 2) a way in which we can "transcend" or go beyond ourselves, 3) "an excess in all modes of awareness" (1977, p.147-48). The technique of improvisation provides an arena in which the artist sets out to "transcend" and transform images, movements, or character relationships and motivations. Acts of improvisation embody the workings of the memory-imagination complex. Memories of any number of experiences of physical states, dialogues, emotions, or struggles are fused through the action within an improvisation. Through this fusion the workings of the imagination can be seen. Sardello elucidates: "Imagination is the context of possibility. Memory relates to that context as what was, insofar as it lives in the present, lives as possibility" (1977, p. 146).

The workings of the imagination in a movement improvisation can be mapped. Portraying the process of dance making might reveal facets of creativity overlooked by traditional conceptions of creativity. The method of cognitive mapping enables the researcher to model students' expressive movements. In this study video records of kinesthetic movements as well as participants'

representations of the performance (as seen through their recollections) were recorded and analyzed.

The definitions of creativity formulated by Weisberg (1986) and Maslow (1968), are relevant to the above discussion of the complex of memory and imagination. Using the Weisberg definition of creativity, we are directed to examine outcomes novel to the performer, rather than abstract standards. This allows us to focus on the transformation of images or spatial codings and the workings of kinesthetic imagination. Maslow's discussion of "peak experience" points out that in creativity the experience of the expressive activity, the situation, and the imagination are unified.

### Summary

Several of the most important approaches to creativity were reviewed and critiqued in light of their applicability to learning disabled students. The positivist theories postulate (a priori) traits that attempt to explain and predict creativity. Although this methodology may be valid for examining many creative expressions, the finding that kinesthetic representations tend to be structured differently from verbal or visual expressions leads to a search for a broader conception of creativity (Aylivin, 1977).

Weisberg's definition of creativity was reformulated to make it applicable to learning disabled students. It

stipulates that expressive outcomes be novel and significant to the individual.

Maslow's conception of creativeness, as well as his observation of peak experiences, have yet to be applied to kinesthetic expressions within the context of a performance event. Participation in a performance event might be a way of widening the individual's perceptions and sensitivities. Within Maslow's conception, creativeness is an aspect of the context of the expression as much as it is an aspect of the person. This conception is consistent with the methodology of this study which assumes that a person cannot be abstracted from his or her "lifeworld."

Yoo's phenomenological conception of metaphors is significant to the present study. During rehearsals, verbal metaphors were used to label kinesthetic expressions. Winner pointed out that children understand metaphors and produce them spontaneously in play. Winner's research supports my own assumption that the participants understand the metaphoric labels given to kinesthetic expressions.

Studies of cognitive mapping were reviewed and discussed as a method for depicting a dancer's conception of the dance in a performance area. The studies of cognitive mapping provide the conceptual tools to discuss the participants' understandings of their expressions in the performance space.

The fact that individual experiences of an expressive activity might not follow a general pattern, suggests the possibility that there are many types of creative experience. I have often been struck by the novel ways that some people, artists or students, engage in expressive activities. Positivist conceptions of creativity assume an objective creative reality exists (and if we could only discover it, we could easily teach anyone to be creative). Positivist researchers hypothesize a characteristic process of creativity and traits which people manifest. On the other hand, a phenomenological approach allows us to assume that "creative process" is inherent in the forms of activity and the way the person chooses to do the activity. This is how I approached creativity in setting up this case study.

## CHAPTER III

### SETTING, PARTICIPANTS, AND PROGRAM

#### Introduction

In this chapter I describe the setting (school and classroom), participants (students and school staff), and the program through which the participants developed the performance event. I describe Ms. Ainsley's (the special needs teacher) initial response to this research, because her remarks show her understanding of her students' creativity before starting the rehearsal sessions. The program was ostensibly structured to teach the participants movement, mime and storytelling skills as a means of providing an opportunity for creative expression. Through the improvisations and storytelling activities the students explored and developed images and ideas to enable them to develop their own presentations. During the rehearsal sessions, the classroom teacher and I refined their scripts and help them interpret ideas and images into movement.

The activities have been divided into four phases: 1) preliminary kinesthetic activities, 2) performance planning and story telling, 3) rehearsal, 4) the final performance. Not all the activities were planned before the first session began. Activities and expressions were introduced to teach skills or provide a structure through which creative expressions could be observed and developed.

### Setting

"Riverview Public School" is a centrally located older school situated on a busy street in a residential neighborhood. The school population of 350 students reflects the varied ethnic mix of the neighborhood. The school consists of two buildings: the older two-story, wood-frame building containing two classrooms per floor and the newer brick single story building. All the sessions, except the last two rehearsals and the final performance, took place in Ms. Ainsley's homeroom, one of the two classrooms on the second-story in the frame building. The other room on the second floor was the home of another special needs group, a class for physically handicapped students. The first floor of that building housed two English as a Second Language classrooms. This research took place in the special needs section of the school. This description of the school is relevant to the research, because the different qualities, and the separation of the buildings might reinforce the participants' social separation and low self esteem discussed in Chapter IV.

### Participants

Mr. Jones, the principal of Riverview, had been transferred to Riverview from another school the week before our February 6, 1989 consultation about the feasibility of conducting this study at Riverview. Mr. Jones believed that the special needs students would benefit from their



participation. He approved the carrying out of this research at Riverview on the condition of Ms. Ainsley's (the special needs teacher) agreement.

Ms. Ainsley was energetic, athletic looking, and in her second year of teaching, when we met on February 6, 1989. After presenting my introduction to the research, Ms. Ainsley initially approved of the project. Two days later, at our next meeting, Ms. Ainsley expressed some reservations: She stated that her students were too shy and did not have any talent for acting. She was afraid that I might be "disappointed by her students." Although Ms. Ainsley believed that her students would be excited by the project, she did not think that their interest would continue through the three months of preparation for a performance. She stated that her students were not creative; however, she was interested in seeing any ways they could become creative. We scheduled either two or three two-hour sessions/week for the three months beginning March 7, 1989 and ending June 9, 1989.

Although the nature of the specific learning disability is beyond the scope of this study, I will summarize Ms. Ainsley's statements (February 8, 1989) about her students' disabilities as her remarks do provide a context for looking at the participating students' mime and dance expressions and verbal productions. Eight of her twelve students had been diagnosed as having some degree of dyslexia or other

perceptual disability affecting particularly their abilities in reading, word recognition, and spelling. Ms. Ainsley believed that her students (between the ages of nine and twelve years) were about three years behind the average student in their development of writing skills and at least one year behind the average in their acquisition of spoken English.

In a subsequent discussion following a rehearsal, Ms. Ainsley stated that her students' home environments did not support her efforts (to teach reading and other verbal skills). For some students (Robin, Sue, and Bradley) English was not spoken at home; for a few others (Anne Marie and Ken) the "emotional environment of the home caused the children to withdraw." According to Ms. Ainsley, only one parent, George's mother, took an active part in her child's education.

All of Ms. Ainsley's students participated in mainstreaming (integration in "regular" classes with non-learning disabled students) for a minimum of ninety minutes per week. All of the students were mainstreamed in visual art and physical education. In some cases, the special needs students were suspended from this integration into other classes because of their "disruptive behavior" in the integrated classroom settings. Other students attended math and geography sessions in regular classes. Ms. Ainsley predicted that nine or ten of her twelve students would

attend special needs classes for their entire school careers. After a few years, "two or three" might be totally integrated into "regular" classes.

### **Phase I: Preliminary Kinesthetic Activities**

I selected this particular program and ordering of kinesthetic activities in order to: 1) provide participants with a movement vocabulary from which images, gestures, or actions could be selected during the script development and improvisational sessions; 2) offer a variety of approaches to physical theatre to fit individual preferences and working styles; 3) develop a working process through which we could learn to communicate personal needs and artistic preferences and cooperate towards our common goal of producing a unique experience for an audience.

During my first four visits to the class I told stories or legends and demonstrated how some of the images from these legends could be shown through movement. I wanted the students to see that artists use movement or dance to show an idea and that through a sequence of movements a story could unfold. During the limited time available within an elementary school schedule, it would be impossible for students to become accomplished mimes or dancers. We could, however, enhance and transform everyday movements such as walking, bending, reaching, falling, etc. to bring to life the images contained in the scripts. We could discover ways to lend these "everyday" movements particular qualities.

For example, the students tried "ghostly" walks and "cricket" leaps.

### Relaxation Exercises

The Feldenkrais' approach helps us relax through breathing and movement exercises; and for the present study this approach provided a way to look at the usefulness of cognitive mapping. To relax means to become aware of and reduce muscular tension. In addition, through this approach we see how the placement of the limbs and spine are inter-related. Dancers and actors practice the Feldenkrais exercises to improve control and awareness of the body. The detail and subtlety of his movement approach enables us to visualize a cognitive map of the body. It was designed to help the participating students understand the detail and the subtle qualities one could express through movement.

To give the reader an example of how awareness can be achieved, I describe two of the exercises from Awareness through Movement, (Feldenkrais 1972). In an exercise to reduce tension and attain subtle control and awareness of the lower back, the persons are instructed to lie on their backs, with the arms relaxed at the sides. To enable the students to concentrate more fully on their own bodies and shut out external stimuli, I asked the students to close their eyes during the relaxation exercises. The feet are slid along the floor towards the hips so that the legs are relaxed and the knees are pointing towards the ceiling.

From this position the exercise begins. Feldenkrais instructs the participants to imagine that they have a clock attached to the bottom few (sacral) vertebrae so that twelve o'clock is at the top of the pelvis and six o'clock is at the tip of the spine. The exercise consists of slowly rocking the lower spine between the imaginary "six o'clock" and "twelve o'clock". When this was accomplished, the students moved from "twelve" to "three" and to other clock positions. In this exercise the image of the clock is associated with the rocking movement; a "road sign" on a cognitive map is drawn. The individual is better able to sense finer and more subtle positions and arrangements of the body.

In a second exercise students learned to portray a "floating" quality when moving from a prone position to a standing position. From a position lying on the back, the right arm is rotated in a clockwise direction. During the rotation, the hand stays as close to the floor as possible. The head and eyes follows the hand. The circle of the hand enlarges until the motion of the hand, always continuing in a circle, brings one to a standing position. I have the students work just one side of the body so they can compare differences between the two sides.

In most of Feldenkrais' exercises a breathing sequence is integrated into the movement. The position and action of the lungs become part of that person's self-image in space.

The relaxation exercises flow into the visualization exercises, because between exercise sequences I ask students to feel tension flow out of their bodies and to notice differences before and after the exercises. As they are asked to notice detailed states within their own bodies, they are being prepared to visualize detailed environments such as forests or seas which they would create and move through during improvisations.

### Visualization Exercises

Movements come alive as the performer visualizes the surrounding environment and thus gives a context and intention to the movement. Visualization exercises are exercises of the imagination.

For "fire building," the visualization exercise used in this program, the students remained completely still. I instructed the students to sit cross legged, to "see" a pile of wood in front of them. In the centre of that pile of wood they were to imagine a small smoldering ember. Using their eyes only, they were to "set the pile of wood on fire."

### Isolations

Isolations are a series of exercises practiced particularly by mimes and dancers to learn to move specific parts of the body while other parts remain motionless. Isolations enable the performer to focus the attention of the audience members on the parts of the body "that tell the

story" or create a particular images at any given moment during the performance. Isolations lend clarity to the mime images we used during the performance. During most sessions we practiced isolations prior to rehearsals. We practiced several neck isolations, chest isolations, abdomen isolations, and hip isolations.

### Neutral Mask

Neutral mask exercises lend the qualities of the primary elements - air, fire, water, wind, and tree - to the movements of mime and dance. The awareness gained through the relaxation exercises, the use of the imagination, and the transformation of metaphors into movement, and the control of the body gained through isolations were all drawn upon during the neutral mask exercises. In mask theatre, the feelings and thoughts of the character must be projected through the body to the audience. As mask performers often do not speak and as their faces are hidden, the neutral mask training helps the artist learn to use the body as an expressive tool.

