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**DESIGN EDUCATION**

Experiencing the Design Process through Textile Design

A dissertation submitted to the Faculty of Education

in candidacy for the

**B.A. DEGREE IN ART AND DESIGN EDUCATION**

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June 1995

COLAISTE NAISIUNTA EALAINÉ IS DEARTHÁ  
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B.A DEGREE IN ART AND DESIGN EDUCATION 1995

**Dissertation Abstract**

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Title: Design Education Experiencing the Design Process  
through Textile Design

Design Education is concerned with pupils receiving a basic understanding of Design. Design Education is about developing a critical understanding of human needs and gaining experience in evaluating whether these needs have been adequately met. The design process is about shaping the way we live as well as shaping the appearance of things around us. Design Education helps man to shape his own environment, determining not only the way he himself lives, but also the pattern of life for others.

This dissertation is primarily concerned with experiencing the design process through textile design. Chapter One, defines design and Design Education. It outlines the need for Design Education and investigates the influence of the Bauhaus School on Design Education today. Chapter Two, looks at the importance of Design Education in Post - Primary Schools in Ireland. It investigates Design Education in the Junior and Leaving Certificate Syllabi, and the place of Textile Design within it. Chapter Three, is concerned with the methodology of my practical project. This chapter includes a description of the Schemes of Work, and their aims and aspirations. Chapter Four, introduces the pupils work, it comments on the results and findings of the project, and the pupils participation within it. The Schemes are fully illustrated within this chapter. The final chapter ends with a conclusion of the dissertation.



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## ACKNOWLEDGEMENT

I would like to thank Professor Iseult McCarthy for her support and interest in my work since year one.

I thank Maria Farrell for her constant help in creating this dissertation and Pat Sweeney for his guidance and direction this year. I would like to thank Mr. Duffy and the Staff of High School Rathgar especially Deirdre Larkin.

Finally I would like to thank my father Arthur Brady and Stewart for their constant strength and patience for which I am eternally grateful.



# INTRODUCTION

In this dissertation I discuss the issue of Design Education. I examine the aspects of Design Education and how it is experienced through textile design. Design Education has been a constant issue within post-primary schooling. In Chapter one I ask the questions, what is design? and what is Design Education, I investigate the design process and what it entails. Finally I examine the need for Design Education and the importance of design awareness and visual literacy. Chapter two comments on the importance of Design Education in Irish post-primary curriculum. It discusses the Junior Certificate aims and objectives within Design Education and how they are met. In Chapter two we are also introduced to the Leaving Certificate syllabus and the neglect of design within it. There is little emphasis put upon textile design within the Junior and Leaving Certificate Syllabus, this chapter investigates why textile design does not feature seriously within these syllabuses and how we can challenge this situation.

Chapter three deals with the methodology of Design Education. It begins with an introduction to the practical project work that was carried out in the art room. The schemes of work that were explored by the transition year groups in 'High School' Rathgar are described so the reader will receive an understanding of what the practical project work involves. The aims and aspirations of the two schemes entitled 'LANDSCAPE' and 'MOVEMENT' are outlined within this chapter.

Chapter four introduces the pupils work which is fully illustrated. The results and findings of the practical project are discussed. This chapter also

examines the pupils participation within the scheme and its importance within the learning process. This Dissertation ends with a brief conclusion which sums up the issues of Design Education that are dealt with in the previous chapters.



# CHAPTER 1

## DESIGN EDUCATION

### A REVIEW OF LITERATURE

#### Design Education

Design education is involved with the development of a perceptive understanding of human needs and gathering experiences in evaluating if these needs have been catered for adequately and efficiently. (1)

"Design provides the means by which we are enabled to perform activities beyond the unaided capabilities of the human frame".(2)

There is not a human practice or exercise that isn't enhanced or eased by the application of design.

"Designing is not just an indispensable human faculty it is the co-ordination and efficient marshalling of all branches of knowledge". (3)

Design is the study of mankind, it is also a way of understanding.