In this study the neutral mask exercises directed students towards transforming metaphorical (verbal) instructions into a kinesthetic expression. The transformed movements and gestures helped them portray the characters in their legends. The qualities were explained to the students metaphorically and, while wearing masks, the students transformed the metaphor into a movement. For example, we

can raise an arm like a mechanical crane, the wing of a bird, or like a feather in an updraft.

When instructing the students in the neutral mask exercises, first, I specified a particular quality. Next, the students tried to express the quality through their bodies. Afterwards, the qualities of each movement were incorporated into specific situations or characters. For example, to the accompaniment of calm watery music students took on the quality of water and began to "float" and "waft" about the room. At a later session we used the quality of water to show how some legendary characters fell out of their boats into the lake, floated on the surface, and learned how to breathe like fish underwater. We created imaginary environments, such as forest fires and then practiced moving through them.

### Choreography

I taught the participating students the "Cycle of Life" choreography to help them understand that a performance is a sequence of events, developed in rehearsal, and then shown to an audience. "The Cycle of Life" is a perpetual motion machine where the performers go through a sequence of four continuously repeated stages. I assigned each student one of four starting positions. Each student moved through each of the four stages: 1) birth out of the sea, 2) the walk across the waves (other students rolling under her in the opposite direction), 3) melting or dying into the sea, 4) a



wave rolling back across the room under those stepping over the waves. In this choreography, the waves are spaced to allow the "walkers" to step through the water. The rebirths and the deaths are timed to keep the sequence rolling smoothly. After the students learned the basic choreography, specific qualities were added to the rolling waves, the walks through the waves, the births, and the deaths. The sequence of the "Cycle of Life" remained, but the qualities were transformed.

### Mime

Mime exercises such as the "tug of war", rope pull, paddling, falling in the water, transforming underwater, were practiced in the pre-rehearsal stages of the workshop, as well as during the rehearsal period, to develop specific images for the students' stories.

## Phase II:

### Planning the Performance Event

#### Introduction to World Legends

I introduced each of the first four ninety-minute sessions by telling a legend and through mime and movement portrayed many of the images from the legend. During the first telling the students were instructed only to listen. During the second telling I asked the students to act out the parts of the characters. I chose some Chinese legends and some Native Indian legends to tell. The students were intrigued by the Chinese "Zen Tales" because the Master in

the story had magic powers. This offered the students an introduction to visual theatre styles such as dance theatre. During the demonstration I also was able to explain the purpose of the relaxation, neutral mask, mime, and visualization exercises.

On April 7, 1989, I performed a dance and mask show with Metamotion and the Theatre of Giants which the entire school population at Riverview witnessed. This performance familiarized the students with some of the theatre and dance styles we would use in their production. The members of the company discussed the show with the participants of this study.

#### Collective Creation of Legends: The Story Circle

During the third through seventh sessions, as a collective, we created several oral stories. The students sat in a circle. One student began the story and introduced characters and situations. The stories grew as the task of adding to it moved around the circle. Students contributed images and embellished the events, characters and situations within the "rotating" stories.

#### Polishing the Legends

During this phase of our work, we changed our improvised oral versions of the legends into a written performance script. Amalgamating the students' oral contributions from the seventh session, I produced a "script". I presented the script to the students during the next session. This story

was titled "the Rich Man and the Thief" (see Appendix I) named after two the main characters in the story. I introduced improvisations, "brainstorming" (De bono, 1973) sessions, and mime exercises to further develop the images and ideas from the story circle. The improvisations were particularly important for developing movement expressions for "the Rich Man and the Thief" and the second legend which was developed through a slightly different process.

The second story was created from an Ojibway legend depicting a magical green sturgeon which protected the Indian people long ago. The characters were borrowed from the legend. The students constructed the plot, which revolved around a kidnapping, to show how the magic fish might have helped the Indian people.

Both legends were further developed through improvisations. It is appropriate to discuss here the approach to improvisation used with the participants because it provides an important avenue through which their creativity could be observed. An improvisation is a theatrical or movement search in a world imagined by the improviser and realized through the actions of improvisation. Improvisations can be performed with specific goals such as the uncovering of a character's reaction to a defined situation. Movement improvisations can bring out body postures and gestures reflecting specified images, ideas, or qualities.

This approach to improvisation engenders consciousness of the body and breath, emotional memory, and self image. The memory of the heightened consciousness is woven into the text, the dance piece or the character work. The improviser tries to suspend expectations of likely outcomes. Actors try to see the world through the eyes of the character in the script. The improviser might gain awareness of physical states, display qualities of movements, produce verbal texts, connect emotional memories to physical states, identify personal memories with the struggles of a particular character, break a movement or posture habit, chop away elaborations, find the essential gesture, or experience stillness. This investigation focuses upon the sensitivities and the awarenesses of the improviser.

#### Mask Making

During the fifth session the making of the masks for the characters (developed in the story circles) began. The stages in the creation of the paper mache masks were: 1) sculpting the mould, 2) applying layers of paper, and 3) painting.

#### Giving Birth to the Masked Characters

The students learned to take on new characters through an improvisation, which also follows the birth-life-death of the "Cycle of Life", but is performed individually. The birth phase takes place with the students "being born" from large stretchy cloth sacks. This activity celebrated the

completion of the masks. I demonstrated how we could find the quality of movement of the character within the sack. From within one of the sacks, I showed how the "paw" or hand could take shape and how it could be shown to the "audience" by pressing it against the stretchy cloth. Each part of the character took shape in this way.

The exercise was presented in three phases: 1) moving in the sack, expressing qualities of water, wind, or fire; 2) moving in the sack as a watery, windy or fiery character 3) wearing the mask and becoming the masked character within the sack, being born and interacting with others who have just been born. The exercise begins as students enter the sacks, curl up into a fetal position, concentrate on their breathing and wait for the accompanying music to begin. I instructed that after their character took shape within the sack, they were to come out, as if just born, and to allow their character to pass through the ages of life from infancy, through childhood, adulthood, and old age. Each student tried the "ritual" two or three times during separate sessions and took from four to ten minutes to complete the ritual each time.

#### Rehearsing the Performance Event

During the rehearsal sessions we found images through which we could "render" the images in the written texts. I selected mime techniques which portrayed images from the students' stories. I helped the students embody the images

from the story so that the audience would be able to understand the story. In the rehearsal process expressive movements were synchronized with narration. Discussions were held to critique and develop qualities of voice and movement.

Improvisations were also used to create and refine the dialogue. Much of the initial narration was given simple "subject"- "verb" form. Both by asking students to repeat images developed in the improvisations and through my questioning, the narration was refined . For example, by asking a question like - "how did he go to the shore?" - a student's response such as, "he crawled." provided a specific image to inspire another or more detailed physical expression. Throughout the rehearsal I encouraged the students to find their own ways to show the events occurring within their stories.

### Phase III

#### Final Presentation

The final performance was presented to seven classes from the school as well as to teachers and several parents. Two legends were performed: "The Rich Man and the Thief" and "The Water Beings". (See Appendix I for texts.) One week after the final performance, the students watched and commented on a videotape of the final performance.

## CHAPTER IV

### INTERPRETATION OF DATA

#### Introduction

The students' participation in the rehearsal and in the performance event is analyzed and discussed in the four sections of this chapter. Firstly, I compare and contrast ways in which the rehearsal activities, exercises and improvisations supported or encouraged the students' achievements and expressions. The impact of the relaxation exercises is seen through the quality of the students' participation in the choreography, the improvisations, and the collective creation of stories. The descriptions of the students' behaviour in these exercises are assessed for evidence that their participation in relaxation exercises, improvisations, choreographies, and their sequencing encouraged verbal creativity.

Secondly, I use the analytic technique of cognitive mapping to discuss how the students understand and visualize their movements and positions in the performance. The usefulness of cognitive mapping as a means of identifying the participants' creative contribution is discussed.

Thirdly, important interactional issues are examined. I compare students' conceptions of the behavioural expectations surrounding a rehearsal and performance with those of the adults (teachers' and my own). The impact of

these conflicting expectations on the participants' expressive outcomes is examined.

Fourthly, I discuss the differing criteria by which teachers and students evaluate the performance. I compare these evaluations of the performance in light of the definitions of creativity discussed in Chapter II.

The descriptions of the experience of creativity are organized and evaluated from the perspectives of the students, teachers, and from my own perspective. The students describe their own creative involvement in the rehearsals and performance. The teachers' and my own observations are of the students' involvement in expressive activities. The evaluations we made of the students' work are based upon different sets of expectations, knowledge and experience. By identifying these competing sets of criteria for judging creativity, I may be identifying issues that are pedagogically useful in helping students.

### **Kinesthetic Expressions**

#### **Relaxation: Adjusting to a New Way of Working**

The students participated eagerly, but were bewildered by the relaxation exercises. Despite this bewilderment the degree of their commitment could be seen in the way they conducted themselves in the relaxation exercises; I remarked in my field notes:

"Jay melted into the floor. Sue and Sean were extremely intent on relaxing. They were trying too hard... The



students were extremely mellow. I wanted to see how long I could stretch this period of calm."

Initially, several students tried so hard to relax, they could not relax at all. For example, after I had instructed the students to concentrate on a feeling in the lower back, Sean fixed an intense, strained stare at the ceiling. At first, I interpreted his bulging eyes as "clowning". However, the students' own recollections of their first experience with the relaxation exercises pointed out that they had been trying to show that they were following instructions. With concentration and relaxation exercises the intended focus should have been on the participant developing awareness of his or her own body. When they showed they were following instructions, they were focusing on their surroundings. The act of showing that they were trying to relax hindered relaxing.

While the exercise was intended to develop an awareness of inner states (muscular tension and qualities of breath), the students were trying to interpret the meaning of both the instructions and the meaning of my (adult world) expectations. They characterized their own adjustment to the relaxation exercises in comments made at the end of the project: "pretty weird", "strange", something "I've never heard of before". Dan said the relaxation exercises were "boring".

In the next session, the participants became somewhat more accustomed to the relaxation exercises, but their continued bewilderment could be seen in the glances they gave one another.

Anne Marie and Anita looked at each other. Anne Marie gave Anita a motherly, reassuring look. I asked them to close their eyes. At one point Bradley giggled. Dan and Ron soon joined in (the giggling). I told them to relax and concentrate on their breathing. I asked Ron to move to a different place on the floor. (So as not to be distracted by the others.) They were able to control their giggling... The group had achieved an overall calm for the first time. I felt it was the right time to teach them the "Cycle of Life" choreography.

#### Relaxation: Implications for Performance Expressions

After several sessions they adjusted to the relaxation exercises, as Ms. Ainsley noted in the changed mood wrought by the relaxation exercises: "By Fridays, they're practically bouncing off the walls. It's the worst when they're expecting you (researcher). On rainy days, like today, they're wild. I can't get them to work. The relaxation work you do settles them down. I can really see a big difference...It would probably pay off to use it with other subjects, possibly before creative writing..." Eventually, the benefits of the relaxation exercises carried

over into their performance expressions, but not without the "adult" controls exerted by Ms. Ainsley and myself.

The participants' adjustment to the relaxation exercises and their learning to work calmly enhanced their dance and movement work. In the "Cycle of Life" I used metaphorical phrases to characterize the changes from one stage to the next in the choreography. The transformation from a "rolling wave" to a "walker" was to be performed "as if one is being born and sees the world for the first time" (my own instruction). The reverse transformation from a "walker" to a "roller" was performed "as if one is dying and descending to the underworld." I used other metaphors of 'growth', besides 'birth', as well as other metaphors for 'decay', besides 'death', (such as a flower growing and wilting).

They learned the sequence of movements first, but had more difficulty achieving the movement qualities suggested by the metaphorical phrases. As I remark in my field notes, "the spacing was good... qualities of movement were not performed accurately... An attempt was made to capture the qualities of calmness in the walk, growth on the ascent and decay in the descent. The calmness found through the relaxation exercise was entirely lost (during their first attempt) because of the difficulty of the choreography."