"Design is that area of human experience, skill and knowledge which is concerned with man's ability to mould his environment, to suit his own material and spiritual needs". (4)

Design education is chiefly concerned with the solution of an identified problem using materials and techniques that are relevant to the social system in which the student will be an adult. It relates to the fusion of practical and intellectual exercises, their relevance to the contemporary environment is self evident. (5)



## The Design Process

The design process is a step-by-step development of problem solving and decision making. All design decisions are related to the problem solving process. This process is linked with creative thinking within planning, arranging and organizing our daily lives for efficiency, comfort and economy, which is itself a design process. (6)

The idea of learning through experience is central to the activity of problem solving. This is developed by identifying, observing and isolating the problem, and becoming aware of the needs required. By collecting information, by proposing and examining solutions, we extend our inventive capacity and creativity rationally by measuring logic or by trial and error. (7)

Finally we test and evaluate solutions. Are they adequate, efficient? Do they foster judgement values, growth and development?

According to John Eggleston, evaluation is an important factor of the thought process, its aim is.....

.....to analyse and hopefully to improve every aspect of human activity that leads to end products and services". (8)

The evaluation stage is essential to learning. We should not take on any problem solving activities until we are aware of the self contained evaluation criteria within the problem. Too often evaluation is external to the child's experience, evaluation methods must be completely accurate, discovery occurs only when we can actually define and understand the



reasons why solutions are appropriate or inappropriate. No problem exists unless the criteria for testing is contained in the initial brief. A pupils self evaluation is central to the learning process.

The emphasis on design education as a thought process and experience is invaluable. It includes, firstly, movement in a creative and inspiring practice where new concepts are developed and older ones redesigned. Secondly, involvement in a whole new interplay of knowledge and understanding. Thirdly, an awareness of the social origin of human response. Fourthly, that effective decision making cannot be achieved in isolation. Fifthly, familiarity with materials and tools, while learning skills and techniques. And finally, awareness of the needs of the environment and those who live in it. (9)

The design process deals with two qualities:

- (i) The intellectual response which enables the analysis of problems and the composing of a solution.
  - (ii) The sensuous response to enable awareness of the needs of others, appropriate use of materials and the emergence of a cultivated solution.
- (10)

### The Influence of Bauhaus

"The Bauhaus endeavoured to link art, design and handicraft into a single dialectic and pioneered ideas like the common foundation course and the twinning of art and design in education". (11)

The Bauhaus was an industrial art school which had an inestimable influence on modern design. It was a twentieth century German school of design whose aim was to explore essentially and rigidly the process of design as a human activity. The movement's principles and work has had a world wide influence on design. The leaders of the Bauhaus movement felt that design should be a joint exercise between those who make things and those who use them. It is this socially sensitive approach that is central to design education. Walter Gropius founded the Bauhaus movement in 1919. He was influenced by the principles of the nineteenth century designer, William Morris and the essence of the Arts and Crafts Movement. The Arts and Crafts Movement was established in late nineteenth century and strove to revitalize hand crafts and applied arts during an era of increasing mass production, Morris felt that the true bases of art lay in the crafts. He and his followers attacked the sterility of the machine. The guiding principles of this movement and later the Bauhaus was that art would meet the needs of society and that no division would be made between fine arts and practical crafts.

Johannes Itten was one of the leading teachers at the Bauhaus school who presented the greatest challenge to Walter Gropius and his ideas for the school. Johannes Itten's approach to teaching and his fertilization of creativity gave strength to the uncertainties of the programme, this challenged Gropius' attempts to clarify his own priorities and establish



direction within the school. Itten joined the Bauhaus in 1919. In 1921 he established the Basic Course, it presented him with three tasks. (12)

- To liberate the creative forces and thereby the artistic talents of the students. Their own experiences and perceptions were to result in genuine work. Gradually, the students were to rid themselves of all the dead wood of convention and acquire the courage to create their own work.