The relaxed, calm group mood aided the synchronization of movement in the "Cycle of Life". The spacing and timing had to be precisely maintained to prevent the students from

stepping on each other. In general, as the sessions progressed, the calmer they became, and their awareness of one another in the choreography improved .

During the early sessions, when the 'calm' was lost in the choreography, I tried to bring it back into the "circle story exercise." I tried to focus their attention on the manner in which we sat down and began the story. During the first two sessions in which this sequence of exercises was tried (relaxation exercises, "Cycle of Life", story circle), the students lost awareness of quality in their movement. I comment in my field notes: They "raced to the corner where they habitually formed their circle for routine classroom activities, except for Ron and Sue, who had to be coaxed by Ms. Ainsley to join the circle. Sue said she was tired. The calm and concentration gained in the relaxation exercises were now lost."

The initial lack of continuity between the preparation exercises (relaxation and "Cycle of Life") can be seen in the students' first attempts at the story exercise. Many of the students used it to aim insults at each other. Generally insults were cast across gender lines. Anne Marie, who in every other phase of the work had been supportive towards the other participants, initiated the story and began the chain of name calling: "A boy named 'Bradley' came from the moon. He was ugly."

Bradley sitting next to Anne Marie spoke next:

"Bradley, hated Anne Marie so much that he barfed on top of her."

Sean continued: "The next thing you know....," he paused (and Bradley interjected, "he turned cute.") Sean repeated, "he turned cute."

The participants brought patterns of interaction from the playground into the 'play' of the story circle. These patterns of interaction competed with the awareness which the exercises were supposed to develop. One student would establish a situation or character and the next one would contradict that which had been developed.

Dan spoke next: "After that, he started eating garbage all day, and he got fat."

Ron reversed that image: "Then he lost weight."

Anita began to speak hesitantly.

"Say something!" Several others interrupted. "Don't tell me your tongue is tied."

I was disappointed in their performance. Ms. Ainsley asked me if she could speak to them. I nodded. "I just want you to remember the rules. It's not serious, but just keep out the names. Make it an imaginary name. Be a nice audience. If you can't think of anything say *pass*."

During the next attempt the students were able to build a story so that more frequently one student's contribution embellished and continued the previous one's. The story was

passed around the circle in the other direction. Anne Marie told of "a little girl who went for a walk and found a dog."

Sean added that "the dog ran off and the girl chased after him."

Bradley kept the dog and the girl in the story and added a new character. "The girl found the dog but his owner wanted him back."

By the third session in which we followed this sequence, the students were able to move to the circle calmly and begin the story with the timing of the "Cycle of Life" choreography overflowing into their patterns of speech. They waited their turn to speak without any cues from me either to wait or to begin, and they were able to refrain from both interrupting and cueing each other.

The calming influence of the relaxation activities and the choreography began to have an impact on their verbal interactions, as evidenced in the "story circle": not only by the giving and taking of turns to speak, but in the way the themes of the story emerged. The pattern of opposites seen in the antonyms "growth" and "decay," around which I structured the choreography, appeared in the students' spontaneous expressions. Characters got fat and thin then fat again. Dogs were found and lost. "A man got blind and then got his sight back."

The observation that the participants learned to move from one activity to the next and maintain a relaxed composure contradicts the interpretation of data of Tarver et. al. (1980) that "a broad, unfocused attention" is related to creativity. The more focused the participants became, the more readily they were able to contribute to the group story as well as devise expressive movements from a verbal or metaphorical cue. The issue of "focus" in an expressive activity is expanded in this chapter in the discussion of children's understanding of play.

#### Kinesthetic Productions and Verbal Creativity

The students had begun to contribute narratives that developed simple conflicts in their collective stories. After relating an introductory legend, I pointed out that stories often involve the statement of a problem and the characters' struggles to solve the problem. Before beginning the circle story exercise, I used a "brainstorming" approach (calling for suggestions without evaluating content) to help them outline the story and to clarify the central conflicts of their stories. I structured mime and movement improvisations around their story ideas and helped them enrich their own images.

The participants derived many of the ideas and images for their collective stories from both the introductory tales and the movement sequences in the mime classes. For example, "the Rich Man and the Thief" started with the

character of the monk who lived in the cave, a character they borrowed from one of the Zen tales I had told. The monk had foresight; he could diagnose an approaching stranger's ailments. I asked the students what other kinds of problems he might solve. Bradley suggested, "to help someone find a girl friend." Out of that idea our story was born. "Why couldn't he find love...?" "He was old and ugly."

I demonstrated and involved the students in creating illusions of such images as floating in water, climbing in and out of a boat, throwing a net, falling in water, and paddling and poling boats. I suggested they might want to try working these images into their stories. Many of the images in their stories came from these mime illusions. When I asked how would the old man get to the monk. "A boat!" Ron suggested.

With this preparation and six previous attempts to come up with a collective story, we began our circle story exercise. The participants' creativity can be seen in the ways they combined and changed ideas from the introductory legends, and in their transforming the mime activities into narrative content for their own stories. Below, I quote from one successful attempt:

Robin: "Once upon a time there was an old man who loved a young woman."

Dan: "He gave her a present. Gold and jewels."



Ron: "And a car."

Bryan : "He tried to act cool. She always turned him down."

Anne Marie: "So one day he decided to visit a wise monk who would help him find someone to love."

Ms. Ainsley: "O.K. How would he get there? Remember? You said it before."

George: "He got on a boat to take him to the monk."

Linda: "He traveled many days and many nights."

Molly: "One night a crook snuck up and the crook tried to steal their boat."

Sophie: "The rich man woke up."

Sean: "The rich man tried to kill the robber, but then he thought he could make him a slave."

Jay: "The robber wasn't really a robber. So he told a story about how they thought he was but he really was innocent, like Rambo."

In this round we had a seed for our performance legend. I asked the students to think about the thief's story. I asked them to try to tell it as if they were the thief, using "I." Sue developed the thief's story. Ms. Ainsley helped her with it, particularly the spelling: "Long ago, when I was young, I worked on the land. I worked hard. So I became a rich farmer. The soldiers came and threw me in jail. Then I escaped from jail."

Between rehearsal sessions, Ms. Ainsley helped them add detail to the story. In addition, she made suggestions to change situational inconsistencies such as the gift of the car. We completed the story in two subsequent circle sessions. Before starting a subsequent circle story, Ms. Ainsley and I reviewed the students' contributions and clarified what we might achieve in the coming round. We made changes through the rehearsal sessions and even up through the final rehearsals as the narrators found other ways to tell the story. The final complete version of "the Rich Man and the Thief" is printed in Appendix I. The students' story, developed collectively, is a creative outcome; their own statements, summarized in the Student Evaluations section of this chapter, attest to the story's significance to the participants. It fits the two stipulations of the reformulated Weisberg definition (see Chapter II), in that it was both novel and significant to the participants.

#### Individual Approaches to Creativity: Mask Painting as a Kinesthetic Activity

Mime and dance obviously have a kinesthetic dimension and are in fact largely movement arts. Individual painting styles were observed to arise from kinesthetic aspects of the painting and and sculpting activities. In this section, movements, as they relate to the participants' painting, are observed and discussed.

At the beginning of the session during which students painted their masks, I demonstrated several painting styles, showed the students several masks which had been painted in a variety of styles, and I presented the students with a few choices of tools or ways with which to apply the paint to the masks. The students could choose a brush, sponge, or fingers to apply the paint. The students were shown a variety of strokes, ways to exaggerate the contours of the features, ways of blending and layering the colors, and we discussed the effects which the combinations could produce. They were so eager to begin with the paint that little interest was shown in the discussion.

Almost all the students tried the layering of the paint with the sponges and the blending of colors. I recorded in my field notes that:

"their use of this approach was quite a bit freer than what I have been accustomed to."

For forty-five minutes the participants remained on task; when school was about to end and Ms. Ainsley and I had to drag the students away from their paints to clean up. Bradley maintained a constant rhythm of sponging layer upon layer of paint. He bent slightly at the waist each time his arm dabbed the paint on the canvas. He bore down on the paint soaked sponge. With each splotch of color an effect appeared and then disappeared. He overworked the surface of the mask.

"I'm waiting for it to look just so." But he was not able to verbalize what it was he wanted. Bradley's approach to the painting of his mask was characterized by a steady rhythmical application of paint and an intense concentration.

Anita, in the same methodical, patient way she built her plasticene mold, carefully painted a grey face with red tears streaming down the cheeks. With a light touch, each tear was expertly formed. From the beginning she said she knew her mask was to be sad. Although a few of the other students claimed to know what they wanted to achieve with their masks, only Anita followed through with her plans. She controlled her brush strokes. Although her concentration, like Bradley's, remained constant, she did not experiment with the paint.

Bradley and Anita adopted two contrasting approaches: one spontaneous and instinctive, the other involving the conceptualization of goals and methodical steps to achieve the goals. For these students, both the involvement in the experience of painting and the appearance of their masks were novel and significant, and were consistent with the reformulated Weisberg definition of creativity developed in Chapter II.

## Cognitive Mapping of the Performance

### Introduction

Cognitive mapping was used in this study as an analytic tool for investigating and depicting the participants' understanding (cognitive representation) of the performance space, the sequence of movements comprising the choreographies, and all knowledge and kinesthetic sensitivities involved in the above. Because we cannot look directly into the participants' heads to see how they visualize or represent themselves moving in the performance space and because of the participants' limited articulateness, I have isolated four behavioural categories which help to indicate the content of their cognitive maps. Firstly, I will isolate events which point out the participants' conception of the "stage" and discuss instances that led to their changing initial conceptions of the "stage." Secondly, I will discuss the participants' adjustments, as they incorporate the conventions of mask theatre (such as facing the audience) into their cognitive maps of the performance. I will discuss evidence of the participants' spatial awareness in a choreography. Thirdly, I will discuss evidence showing that habitual, "everyday" ways of conversing and interacting may interfere with conventions of mask theatre. This interference is evidence of the operation of two kinds of memory: cognitive and kinesthetic. Fourthly, I will discuss evidence of the

participants' acquisition of knowledge about and kinesthetic sensitivities of the sequence of movements, which are bound into their cognitive maps of the performance. Through these four indicators of the participants' cognitive mapping of the performance, I will discuss how creativity is involved in those novel ways by which students transform the movement sequences of the choreographies.

#### Participants' Conception of 'Stage'

Because the actual stage at Riverview School was available for only the last two rehearsal sessions, desks were cleared from the centre of the classroom, and a performance area was demarcated. The front of the stage (downstage) and the exits were defined to correspond to the dimensions of the actual stage in the gymnasium.

The performance scripts called for the participants to enter and exit many times. By looking at where they enter and exit and at the timing of their entrances and exits (through a progression of several rehearsals), a feature of the participants' 'cognitive maps' can be depicted.

After changing the classroom into our "stage" and defining the borders, we decided on the best places for each character to enter and exit. In reviewing the data I found that the participants were able to detail the events of the narrative and tell me the locations of their entrances and exits (when asked), but did not always perform so. When "in character" they would often become quite excited. It was as

if the commitment to their characters took them outside the boundaries of their cognitive maps of the stage.

During the early rehearsals, I had to remind them to stay on the "stage." We improvised a chase scene which meandered through the classroom. Bradley as a fish, did a transformation to a "merman" off the (demarcated) stage in the classroom.

The last two rehearsals and the final performance took place on the stage. In reviewing the video tapes I saw that the locations on the stage, where specific movements were performed, were similar during those last two rehearsals and the final performance. The energy and excitement put into the movements was amplified for the final performance.

Another interesting source of data came from looking at how substitute student actors performed for students who were absent. During the last five rehearsals, substitutes seemed to know the blocking of the others' parts, but they had problems giving movements and gestures those specific qualities that the usual performer had discovered. Movement sequences were more readily absorbed into their cognitive maps than the kinesthetic sensitivities that were welded to the movement. It is the discovery of the qualities and sensitivities of an event that lend the movements communicative or expressive value. One's discovery of movement quality aids retention of the choreography of the event.

### Conventions of Mask Theatre and 'Everyday' Social Spatial Arrangements

Some of the conventions used in mask theatre conflicted with the students' habits of positioning themselves in 'everyday' conversations. In order to describe this conflict, I will first describe the conversation convention used in mask theatre and then compare it to field observations of the participants struggling with this convention.

In mask theatre, physical movements are used to establish characters, depict their relationships, and tell the story. An important technique in using masks involves bringing the energy from the body through the mask, particularly through the eyes, and to the audience. I refer to this as "projecting" through the mask. The audience members must see the mask in order to experience the "energy" of the character. An important part of projecting involves the performer directing or angling the mask towards the audience. The masked performer does not always face directly towards the audience in every movement. For example, when two characters are "conversing" side by side, they both will angle their heads slightly towards each other, and angle their bodies nearly directly towards each other. This is one convention of mask theatre which I intended to teach Ms. Ainsley's students. This convention



is contrary to our "everyday habit" of facing the person with whom we are conversing.

In the rehearsals and in the actual performance, narrators situated at the side of the stage read the text and dialogue of their stories. As the dialogue was read, the characters acting out the conversation gestured and moved their heads as if they really were speaking.

In rehearsal I demonstrated the conversation convention of mask theatre. In addition, while they were practicing the performance, I called out "face the audience" or "audience". Several times I halted the rehearsal to make sure that everyone knew about the convention. All the participants could recite both the stage directions and the the conversation convention. For a few moments after my reminder, they adopted the convention, but then soon returned to the habit of facing one another. In only a few instances were the students able to overcome their habit of facing the person with whom they were conversing and project the energy of the conversation through their masks. This is relevant to the participants' cognitive maps of the performance because they were able to describe the convention, but in performance, generally, reverted to their everyday habits of conversing. Cognitive and kinesthetic memory do not coincide.

In most other actions of the performance, besides conversing, the students demonstrated the convention of

projecting to the audience. For example, when Jay and Dan paddled the canoe, when Jay cast the net, and when Jay was pulled into the water, the convention was used. When Bradley as the Merman began talking to Jay, Jay turned to face him.

A similar pattern was followed when George as the evil sorcerer crept up on Linda, the maiden. Facing the audience, Linda picked berries. George moved downstage, "hiding behind rocks and trees", facing the audience. As soon as the sorcerer "spoke" to the maiden, they turned towards each other.

The conventions of mask theatre compete with habitual ways of interacting. In general, the students did not demonstrate that they could overcome habitual ways of interacting in conversation and adopt the convention. However, when the movement did not involve interaction with another character, the participants had little difficulty demonstrating the convention of projecting to the audience.

Since students knew what the convention was (often, participants would remind their fellow students when they noticed that they were not projecting to the audience), it is apparent that the knowledge about facing the audience at specified points in the performance was part of their cognitive map of the performance. In addition, their drawings of a performance image depict the characters facing directly towards the viewer. Since they generally did not

demonstrate the convention during the conversation sequences, the participants lacked the awareness of the position of their bodies in relation to the stage (exproprioceptive spatial coding) at those times. During the conversation sequences, instead of concentrating on their positions, they focused on making gestures and moving their heads in a manner that would make it seem that they were saying what the narrators were in fact saying.

This example shows that the students do not visualize themselves moving from the perspective of others on the stage. Further, evidence for this can be seen and heard in the participants' reactions and comments as they watched a video tape of themselves doing the final performance: "I didn't know I was moving so fast." "Yuk." "Was I paddling like that?"

#### Spatial Awareness and Kinesthetic Memory

The "Cycle of Life" choreography is a sequence of movements in which the participants take on the abstract qualities of growth and decay. Since they are not acting or moving as real humans, there is no expectation that they resort to habitual conventions of social interaction, as is the case when they play the characters from their stories. The "Cycle of Life" choreography involves exproprioceptive coding (relating the position of the body to the environment). It involves a more complex series of movements than conversing.

During the fourth session, in which the "Cycle of Life" choreography was practiced, I instructed the students to close their eyes while continuing the same rhythm and movement, whenever I clapped my hands. I asked them to listen for and sense the positions of the others. This way no one would be stepped on. The second time I clapped my hands they could open their eyes. I observed that not everyone would keep their eyes closed for more than five or ten seconds. Several times, I reminded them to keep their eyes closed. After, several attempts, the participants were able to keep their eyes closed. I delayed my second clap of the hands and extended the periods of time which they had to rely on their senses other than sight, and possibly their kinesthetic memories. Eventually they could keep our perpetual motion moving unimpeded for ten seconds. The fact that they learned to maintain the constant rhythm and progress "sightless" through the choreography is evidence of the complexity of the participants' cognitive maps.

#### Participants' Creative Contributions: Transforming Kinesthetic Movements

The students' cognitive maps of the performance contain knowledge and kinesthetic sensitivities that are the outcomes of many of the preliminary exercises described in Chapter III. The kinesthetic sensitivities represent the students' creative contributions. Their past experiences and individual approaches in the improvisations led to

outcomes that are both novel and significant to the individual. The students learned the movements which told the story. By virtue of their participation in the neutral mask and improvisational activities, their movements showed greater sensitivity to the task, and a sense of qualitative interpretation that could be called artistic expression. They drew not only from their participation in these exercises, but also from their personal resources and experience in transforming the sequence of movements into an artistic expression. Their commitment and enthusiasm also contributed to the movements. Herein, lies the creative element for the student. Below I describe three cases in which students developed novel kinesthetic expressions.

The "Water Beings", the legend which we adapted for the performance, contains an incident in which a fisherman falls into the water. A magic fish gives the fisherman the power to breathe underwater. Sean worked on his own in a corner of the room. I could see by his shaking hands and legs that he was (portraying a) drowning. After a minute of this shaking, he gasped. His movements calmed. He floated. The gasp provided the perfect transition between the panic of the drowning and the calm of learning how to breathe underwater. The specific qualities associated with the drowning and the calm of the magic moment of learning to breathe underwater were also developed during specific exercises during the preliminary stages. The shaking during

the portrayal of the drowning was similar to the movement expressed during the "fire" exercise. The relaxation exercises sensitized the students to the use of breath as a dramatic element. The calm quality had been developed through the relaxation exercises. Sean's creativity can be seen in the novel way these qualities and movements were amalgamated to fit the dramatic situation.

In this second instance the student lent a sequence of movements a dream-like quality. Here, the student not only found the movement, but added to the plot of the story, so that the movements could be used.

Bradley, Linda, and Molly were watching from the side of the performance area. I was working with George on a kidnapping sequence. The students' script called for George's character, Majeawea, to sneak up on Linda's character and drag her away. Bradley made a loud "burping" sound very close to Linda. Linda pretended to faint. When she pulled herself off the floor she suggested that Majeawea could make her faint. Bradley suggested he could give her a magic potion. Linda tried taking the magic potion. She pretended to pour it down her throat. Her legs started shaking. The shaking rose up her body to her head and she fell over. It had looked as if the poison had gone straight to her feet and then had risen up her body. In this incident the inspiration for the student's creativity came out of "non-purposeful play." She was not looking for a way

to change an element from the plot. An addition to the plot was made to accommodate a new expression.

In post-performance interviews, several students said that the "way Bradley did the fish was the most creative" contribution to the performance. In contrast to the above examples, where movements were invented, Bradley's creativity could be seen in the quality he gave the movement. The fish was a large fabric sculpture which totally covered his body. It had a long tail which was moved by extending the left arm into the tail. The eyes were manipulated with the right arm. Bradley's right hand moved the fish's left eye, his right elbow moved the fish's right eye. This technique for playing the fish was my invention. The languid, watery movement was Bradley's creation. That is not to say that the "idea" of watery movement was his creation. The creativity was the movement itself. The consistent, watery movement gave the impression that the fish was floating. The consistency of the movement evidenced Bradley's commitment to the image of the fish in the water. Bradley's creativity was in the quality of and the commitment to the movement. His kinesthetic sensitivity towards the languid movement was brought into his cognitive map of the performance.

#### Summary of Cognitive Mapping and Kinesthetic Expression

The conception of cognitive mapping developed by Downs & Stea (1978) proved useful in analyzing the participants'

kinesthetic expressions. First, the technique of cognitive mapping was used to analyze how the participants defined (spatially) the "stage." I described the "Cycle of the Sea" choreography to point out that cognitive maps contain detailed memories of the positions of the body parts (limbs) in relation to each other, the other performers, and the space. Field observations reviewed in this section suggest that Millar's three types of spatial codings (exteroceptive, proprioceptive, exproprioceptive) may be expanded to include the performers' kinesthetic sensitivities as they lend specific qualities to their movements.

Next, I discussed how the participants' cognitive maps of a "normal conversation" interfered with the cognitive map of a conversation between the masked characters. Finally, I described examples in which the students' cognitive maps of movement sequences were transformed imaginatively as they welded specific qualities into the movement sequences.

The analytic technique of cognitive mapping was useful in looking at the participants' memories of the movements. The participants' imaginations transformed movement sequences. It would be useful at this time to discuss aspects of the working environment and interactional issues that support imagination.



## Social Interaction in the Rehearsal Situation

### Introduction: Social Expectations of the Rehearsal Situation

Actors and dancers who are accustomed to rehearsal situations follow unspoken norms and expectations of behaviour. During the activities involved in the present study students' behaviour was influenced by their conception of a rehearsal. The rules of the rehearsal situation enable the performers to complete the play, as well as maintain and practice technique. A comprehensive list of the norms and expectations surrounding a rehearsal situation is outside the scope of this study. I will give a few examples of adult expectations in the rehearsal situation because they are relevant to the ways Ms. Ainsley and I acted towards the students in the rehearsals.

### Adult Conceptions of Rehearsal

Adult actors have been socialized to behave according to the norms and expectations of the rehearsal situation. Within a rehearsal, performers participate in a diversity of activities including warm-up, improvisations, learning choreography, characterization and concentration exercises. The expectations and the norms of behaviour vary from activity to activity. During a group warm-up performers do not talk; they might look at each other. During improvisations performers are spontaneous, often playful, and are cognizant of the others in their group. On the other hand, concentration exercises demand that the

performers maintain an internal focus and close off the possibility of interaction with others.

Other adult conceptions about the nature of the expressive productions revolve around how a director phrases comments to the actor about his or her work. Rather than talking about the actor doing the 'right' thing or the 'wrong' thing in an improvisation, actors talk about 'making choices.' The overriding question is: How can the actors' choices contribute to the audience's experience of the play? In light of the agreed upon interpretation of the play, the actor's choices are adjusted, rather than corrected.

#### Adult Versus Children's Definitions of Rehearsal and Play

Seeing the rehearsal process in relation to the final goals is a significant part of the daily work of an actor. On the other hand, the participants often perceived techniques such as improvisation as a means to please adults. The rules that structure improvisations were seen as absolutes passed down from the adult world.

In school, students' expressive images are too often seen in terms of right or wrong. Students are accustomed to having their work "corrected." The teacher does not "adjust" their work. The child's world is filled with rights and wrongs specifying details from which is the "up" stairway to when you can use the pencil sharpener. Much of their day is spent trying to uncover what the rules are. They often assume there must be a right way and a wrong way

to make choices in an expressive situation such as occurs in an improvisation.

For example, when I asked George to repeat the mime sequence of pouring a magic potion and hiding behind an imaginary tree, he repeated the movement several times. Then silent tears streamed down his face. Several weeks later when I asked him why he became unhappy on that occasion, he answered, "because I couldn't do it right." In retrospect, I recalled asking him to repeat the movement because he added more detail each time and I was interested in showing the others how detailed movement could make the action of hiding behind the tree seem so real. George did not understand my assumptions about the purpose of the rehearsals and became upset. He was extremely cooperative to have gone so far in the activity. This is another instance of the students' viewing the rehearsal as a way of getting things right, while my adult conception of the actor's job holds that repetition can be enjoyed as a way to enable a refinement of the action.