- To make the students' choice of career easier. Here, exercises with materials and textures were a valuable aid. Each student quickly found the material with which he felt the closest affinity; it might have been wood, metal, glass, stone, clay or textiles, that inspired him most to creative work. Unfortunately at that time the Basic Course did not have a workshop, where all basic skills such as planning, filing, sawing, bending, gluing and soldering could be practised.

- To present the principles of creative composition to the students for their future careers as artists. The laws of form and colour opened up to them the world of objectivity. As the work progressed it became possible for the subjective and objective problems of form and colour to interact in many different ways. (13)

Itten considered it essential, in teaching the means of artistic representation, to arouse an individual reaction in students of various attitudes and talents.



### The Need For Design Education

There is no such thing as good design or bad design, but rather appropriate or inappropriate, efficient or inefficient solutions to problems. (14)

An essential part of design education is to be aware of the above. We need design education so we can at least identify problems before we appropriately and efficiently solve them. We live in a man-made environment where the responsibility of the quality of our life lies in the hands of the designer. (15) John Eggleston states that a designers mind....

....is very much like that of a computer, a person who operates only on the information that is fed to him and who follows through a planned sequence on analytical, synthetic and evaluative steps until he recognizes the best of all his possible solutions. (16)

The environment is defined as all that is around us apart from ourselves. This alone is reason enough to be aware of the need of design education. There is a need to understand design in order to nurture a positive critical analysis of design within the environment and an understanding of the forces that work behind the scenes. It is necessary to understand and contribute to the shape of things around us, the way we live now and the way we would like to live in the future, in order to become people in the fullest sense. We need to encourage methods of learning that are flexible so we can propose new concepts and ideas, and so we can also identify problems and diagnose relevant solutions. In education there is an emphasis on words and figures, there is a real need to develop visual literacy within schools, this would be perfectly channelled through the process of design education. The nature of design is ever changing due to technology and



science, our choices grow everyday, we need to be aware now and grow with it. (17)

Despite the importance of visual literacy, the designer does not just deal with the visual appearances of an object or product, therefore, we should, as consumers or future consumers, be in tune with the quality, production, make-up and origins of a product. After all,

The appearance of an object is rather like that of an iceberg. The process of design involves much more than the outer appearance. (18)

Design is a fundamental process involving many individuals whose main aim is meeting with human needs successfully. To meet human needs you must firstly recognize what they are and why they are needed. Design education, in effect creates an environment where an individual can discover something of his / her attitudes, the relevance of their ideas and of other people's ideas. The design process can be seen as a tool of enquiry, if experienced it could have a general applicability in future adult life. Decision making and problem solving is a form of responsibility and this links students with the adult community rather than isolating their development within post-primary years. The encouragement of social integration in education is directly involved with preparing pupils for adult life. General education has been centred around the concept that pupils were nourished with knowledge values and skills that would stand to them in later years. (19)

"Design is also cleaning and reorganizing a desk drawer, pulling an impacted tooth, baking an apple pie, choosing sides for a back-lot baseball game, and educating a child". (20)

There is nothing to say that an education in design is only worthwhile for those who wish to work or study further in that area. Design education is of vital importance to an organized, efficient daily life at home or at work.

"We don't expect everyone to become expert designers; that is neither possible nor desirable, we cannot all become accountants, but we can learn enough to read a balance sheet". (21)



## FOOTNOTES - CHAPTER 1

1. Peter Green, Design Education : Problem solving and visual experience, (London : Batsford Ltd, 1978) p.7.
2. David Thistlewood, The essential disciplines of design education : Issue in design education, (London : Longman, 1980) p.14.
3. Ibid., p.14.
4. John Eggleston, "Development in design education" in Design Education Project Report, pp.15. Edited by Prof. L.B. Archer, leader of The Royal College of Art, (London : 1975)
5. Bernard Alywood, Design Education in schools, (London : Evans Brothers Limited, 1973) p.15.
6. Green, Design Education, p.9.
7. Eggleston, "Development in design education", p.17.
8. Ibid., p.17.
9. Ibid., p.28.
10. Green, Design Education, p.14.
11. Paul P. Hogan, Defining Design Education, Symposium in Design Education in schools at the National College of Art and Design. Feb. 1995.
12. Gillian Naylor, The Bauhaus Reassessed : Source and design theory, (London : The Herbert Press Limited, 1985) p.76.
13. Johannes Itten, Design and Form : The Basic Course at the Bauhaus, (London : Thames and Hudson, 1983) p.7.
14. Green, Design Education, p.7.
15. Ibid., p.7.
16. Eggleston, "Development in design education", p.18.
17. Maurice De Sausmaris, Basic design : The dynamics of visual form, (London : The Herbert Press Limited, 1980) p.16.
18. Green, Design Education, p.57.
19. Eggleston, "Development in design education", p.65.
20. Hogan, Defining design.
21. Sir Gordon Russell, Defining design education, Symposium in Design Education in schools at the National College of Art and Design, Feb. 1995.

## CHAPTER 2

### DESIGN EDUCATION IN POST PRIMARY SCHOOLS

#### The Importance of Design Education in Irish Post Primary Schools

This year David Thistlewood introduces us to 'Design Education : A Cultural Model'. Within the paper he proposes a cultural model of design education as an alternative to current practices within the western industrial world. (1) It is important to reassess the role and function of design education in schools, if we wish post-primary education to provide more than a preparation for future workers by inspiring an 'assembly mentality' and a 'problematic based entrepreneurialism'. (2) Design education must induce:

- (i) The embedding of creative and practical experience in sensitivity to the real needs of particular communities of individuals in all their exhibition of difference.
- (ii) The celebration of unique cultural ownership and its expression in designs that evoke their place of origin. (3)

A large problem facing design education in Ireland's ever changing society is the necessity to revise constantly the role of the educator and the function of design education. A current responsibility of a visual educator is to define a significant role for design within a particular society. This problem is consistent with the dynamic concept of education as it is not a



static body but a response capable of identifying needs and providing experience and activities appropriate to them. (4)

Design by nature is an all embracing activity, where peripheral activities should be promoted. The practical area of art, craft and design education responds to a interdisciplinary programme which is both enlightening and comprehensive. We need to consider expanding the limits of what we think constitutes design activities, although it does not include all component subjects, for example not all areas of art are problem-solving orientated. It is important to recognize where design education fits into different departments and into the curriculum. The idea is to enhance and augment the programme not to deluge it. As design education covers a range of subjects, it overcomes the restraint which tradition had put on art as a decoration and crafts as a vocation, that prevented them from contributing to mainstream education. (5) I see design education as encouraging popular and living culture bridging the gap between cultural tradition and arts with contemporary society.



### Design Education in the Junior Certificate Syllabus

The Junior Certificate was introduced in 1992 and replaced the Intermediate Certificate, the change was brought on by a lack of confidence within the syllabus. The seed (for design education in Ireland) was sown in 1961, when the Scandinavian report was published. The report, entitled 'Design in Ireland', outlined the serious neglect of design within the Irish curriculum. (6) It was much later decided in the 'Intermediate Examinations Report' that a flexible diverse assessment procedure would be of more benefit to the Arts in Irish Education. (7) In the introduction to the Art, Craft and Design Junior Certificate Syllabus, it states,

Art, Craft and Design are three inter-dependent disciplines. They are fundamental to human existence, predating written language. They play a major role in human evolution and development. Each involves a different way of thinking

- Art emphasizes ideas, feelings, and visual qualities.
- Craft emphasizes the right use of tools and materials.
- Design emphasizes planning, problem solving and completion, using drawing as a means of thinking. (8)

The idea of the Junior Certificate syllabus was to let the disciplines work together. The syllabus is well focused and is concerned with creating a meaningful broadly based central role for visual education.