#### Adult Versus Children's Definitions of Time

When a choreography or blocking scheme is taught, it is expected that those performers directly involved would ask for clarifications, or make suggestions, while those performers not involved watch the action or work on other parts of the piece. Actors might often repeat the same movement thirty times. Professional performers are aware of

how quickly rehearsals can pass and try to utilize all the time available learning their parts.

During the last five rehearsal sessions, I asked students not directly involved to work on their own or in small groups on particular movements or images that needed clarification. The students on the fringe would repeat the movement one time, stop, begin to talk, or mix with other groups who were presumably also working on their own. What seemed like lack of interest or fooling around, at first, was another understanding of what "repeat the movement" means. The students had not been socialized into what adults think of as "efficient use of time."

#### Play as Non-purposeful Activity

I wanted the participants to have an overall view of the project and understand issues such as how their sculpting the mould for their mask would affect their vision or how learning to relax would help them on the stage. I called "meetings" to explain the process of work and the relationships between various exercises. At each meeting I outlined what the next phase of our work would entail. Generally, the participants were not interested in the reasoning or justifications behind the activities, as evidenced by their restless glances toward the performance area or towards the mask making supplies. They eagerly anticipated getting to work. Ms. Ainsley would call out "eyes," meaning that they should watch and pay attention.

The problem solving approach to creativity assumes creativity is purposeful: Student choices are evaluated in terms of how the choice contributes to a solution. Creativity tests are made up of tasks and solutions. But in this study, much of the participants' expressive activity was non-purposeful. The value of the activity was intrinsic to the expression.

During the fifth session the students started to make masks. I demonstrated briefly each stage of the mask making procedure to give them an overview, and then, in some detail, I demonstrated the sculpting of the plasticene to make a mould. The plasticene was stiff and difficult for the students to sculpt. I showed them how to warm and soften it by rolling it into snake-like forms. I suggested they "play" with the plasticene to see what interesting shapes they could find for the features of the face.

After a few moments, Ron hung a rolled piece of plasticene from his nose and called attention to it. "Look, a booger."

A few minutes later Ron found another way to make a plasticene "booger". Ms. Ainsley cut him off. "O.K., that's enough of that."

Swinging a snake-shaped piece of plasticene in a figure eight configuration, Sean called out, "I got nanchuks," (an oriental weapon).

Dan took another snake-like shape and placed it in the mouth of his mask which he had already begun. He twisted the piece of plasticene and said, "looks like he's doing a tongue twister."

Sean attached five snake shaped pieces of plasticene on the ends of his fingers. "Look at these fingers."

Ms. Ainsley, noticing his wormy fingers, scolded him mildly, "he doesn't mean play like that." I told Sean the fingers were a good idea and we could try them with paper mache and chicken wire, another technique I had previously mentioned.

The structuring of limits to behaviour has implications for creativity. As Maslow (1968) noted, play is an important facet of creativity. For the child play is natural and spontaneous. It is having fun. Educators, however, tend to see "play" as a purposeful activity. In the above example the adults and the children did not share the same conception of play. Ms Ainsley, in rebuking Ron, indicated where the limits were to be set.

Sean placed a wedged shaped piece of plasticene on top of the cardboard box that supported his mould. Chanting the suspense theme song from the film "Jaws", Sean's mould emerged from under the table as he cried "shark."

These seemingly off-task behaviours are not off-task in the mind of the student. Their behaviours are a response to my suggestion that they "play" with the plasticene to try to

discover interesting forms. Much of their play did lead to facial features that were incorporated into their masks. Pressing a slab of plasticene at the top of his mould Dan said, "I'm gonna' give mine a mohawk."

Later Dan tried to get Bradley's attention, "Bradley, "Bradley! BRADLEY! I'm gonna give mine a huge nose. Aaaah Chooooo!" He made a sneezing sound as he caused his plasticene nose to flop off the mould.

Having found out that boogers were unacceptable, Bradley tried a "sneeze." Ron, who had tried dangling a plasticene "booger" from his nose earlier, tried to see if "boogers" for masks were acceptable. He stuffed several plasticene balls just below the nose on his mask. "Look! My guy has boogers." This time Ms. Ainsley did not react. The limits, it seems, could therefore be redrawn this time around the rule: People cannot have boogers, but masks can.

### "Play" and Factors of Creativity

The "off-task," spontaneous, non-purposeful behaviours discussed above, parallel the "broad, unfocused attention" that Tarver et. al. claimed to be an aspect of the creativity of learning disabled students (1980). The authors found that in comparison to non-learning disabled groups of students, learning disabled students recalled more information incidental to tasks and less information central to the task. This unfocused attention was related to the "originality" or "uniqueness" factors of creativity. In the

case of the students in this present study, their play was, at times, unrelated to the task as defined by the adults in the situation. In the following excerpt from my field notes recorded on May 15, 1989, eleven days before the final performance, one might see how "unfocused attention" might lead to "originality."

The students were divided into four groups... I gave each group of students an assignment and a corner of the room. Linda, Anita, and George were to work on Majeawea sneaking up on Pelala, who was out picking berries (from the "Water Beings"). Sean, Jay, and Bradley were to find ways to make the thief's tale of his arrest more interesting. I reminded them that according to our script we had to see how the rich man was involved in the arrest as a secretary for the emperor. I moved from group to group... I came back to Linda, Anita, and George. Linda and Anita were discussing a program for the show. Anita wanted the "cast" listed alphabetically. Linda believed it should be decided on the importance of the character to the story. "Heroes and heroines should be first, then the bad guys." George sat quietly... I told them I did not know what we would do about the program, but we should really get to work. I asked them to show me what they had accomplished, believing it would not be much. I watched Linda make two grabs for imaginary



berries. George smiled and stalked Linda from behind an imaginary tree. On the other side of the room, Sean, Jay, and Bradley screamed and giggled. I was distracted. Bradley galloped around with Jay on his back, bumped into some desks, and stumbled between Ralph and Dan. I approached Bradley, who told me, "the thief is escaping." (Their original script called for the thief to be thrown in jail without a trial.) I brought the groups together to share their discoveries... Linda picked berries as George moved from tree to tree. He peered between branches. The others applauded. Ron's group wanted to go last. Sean and Bradley lifted Jay from under the armpits and tossed him in prison. Jay made a convincing grab at imaginary bars. There was nothing in this portrayal, which resembled their earlier escape scene.

The above description is typical of many instances, in which the participants, while attempting to work within a group, would drift off an assigned task. However, when I asked them to perform for each other, they demonstrated an understanding of the task and fitting solutions to performance problems.

On the individual task of mask making, many students worked within the limitations of the task as defined by the adults. We can see that in the work of George, Anita,

Molly, and Anne Marie. In addition, these students all demonstrated unique work processes.

George motioned to his plasticene shape, "Ms. Ainsley, I'm making fire eyes." In one of the neutral mask exercises, George had expressed the energy of fire in an improvisation earlier that day and brought the image of fire into his mask. As he looked up at Ms. Ainsley, his own eyes were bulging out in a convincing mime of his plasticene creation. George "made faces", pursing his mouth to the side, bulging his eyes, and then tried to imitate it in his mask.

With each student working on their own mask, the playful atmosphere encouraged a wide variety of shapes and forms. The objective of this afternoon of work was to produce a mould for the mask. Most of the students tried several solutions. This experimentation with the plasticene parallels "divergent thinking," (Torrance, 1962) and involves visual and kinesthetic modes of expression besides the cognitive.

The previous discussion highlights the strong focus and spontaneity of the students' play. At other times, adult expectations about finishing the show or learning technique restricted spontaneity, as can be seen in the following discussion.

### Socialization of the Participants and the Adult Conception of Rehearsal

In the examples of play described in the previous sections, students were trying to find out what the limits to their behaviour might be. The adults objected to "boogers," but ignored the "sneeze." "Sneezes" were acceptable.

During the mask making sessions, it was easier to accept these "off-task" behaviours. However, in a rehearsal, competing definitions of behaviour would be disruptive. This is evident in the following field notes entry describing an instance from the "circle story." As noted previously, during early attempts at a "circle story", the students exchanged insults and interrupted each other.

I had been tempted to stop them. Their expressions did not suit my definition of a story. Their treatment of one another would prevent any creativity. Ms. Ainsley stopped them and reminded them of the rules. Their insults were testing the limits, and Ms. Ainsley made it clear that they were stepping over the boundaries.

On other occasions in rehearsal, student behaviours, according to the "adult" definition of play in a rehearsal, blocked progress. Wearing the fish costume, Bradley was trying to perform a transformation from the "sturgeon" to the "merman". He was hanging out the mouth of the fish.

Dan pulled his tail. Scolding, I told the students that an audience would be viewing "our" legend, and "what you do now is what the audience will see." In adult theatre the goal of preparing the show for the audience defines our actions during rehearsal. As we socialize children to accept adult behavioural norms and expectations for the rehearsal situation, we are also defining limits of play.

Evidence for this can be seen in the student behaviours observed during their participation in two neutral mask exercises. Achieving the objective of embodying the elements of water and fire, (see Chapter III, neutral mask), demands an internal focus (concentration on breathing). I instructed the students to "become like water...allow every part of your body to move like water, including hips, feet, face, eyes." The first time the students tried this, they mimed floating motions with their arms, while their eyes wandered the room in a self-conscious manner as if searching for affirmation. Trained actors learn to concentrate on their own being and shut out others. Many of the participants had not adopted this behaviour. Initially I interpreted their eye roving, grinning and snickering as an off-task or disruptive behaviour. After reflecting on the rehearsal process, I was able to re-interpret these perceived off-task behaviours as analogous to bringing a new culture to the participants.

Teaching a rehearsal process is bringing students into an alien culture. Unspoken expectations and norms surround the expressive activities. The structuring of the rehearsal activities, space and time gives students the opportunity to learn movement technique and to use this technique in their own expressions. As I began to reflect on student understandings of the behavioural expectations surrounding the rehearsals, I found that the preliminary activities and improvisations could become more effective. For example, the relaxation exercises were observed to enhance the continued flow of movement in the "Cycle of the Sea" when the participants' *flowed* from the relaxation warm-up into the choreography. The structuring of the rehearsals could evolve in relation to the students' understanding of my expectations of them.

### Summary

At times, the participants' social involvement with their peers competed with their focus on expressive activities. The participating children and adults had differing and often competing definitions of appropriate rehearsal behaviour. These differing expectations revolved, firstly, around conceptions of play. In theatre, adult actors look at play as a feature of improvisation, (which actors use to the end of exploring performance images). For the student participants, play was spontaneous, intrinsically valuable, and non-purposeful.

For the students, rules and behavioural expectations had absolute value, as did the choices they made. The adults (Ms Ainsley and myself) saw the rules and expectations surrounding the rehearsal situation in relation to the goal of performing the show. As seen in the events described in this chapter, adults and children had competing expectations about the use of time in rehearsals.

The participant adults and children had different understandings about the nature of aesthetic choices. Ms. Ainsley's students saw choices in terms of "right" and "wrong" and looked to adults for approval. In addition to seeking approval, adult actors weigh specific choices according to criteria which are chosen for the genre or particular work. Criteria evolve in the process of the work. This proposition has implications for the comparisons of the definitions of creativity discussed in Chapter II. For the participating students, creativity was fun, spontaneous and involved the unsuspected. In the next section, the participants share their conceptions of creativity and their evaluations of the performance.

### **Teachers' Evaluations of the Performance**

The teachers' evaluation of the students' performance is relevant to this case study for two reasons. First, they point out issues and concerns related to the outcomes of creativity. Second, their positive evaluation has an impact on the significance of the performance for the participants.

Their evaluations can be arranged according to four themes:

1) participation, 2) cooperation, 3) esteem 4) hidden talents.

### Participation

Teachers remarked that they were surprised that some of the students were able to perform on the stage in front of the whole school. Ms. Ainsley's learning disabled students had been mainstreamed for several years in art, music and physical education.

The art teacher observed that despite mainstreaming, the learning disabled students segregated themselves in her class. Her remarks also belied a frustration with Ms Ainsley's class: "I definitely (referring to the performance) was surprised by Anita, Linda and Molly, and Robin. Robin is a nice boy, not like some in that bunch. Very polite. They stay together in their little groups and do not like to mix with students from the other classes."

During many of the initial rehearsal and improvisational sessions I found similar participation patterns for Anita, Robin, and Molly. These students rarely volunteered. However, once parts were assigned, Molly and Robin were happy to have roles in the production. Anita took a small part and performed well, spurred on by many of the other students' prompts. No student ever refused to participate in any group exercise. Linda, contrary to the art teacher's

observation, frequently volunteered through all stages of the work.

The art teacher emphasized the significance of the students' participation in the final performance: "Anne Marie has been coming to my class for two years with the regular grade five and six classes. She seemed to fade into the wall. She always seemed so shy. You wouldn't think she'd be the type to jump up in front of the class, much less the whole school." For teachers, greater participation was an important outcome of the students' involvement in the performance.

#### Cooperation

The clearest evidence of cooperation (despite many frustrating and seemingly chaotic moments) came during the final performance, when the students were able to complete the show without an adult "stage manager." The fact that the students had the opportunity to do their own stage managing resulted from an omission of my part. (I never considered the necessity of having an adult back stage.) For the final performance, I introduced the two performance pieces and promptly took my place behind the video camera at the rear of the gymnasium. On their own, the students were able to make all their entrances and exits on time. The teachers, being familiar with the students, were surprised at the students' ability (in one teacher's words) "to carry off the performance without omni-present adult supervision."



The art teacher described the degree of cooperation she had observed in one of the students. "I thought George did very well in the performance. The evil character suited him. He's an aggressive little thing. You know, I have to send him out of my class every single time. I don't know how many times he's been suspended (from school) for fighting. They have no business sending him to my class. He's extremely disruptive. I don't go for this mainstreaming. These (learning disabled) students, most of them, can't handle the pressure of mainstreaming. I don't have the time to constantly police them."

Ms. Ainsley had a different explanation for George's difficulty in the art class: "George is a very sensitive child. Whenever he's threatened, he lashes out at the world....Mrs. Jones (the art teacher) is playing politics with George. She just doesn't want to be bothered with my students."

During the course of the rehearsals George was extremely committed to the work. In many of the exercises, he demonstrated exemplary concentration and produced detailed movements. Like Ms. Ainsley, I observed George's sensitive nature. During a rehearsal, George began to cry after I asked him to repeat the same mime sequence several times. Even though he began to cry, he did not resist the activity. Evidence of George's cooperation can be seen in his continuing as long as he did.

The students' level of cooperation during the final performance was not typical. On one occasion, Ms. Ainsley had been absent and a substitute teacher had been with the students all day. I arrived and struggled twenty minutes introducing the first activity. As I remark in my field notes, "while I was giving instructions, many students would not stop talking. I called a meeting. I threatened them. If their behaviour did not change we would not be able to do a performance. Anne Marie, who had been cooperative anyway, prompted the others to pull together...Most of them concentrated on the rehearsal for thirty minutes and then forgot we ever had that meeting" and became disruptive again.

Their level of cooperation varied from high on the day of the performance to low the day Ms. Ainsley was absent. For teachers, cooperation among participants was an important outcome of the creative activity, and I was made acutely aware of it at times like these, when it was lacking.

### Esteem

Teachers believed that the successful performance witnessed by the entire school raised the esteem of the special needs students in the eyes of their peers from other classes. Teachers reported that a stigma is attached to being a member of the special needs classes. On the

playground they are referred to as "retards", "dummies", and other derogatory names.

The participants' improved reading, demonstrated by the children who acted as narrators demonstrated, helped overcome some of the stigma attached to being a member of the learning disabled class. The participants' self esteem was raised by feeling that others admired their reading. The teachers comments indicate that they were impressed by many students' reading.

The narrations, which the students wrote collectively, were typed and read during rehearsals and the final performance. During the earlier rehearsals, the students read in a monotone, stumbling through the text despite their having contributed to that very same text in the story circle.

To help them with the reading of the narrations, I would choose one key phrase such as a line from the "Water Beings" in which one of the characters became excited, "Look, I see a fish, on the bottom, near the rocks." We would start by saying "a fish," repeatedly, becoming more and more excited each time. Once the student had mastered that phrase, I would move to another. Eventually they began to find their own ways to colour the narrations. For the final performance many of the students did character voices which contributed to the suspense. What teachers interpreted as improved reading resulted from improvisations and vocal

exercises. The performance aspects of the narration contributed to the impression that these students were good readers.

Teachers believed that the higher regard of other students towards the special needs students would have an impact on the special needs students' own self concepts, (as would the participants' view of their own achievements in their performance work). This can be seen in the following incidents reflecting changed playground interaction after the performance.

At lunch and at recess the special needs students normally stayed together in groups with their own classmates only. Often when I arrived at the school at the end of the lunch hour or during recess, I observed these groupings each time. I did not observe any of the special needs students mixing with other students in games or playground activities. I questioned Ms. Ainsley about this observation. She believed the attitudes of the other students kept her special needs students from being accepted. This was also observed by Dan, one of Ms. Ainsley's students. He noticed that students from other classes with whom he previously had little contact, talked to him about the performance.

By virtue of their participation in the performance, teachers believed the esteem other students held towards the performers was increased. Mrs. Brown, a general grade five

classroom teacher, told me her students' viewing of the final performance sparked a discussion about the special needs class; they wanted to know how special needs students were assigned to that class and why they had the chance to work on the performance. Mrs. Brown reported that her students wanted the opportunity to produce a show. Several students argued that there was no difference between special needs students and other students, and therefore, they all should have equal opportunities. Mrs. Smith, the art teacher, said that the special needs performers were "bombarded by questions from some regular students" in one of her classes in which six of Ms Ainsley's students had been mainstreamed. For the first time, according to Mrs. Smith, the special students "really opened up in a classroom discussion."

#### Hidden Talents

Teachers commented that the expressive activities included in our program helped them uncover their students' hidden talents. Ms. Ainsley's understanding of creativity changed in the course of this case study. During our first meeting Ms. Ainsley stated: "I don't think my (learning disabled) students are creative... Maybe by participating in this project I can see how they might become more creative." After the performance she told me all the teachers were really impressed with the performance. She also admitted, "at first I was a bit dubious, even a week ago, I didn't

think we'd be able to pull it off... The kids really came through in the end... Next year I'm going to try something like this on my own. It gives the kids a chance to express themselves and it brings out hidden talents."

### Student Evaluations of the Performance

#### Creativity is Fun.

In response to my question - "What to you think creativity is?" - the students' most common answer was "fun." When I asked them to name some things they did or others did that were creative, they talked about some of the masks or movements they had done. As detailed below, the students believed that something done well, something they liked, was creative. Dan and Jay both thought the way Bradley moved as the 'fish' was creative: Jay exclaimed, "you wouldn't think Bradley could dance like that."

Anne Marie liked Anita's portrayal of the 'monk'. Linda thought Anne Marie's mask was creative. None of the students made "creativity" claims about their own masks.

When I asked the students what they thought was their most important creation, several students answered reticently. (Robin, George, Linda, and Anita did not know.) Other students mentioned ideas or narration they contributed to the performance.

Sue, Ron, and Bradley made bolder claims: Sue said that her story about how the farmer became a thief was her most important achievement. Ron liked his idea about the fish

saving the captured girl in the Native Indian legend titled the "Water Beings." Bradley thought his idea about the fish biting off the head of the evil sorcerer "made that play awesome." Contributions to the narrative and "ideas" were valued most.

### Commitment

Throughout the rehearsal sessions, a great deal of time was spent organizing the students. While I coached small groups of students or individuals about specific performance qualities or elements, I observed that other students did not stay on their assigned tasks. Occasionally, I had to interrupt coachings to speak to students about "our right" to concentrate on our own work. As the performance date approached, the students' motivation to stay on task increased and was often supported by peer prompting.

Anne Marie and, at times, other students directed their peers: "Bradley, don't fool around." She often paraphrased my own words: "Come on everyone, let's concentrate." "You're forgetting the audience...Audience! Audience!"

Several students such as Jay, Sean, Bradley, and George volunteered for nearly every exercise or task. Often, they waved their hands in my face and jumped up and down to be chosen first. To choose other students, who had different tactics for getting my attention, like raising their hands, I would tell them, "I will call on those people who sit quietly and raise their hand."

### Performance Aspirations

In this investigation of creativity I was interested in changes in the participants through the 'peak experience' of expressive activity. The students' own comments reflect this conception about their performance aspirations.

During interviews, Bradley, Dan, and Ron all said they would like to try doing shows when they got older. I asked them if they had ever thought of it before. They had not. Five days after the performance had been shown to the entire school population, Dan related his doubts about the performance: "I didn't think it would get done. A few days before we did it, it stunk. I didn't think it would be any good. I thought everyone would hate it. But they liked it."

I asked Dan: "Do students from other classes ask you any questions about it?"

"Yeah... "like how come we got to do it and who made the masks and... and how long did it take?"

I asked Dan: "Do you often talk to these students?"

"No. Not even a long time ago. But now they think the show was pretty cool."

I asked Sue: what her favorite things about the project were?

"Hearing my story."

"Your story?"



"The story the thief tells... If I write another story can we do it?"

Sean, like Sue, was also eager to begin to create another show. After he responded to my questions, he asked me if we could do another and when would we start. Sean was quite definite about doing this, when he got older. Sean also asked if he could join my own company (Theatre of Giants). I suggested he might when he was a little older. "How old do you have to be?" he asked.

Anne Marie and Bradley expressed an interest in becoming performers. When I questioned them about what they would need to do to accomplish this, to become actors, they described the rehearsals and training they would have to undertake. Sue wanted to write plays like the one they had performed. After the performance and during one of the interview sessions, she showed me some writing she was working on and wanted to perform for her school and other schools. The students' new aspirations and confidence evidence a transformation of their "life-world". That these aspirations were expressed as a desire to continue performing demonstrates the significance of expressive activities for those students.

Three themes reflecting changes in their lives were repeated in the students' remarks during the interviews. They talked of performance aspirations for the future. Some wanted to know where they could take more classes in

theatre. Secondly, they indicated a change in attitude they had towards themselves. They referred to their improving as performers, as well as their overcoming fears. Thirdly, the students referred to changes in the ways students from other classes treated them. Other students began to talk to them during recess and at lunch.

### Summary

In this chapter examples taken from the data were reviewed in relation to four questions: How and to what extent did the program of activities (outlined in Chapter II) support and inspire the participants' creativity? How did the participants visualize and understand their kinesthetic (movement) expressions? What were the interactional issues that made an impact on the participants' creativity and how do these social aspects of the performance situation affect the participants' behaviour? And finally, how did the participants and teachers evaluate the program and the creative outcomes of the program?

The program of activities, incorporating mime, movement, and dance, supported the participants' production of two performance pieces. Relaxation exercises prepared the students for increasingly complex choreography and movement expressions. During the improvisations, the students responded to my metaphorical suggestions with their own mime

or dance expressions, which were later incorporated into the performance pieces.

The learning of a choreography is like the drawing of a detailed map on the stage, a map with mountains and valleys that change and move as we progress through the performance piece. The observation that the participants could move through segments of the choreography with their eyes closed is evidence of their learning of these complex maps. Observations were made of the participants' behaviour in learning and applying theatre conventions related to the use of the stage and masks. Often, the abstract conventions of theatre competed with the participants' habitual ways of moving and relating socially. The analytic technique of cognitive mapping enabled me to depict not only the participants' conception of the movement and choreography on the stage, but also the emotional or aesthetic qualities that they attached to their movement expressions. The creativity of the participants can be seen in their coloring and sculpting of the masks, in their adapting of "everyday" movements to develop an image from the script, and in their transforming metaphors into movement expressions.

For the participants, the learning of the rehearsal process, prescribed by the program of activities, involved socialization into another system of behaving with different expectations and patterns of interaction. At times, the social situation of the rehearsal process conflicted with

their habitual ways of interacting. This conflict was discussed in relation to their understanding of "play" and organization of rehearsal time and in their search for absolute rules in aesthetic choices and behavioural expectations.

The observations of several teachers about the participants' performance is significant because it is evidence of the teachers' heightened awareness of the learning disabled students' potential. The participants' own statements about their changed aspirations and their reports about the praise from students on the playground reflect changes in their self concept and self esteem.

## CHAPTER V

### CONCLUSIONS

#### Research Questions

Observing and participating in the production of a performance with a class of special needs students provided a rich setting for addressing pragmatic and theoretical issues related to the creativity of the participants. The pragmatic questions asked were: What are some of the ways that creativity might be encouraged through dance and movement, and how can kinesthetics support the verbal productions and creativity of learning disabled students? The theoretical question asked was: In light of the findings, what are the implications for the definitions of creativity I bring to this case study?

#### Findings

The practical, personal significance of this study can be seen in the development and adaptation of ways that I used to encourage kinesthetic expressions among learning disabled students, particularly through the sequencing of relaxation exercises before improvisations, and through a program of mime and dance activities. For the students, a creative outcome of the program can be seen in their productions of narrative texts. This supports the conclusion that kinesthetic activities can encourage students' verbal achievements.

The theoretical significance stems from the implications that the findings have on the two distinct conceptions of creativity discussed in Chapter II (the quantitative and the phenomenological).

The findings relate to the patterns of interaction and the expectations for behaviour that encompass the rehearsal situation. For the students, entering the world of theatre was learning a new culture. My involvement in the dual roles of researcher and participant, brought my socialization into their world; in these roles, I was seen as someone to be pleased. Much of the richest data came through those chaotic, confusing, and ambiguous moments as the participants attempted to perform exercises which they found most bewildering. In this study I have illustrated the participants' understanding of the behavioural expectations surrounding rehearsal and performance situations, and more importantly, how their mastery of these responsibilities resulted in a successful production.

The conclusions to this study are divided into two sections: practical and theoretical.

### Practical Conclusions

In implementing a program that enabled learning disabled students to produce and present two movement based performance pieces, I uncovered several useful and practical ways of designing and implementing programs. These focus on ways to encourage the kinesthetic expressions of dance,

mime, and movement, as well as how these non-verbal forms of expression might be used to inspire students' verbal productions.

#### Relaxation: Ways of Being

The relaxation exercises improved the students awareness and control of their bodies and prepared them for other activities. This program of activities should be presented in light of the children's concern about fitting in with their peers and their uncertainty about some of the language of dance and movement, which may interfere with their relaxing.

The relaxation exercises focused the students' attention on the workings of their bodies and helped make them more aware of the control they might exert on their concentration, moods, and energy states. The relaxation exercises, in getting everyone to focus on the same movements, brought students' energy levels closer together and enabled them to develop into a working ensemble. The relaxation exercises directed students to take note of tension and the detailed positioning of the parts of their bodies. Relaxation exercises habituated students to unordinary ways of moving and acting and thus opened avenues for creative movement expressions.

Relaxation is a state of mind and body. Students can remember the calmness they achieve through the relaxation exercises. The relaxed state can be recalled, applied to

performance work, and welded into specific expressions or characterizations.

There can be something alien about an exercise that calls for you to listen to your heart beat and your breath. Children's acceptance of relaxation exercises can be encouraged through examples of expressive movements in which the calm resulting state of the relaxation exercises is evident in suggested movement expressions.

The language of theatre and dance borrows words from everyday speech, yet these terms have different and sometimes unspoken meanings. Techniques should be conveyed in light of children's understandings of terms such as "relaxation" or "concentration." Learning the special significance of these terms in the performing arts is a part of the students' socialization into the rehearsal process.

#### Sequencing: Relaxation Exercises as a Warm-up for Verbal Activities

As students move from one activity to another, they take with them their moods, sensitivities, and feelings. Relaxation exercises can help the students clear their minds and prepare for the next exercise. Relaxation exercises before several of the story telling sessions were observed to have improved student concentration and their willingness to listen to each other, absorb the ideas and images from each other, and imagine images, ideas, and narrative text built upon another's contributions.



### Kinesthetic Activity Encourages Verbal Productions

Students' verbal productions were encouraged by kinesthetic activities of mime and dance. Metaphoric labels were used to talk about the qualities of movement. Students expressed these metaphors through movement. The movement qualities were then evaluated during discussions. Images from the students' movement improvisations and mime exercises were incorporated into their stories. Kinesthetic imagery had an impact on their verbal expressions, as seen through the narrations they produced for the performance.

### Visualization of Spatial Relationships

Choreography and stage movement are non-verbal forms of expression and are an alternate avenue of expression from the largely verbal world of school. In this study, the choreography and stage movement prompted the participants to manipulate and transform complex images and spatial arrangements.

Improvisational activities not only enrich dance and movement sequences, but they support the learning of them. The students' discovery of expressive qualities in a dance or movement sequence aided the recollection of that sequence.

Performing a choreography with closed eyes encouraged them to visualize transforming three dimensional spaces. It prepared them for the mask work in which vision was limited.

### Balancing "Play" with Goals and Objectives

"Play" has been identified as an aspect of the creativity of learning disabled students. The participating students and adults demonstrated competing definitions of "play". To structure creative activities which encourage spontaneity and experimentation, preserves the playfulness that is the essential ingredient in the child's conception of creativity.

The art of improvisation and "play" were observed to share many common features. Improvisation was most effective when immediate and instinctive actions, movements, or texts were encouraged and produced. The art of improvisation shares with "play" this immediacy. Improvisation and "play" differ in that improvisation often involves the definition of specific objectives and outcomes.

Students can develop understandings that there are different approaches and expectations of behaviour for different activities. Long range goals such as perfecting the final performance demand discipline and consistency. Students can understand that there are different ways of behaving and "being" for different activities; they can differentiate spontaneous "play" from outcome-oriented theatre games. The improvisational activities involved in the program supported student creativity when their spontaneous play could be focused on an objective.

## Theoretical Significance

### Definitions of Creativity

I have considered two approaches to creativity in light of the findings of this case study. The first is a reformulation of Weisberg's definition. The second borrows from Maslow's study of people who demonstrated "creativity."

My reformulation of Weisberg's definition of creativity stipulated that the *outcomes* of expressive activities should be both novel and significant to the person involved in the expressive activity. In light of my observations of the participants and their comments about their participation in the performance, I concluded that this definition reflects the significance and the novelty of the experience. The students' expressive work, particularly in their movement and storytelling improvisations, is evidence of their creativity.

The second definition of creativity used in this study assumes that the whole person, inseparable from cognitive, emotional, kinesthetic, and evaluative faculties, is drawn into the creative activity. Creative work often produces a peak or extraordinary experience for that individual. Perceptual faculties are heightened. Visual, auditory and kinesthetic sensations are readily absorbed. The experience of the creative activity produces a transformation of the "life world" of the individual, so that subsequent

perceptions, sensitivities, evaluations and aesthetic experiences are enriched and enlightened.

In observing the work of the students and in listening to their remarks about future performances, changed aspirations, improved self esteem, increased participation and social interaction with individuals from other classes - the transformation of their "life-world" was evident. In general, the ways they viewed themselves and the world were transformed through the process of their participation in the performance. This concept of creativity was not abstracted from the life and world of the participants in the act of being creative, but included their experiences and understandings of significant creative expressions. As phenomenology assumes, the emotional, perceptual, social, and physical experiences of the individual are interwoven in experience of creativity. The observations of the rehearsals and performance support this assumption.

This conception of creativity can be expanded to include the students' observations of their own creativity. "Play" and "having fun" are the most prominent themes in the students' discussions of their own creativity. Maslow (1968) observed this in those adult clients whom he considered the most creative.

From the students' own remarks, the "peak experience" of the project was the performance presented to their school population. During the improvisations and circle story

exercise, where students produced imaginative contributions, the concentration never reached that intense state which the performance inspired. The concept of the "peak experience" reflects the creativity of these students mainly in the final performance. During the routine rehearsals, the participants' focus on social interactions precluded the heightened awareness and the intensity of the "peak experience."

### Implications for the Field of Teaching

#### Implications for Self Concept and Mainstreaming

Through discussions with teachers and with the participating students, I concluded that participation in the performance changed the way the students saw themselves. Through the performance they raised their aspirations. Many students reported pride in their performance work. The teachers believed that participants gained confidence in their abilities. The performance gave the participants the chance to demonstrate achievements that they otherwise would not have accomplished. Participation in the performances raised self esteem. Teachers also believed that the higher regard of other students towards the special needs students had an impact on the special needs students' own self concepts.

Teachers were sensitized to the possibilities of the creativity of kinesthetic expressions. School is a verbal world. For special needs students, who find difficulty in

many lessons that emphasize verbal skills, movement improvisations and choreography provide alternate, non-verbal avenues of expression. In addition, while producing kinesthetic expressions, the participants were driven to practice verbal skills, both by their desire to communicate images and by the improvisational exercises.

Recent Province of British Columbia documents stipulate that the first goal of education is to ".... develop the capacity for creative thought and expression." At the same time, "students are recognized as individuals with unique learning styles..." (Graduation Program, 1990, p.8-15). The conception of creativity which guided this present study points out that creative "outcomes" should be novel and significant to the learner and that they may involve cognitive, emotional, and kinesthetic faculties. This conception of creativity may sensitize teachers to the creativity of special needs students.

The program of activities and the final performance have had an impact on the lives of the participants and the teachers. It is reasonable to suggest that in other situations, participants might be equally affected by similar creative involvement. This study of the creativity of special needs students focused on the changes in the "life-world" of the participants, on the social interactional issues relevant to the rehearsal process, and

aspects of the expressive situation which draw upon creativity.

## References

- Anooshian, L. (1984). Problem mapping before problem solving: Young children's cognitive maps and search strategies in large-scale environments. Child Development, 55, 1820-1834.
- Argulewicz, E., Mealor, D. & Richmond, B. (1979). Creative abilities of learning disabled children. Journal of Learning Disabilities, 12, 21-24.
- Aylivin, S. (1977). The structure of visual and kinesthetic imagery: A free association study. British Journal of Psychology, 68, 353-360.
- Bailin, S. (1988). Achieving extraordinary ends. Boston: Kluwer Academic Publishing.
- Baum, S. & Kirschenbaum, R. (1984). Recognizing special talents in learning disabled students. Teaching Exceptional Students, 16, (2), 92-98.
- Casey, E. (1976). Imagining, a phenomenological study. Bloomington, Indiana: University of Indiana Press.
- Clifford, G. J. (1973). A culture-bound concept of creativity: A social-historian's critique, centering on a recent American report. In M. Bloomberg (Ed.), Creativity: Theory and research. New Haven, CO: College & University Publishers.
- Colaizzi, P. (1973). Reflection and research in psychology: A phenomenological study of learning. Dubuque, Iowa: Kendall/Hunt Publishing.
- Colaizzi, P. (1978). Psychological research as phenomenology views it. In R. Valle & M. King (Eds.), Existential phenomenological alternatives to psychology. New York: Oxford University Press.
- Cromley, R. (1986). Cognitive maps of campus: Student views of spatial arrangement. Journal of Geography, 85, 67-71.
- D'Antoni, A. (1984). Learning strategies: Secondary l.d. students in the mainstream. Eric Abstracts, No. 246631.



- De bono, E. (1973). Lateral thinking, creativity step by step. New York: Harper & Row.
- Downs, R., Stea, D., (1977). Maps in minds: Reflections on cognitive mapping. New York: Harper & Row.
- Eisner, A. (1981). The role of the arts in cognition and curriculum. In G. Hass (ed.), Curriculum Planning a New Approach (258-271). Toronto: Allyn & Bacon.
- Feldenkrais, M. (1972). Awareness through Movement. New York: Harper & Row.
- Gardner, H. (1982). Art, mind & brain. New York: Basic Books.
- Gardner, H. (1985). The Mind's New Science. New York: Basic Books.
- Getzels, J. W. & Jackson, P. W. (1970). The highly intelligent and the highly creative adolescent. In P. E. Vernon (Ed) Creativity (pp. 189-202). Baltimore: Penguin.
- Goetz, J. & LeCompte, N. (1984). Ethnography and qualitative design in educational research. New York: Academic Press.
- Goldstein, S. (1968). The phenomenological and naturalistic approaches to the social sciences. In R. Manners & D. Kaplan (eds.) Theory in anthropology. Chicago: Aldine Press.
- The Graduation Program. (1990). Province of British Columbia, Ministry of Education.
- Guilford, J. P. & Merifield, P. (1960). The structure of the intellect: Its uses and implications. L.A.: University of California.
- Guilford, J. P. (1970). Traits of creativity. In P. E. Vernon (Ed) Creativity (pp 189-202). Baltimore: Penguin.
- Guilford, J. P. (1973). A psychometric approach to creativity. In M. Bloomberg (Ed.), Creativity: Theory and research. New Haven, CO: College & University Publishers.
- Guilford, J. (1983). The nature of human intelligence. New York: McGraw-Hill.

- Hausman, C. R. (1976). Creativity and rationality. In A. Rothenberg & C. R. Hausman (Eds.), The creativity question. Durham, N.C.: Duke University.
- Hodgson, J., Richards, E. (1966). Improvisation. New York: Grove Press, Inc.
- Houts, P. (1977). The myth of measurability. N.Y.: Hart.
- Jaben, T. (1983). The effects of creativity training on learning disabled students' written expression. Journal of Learning Disabilities, 16, 264-265.
- Keen, E. (1977). Studying unique events. Journal of Phenomenological Psychology. 8, 1, 27-43.
- King, R. (1974). The teacher as participant observer. In G Spindler (Ed.), Education and the cultural process. Toronto: Holt, Rinehart, and Winston, Inc.
- Lepke, P. (1976). Responding actively to the world of literature. Language Arts, 53, 404-406.
- Maslow, A. H., (1968). Toward a psychology of being. Van Nostrand Reinhold.
- Mathews, M. (1987). Sex differences in spatial competence: The ability of young children to map 'primed' unfamiliar environments. Educational Psychology, 7, 77-90.
- Merleau-Ponty, M. (1962) Phenomenology and perception. New York: Humanities Press.
- Millar, S. (1988). Models of sensory deprivation: The nature/nurture dichotomy and spatial representation in the blind. International Journal of Behavioral Development. 11, 69--87.
- Moncrieff, D. (1972). Heuristic ambiguities in Maslow's "creativity". Journal of Phenomenological Psychology, 2, 2, 257-270.
- Murray, E. L. (1975). The phenomenon of the metaphor: Some theoretical considerations. In A. Giorgi, C. T. Fischer, & E. L. Murray (eds.), Duquesne studies in phenomenology, volume II. Pittsburg: Duquesne University.

- Ricoeur, P. (1973). Creativity in language. Philosophy Today, 17 (2), 97-111.
- Romanyshyn, R. C. (1971). Method and meaning in psychology. Journal of Phenomenological Psychology, 2, (1), 93-114.
- Romanyshyn, R. C. (1982). Psychological life: From science to metaphor. Austin: University of Texas.
- Rosch, E. (1973) Natural categories. Cognitive Psychology, 4, (3), 328-350.
- Sardello, R. (1978). A phenomenological approach to memory. In R. Valle & M. King (Eds.), Existential phenomenological alternatives to psychology. New York: Oxford University Press.
- States, B. (1985). Great reckonings in little rooms: On the phenomenology of theatre. Berkeley: University of California Press.
- Tarver, S., Ellsworth, P. & Rounds, D. (1980). Figural and verbal creativity in learning disabled and non-disabled children. Learning Disability Quarterly, 3, (3) 11-18.
- Torrance, P. E. (1962). Guiding creative talent. Englewood Cliffs, N. J.: Prentice Hall.
- Weisberg, R.W. (1986). Creativity: Genius and Other Myths. N.Y.: W. H.&Freeman & Company.
- Witelson (1970). Developmental dyslexia: Two right hemispheres and none left. Science, (195), 309-311.
- Wolff, J. (1984). The Social Production of Art. N.Y.: New York University Press.

## APPENDIX I

The following texts were developed by the participants through the improvisational theatre exercises described in Chapter II and extensively re-edited by Ms. Ainsley and the researcher. These narrations provide the background for mime performance pieces. Because these narrations are full of imagery, they are useful for inspiring students' kinesthetic expressions.

### The Rich Man and the Thief

NARRATOR: Once upon a time there was a rich old man who loved a young woman. He had never married. He gave her presents of silk, gold and jewels. He tried to impress her in many ways. She always turned him down.

One day he decided to visit a wise old monk who would help him find love. He hired a man and a boat to take him to the hills where the monk lived. They traveled many days on the river. One night while they camped beside their boat. A fugitive from the Emperor's prison crept up. Both of the tired travelers slept. The thief untied the boat. As he pushed the boat away from shore, he fell in the water. He began to drown. The rich man was awaked by the splashing and thrashing. He helped pull the thief ashore. The thief begged to be forgiven.

RICH MAN: I will forgive you. You will become my servant. I know you are the one who escaped from the emperor's prison.

NARRATOR: The thief bowed to his new master and told his story of how he was pushed into a life of crime.

THIEF: Long, long ago, when I was young, I worked my own land and I worked hard. The soil, my soil was good to me. Its riches were beginning to become my riches. Once when I was planting my crop, a man came with a paper from the emperor. I could not read it. But the soldiers threw me in jail.

NARRATOR: For some unknown reason the rich man became very nervous.

RICH MAN: Very well. Indeed. Yes. You have been treated unjustly. There are still several hours to sleep this night. We will travel in the morning. You will be able to escape if you stay with me.

NARRATOR: The rest of the night the rich man thought of his years as the secretary for the emperor. He remembered writing many pages for the king to take the land from many honest farmers. And he remembered this farmer and his land. He had gone with the soldiers when the paper had been used to throw the farmer in prison.

The next morning they awoke and traveled further up the river. After several more days they reached the foothills. The rich man and his new servant said "goodbye" to their boat man and began the climb to the mountain of the holy monk, the monk who would help the rich man find love. They reached the cave of the monk. They sat and waited.

MONK: You come to find love. But love comes only to those who are pure of heart. You, rich man have wronged many people. When you act justly, you will find love.

NARRATION: The monk returned to his cave.

RICH MAN: My servant. How can you forgive me? From now on all my riches will be your riches, my lands your lands, and I will be your servant and you my master.

NARRATION: For twenty years they traveled together, learning many things. They grew to be great friends like two old trees whose roots intertwine. They grew old together.

### The Water Beings

NARRATOR: The Ojibway Indians believe that there is a huge green fish in waters of Lake Nipigon. The eyes shine like the sun. The green fish is the keeper of all the sacred rocks on the shore. One night two Indians were fishing.

BUNGEY: I see a fish at the bottom, near the rocks.

OGOSIS: Hold your torch closer to the water! I see him move! I see him!

NARRATOR: Ogozis jabbed the fish with his spear trapping his huge prey against the bottom of the lake. Suddenly, the water began to churn and bubble. His hands were stuck to the handle of the spear. He tried to free himself. From a sudden tug he was pulled into the water. Ogozis did not

drown. He felt some strange power enter his body letting him breathe.

When the sun came up, Ogosis could see that he had not speared a fish at all, a Merman had grabbed his spear and pulled him underwater.

MERMAN: We want you to give your people a message. We want you to tell the your people to put sacred rocks above our hiding places. We will bring good luck to all Indians that travel on the lakes and rivers.

NARRATOR: Ogosis and Bungey returned to their village and told the story of the Merman. Ogosis and his family were happy. They caught many fish and when storms came, the lightning seemed to pass over because they were protected by the Merman.

In a nearby village lived an evil sorcerer named Majeawea. Majeawea wanted to steal the wife of Ogosis. Her name was Pelala.

One day while Pelala was picking berries, Majeawea passed by. He saw what she was doing and where she was headed. Majeawea spread a potion on some very large berries in a place where she would soon be picking. Majeawea then waited behind a tree. As soon as Pelala touched the berries where Majeawea had spread his potion, he stepped out from behind the tree.

MAJEAWEA: Is that berry sweeter than all the others?

PELALA: Here, you taste it and tell me.

MAJEAWEA: Then only I will know of its sweetness.

PELALA: The we will both taste it.

NARRATOR: First Pelala took a bite of the berry, then Majeawea. Slowly, a strange light entered the eyes of Pelala. She fell into the arms of Majeawea.

At the the same time, Ogosis and Bungey were fishing. The green fish appeared on the surface of the water.

GREEN FISH: Pelala is in danger. She has been imprisoned by Majeawea's magic. You must paddle to ghost point to find Majeawea's hiding place.

NARRATOR: Ogosis and Bungey paddled quickly towards ghost point. The fish gathered all the water creatures.

GREEN FISH: Majeaweaaaaaaaaah...Majeaweaaaaaaaaaa...  
Majeaweaaaaaaaaaaaaaaaaah.

NARRATOR: Majeawea crept towards the shore. The Green Fish rose to the surface. I have a wedding gift for you. Come closer so that I can give it to you.

MAJEAWEA: What could you possibly have for me?

GREEN FISH: It is the most prized possession in all the lake.

NARRATOR: Curiously, Majeawea knelt close to the water.

MAJEAWEA: I can only see my own reflection.

GREEN FISH: That is the prize!

NARRATOR: With his jaws open, the giant fish bit off Majeawea's head. As Majeawea took his last dying breath,



Pelala saw Ogosis. She fell out of the trance and returned to her village again where they live happily ever after.

## Appendix II

### Kinesthetic Transformation: Finding the Physical Characters for the Masks

In this section, I analyze a process that I invented to enable students to create a physical character for a particular mask. For the student, the creative element is in the choice of character and how movements are chosen to fit the character. The process is "ritualized" around the actor's birth of the character. The creative element for the students can be seen in the particular qualities of movement they discover and explore.

I divided the characterization work into three phases. In the first phase, the students entered the sacks, and were given the objective, "to become fire." In subsequent attempts, the second objective of embodying the element of water was added. The students were able to choose. Three students attempted to become their element while the remainder watched. The objective of this first phase was to acquaint the students with the technique of using the sacks to express particular qualities using their entire bodies.

In the first stage the performers, who are encased in the sacks, are separated from the audience by the fabric of the sacks. The protection from the eyes of the viewers enables the students to explore the movement with a feeling of security.

In the second phase, the sacks were considered wombs. They were born from the sacks; and using only movement and gestures, they passed through the stages of life from infancy through old age.

The third stage was presented as a celebration for completing the masks. The students entered the sacks with their masks. They chose a movement which their character would use. At first they did the movement only with part of their body, perhaps a hand or a leg. Gradually they allowed the movement to grow until it encompassed their entire body. When the movement had become exaggerated, and when they were ready, their characters were born from the sacks. The first births were difficult for all the students except George. They lacked the internal focus required to maintain concentration. Their wandering eyes evidenced their lack of concentration during the "birth." A few of the students, including Sean, Bradley and Anne Marie, after losing their concentration during the birth were able to complete the stages of life. George gave an extremely convincing performance. I discussed and demonstrated what George had done to make his birth and passage through the stages of life seem so real to us. Jay and Sue showed a great deal more effort on their next attempt. Performed in groups of three, their characters were born and interacted on the floor.

The theme of the above exercise, which has been central to my own artistic experiences, are reflected in the participants' work. It shines through many of the expressive choices they made. For example, the "Rich Man and the Thief" legend portrays the "thief" and the "young woman" aging.