The aims of the Art, Craft and Design at junior cycle are:-

- To promote in the student an informed, inquiring and discriminating attitude to his / her environment and to help the student relate to the world in visual, tactile and spatial terms.
- To develop a sense of personal identity and self-esteem through practical achievement in the expressive, communicative and functional modes of art, craft and design.
- To develop in the student an understanding of art, craft and design in a variety of contexts - historical, cultural, economic, social and personal.
- To develop in the student the ability to apply evaluative criteria to his / her own work and to the work of others and in his / her daily encounters with the natural, social and man-made environments and with the mass media.
- To promote in the student a practical understanding of and competence in the principles and skills underlying visual and constructional design and problem solving.
- To develop, through structured practical work, the student's aesthetic sensibilities and powers of critical appraisal, appreciation and evaluation and to enhance the student's qualities of imagination, creativity, originality and ingenuity. (9)

Within the syllabus design is considered a problem solving experience, a balance between process and product within the teaching and learning of two-dimensional and three-dimensional design. Within their work pupils should show the ability to:-

- Identify, describe and analyse a problem or task and propose a solution to same.
- Identify and record information relevant to the task.



- Formulate a variety of ideas - examine feasibility of these.
- Construct working drawings, plans, elevations, models and prototypes where appropriate.
- Develop most feasible ideas which are appropriate to the solution.
- Implement or construct proposed solutions, using appropriate knowledge, skills, techniques, equipment, material and research data.
- Assess and evaluate what they have made.
- Suggest possible ways to alter or modify the process, the solution, or both, in order to improve it.
- Support and justify solutions to a problem.
- Develop an understanding of the communicative function of design.
- Develop critical, evaluative, discriminative aspects through support studies.

(10)

The syllabus contains a core syllabus plus a minimum of one option for ordinary level or two options for higher level. Within the options, the appropriate design process, including drawing and visual research are essential to the learning process. 'Design should not be regarded as mere decoration or embellishment of finished products'. (11) Students should be able to analyse design problems, plan and research, define ideas through working drawings, transport work to completion and evaluate the final product.

### Design Education in the Leaving Certificate Syllabus

The Leaving Certificate, unlike the Intermediate Certificate has not been revised, changed or challenged. The Leaving Certificate syllabus tells us that the course should be as broadly based as that of the Intermediate Certificate and that it is important that a sense of unity be retained within the different sections of the syllabus to prevent a system of segregated lessons. (12)

There are four papers within the syllabus:

- Imaginative composition of still life.
- Design or craft work.
- Life sketching.
- History and appreciation of art.

The design paper is composed of a passage of prose, which is used as a foundation for design work for a particular craft e.g. fabric printing, calligraphy, linoprint, embroidery, pottery, modelling, carving or publicity design. The craft consists of designing and creating a piece of work such as linoprinting, bookcrafts, hand printed textiles, embroidery, pottery, weaving, puppetry, calligraphy, carving, modelling or metalwork. Within the art history and appreciation paper are questions which examine the general knowledge of historical development and visual appreciation rather than specialized knowledge of history of art. Opportunities will be offered for the expression of the candidates' own opinions of works and visual problems. (14) The paper offers a wide choice of questions under the headings:

- Art in Ireland (from prehistoric times to present)
- European Art (from 1000 AD to the present)



- General Appreciation (a discussion of topics based on everyday visual experience in the pupils environment). (15)

The Leaving Certificate programme does not reinforce the principles given to us in the Junior Certificate Syllabus. The design programme within the syllabus lacks a connection with the arts and crafts programmes which could lead to an all embracing programme of activity developing from the basis of the Junior Certificate principles.

The design paper needs an exciting brief that encourages creativity by dealing with the design process through identifying problems, solving problems, exploring decision making elements and social issues, understanding and meeting consumer and cultural needs, implementing and creating a proposed solution encouraging visual enquiry and awareness, nurturing design appreciation, evaluating final products and encouraging personal development and evaluation. This could be achieved by linking the practical and written papers together, for example, design a plan for a fabric print and also create the print. Pigeon holing each discipline limits the pupils development. Answering the general appreciation section with a practical 'hands on' approach would enhance the learning experience. For example answering the following question through the design process would be much more beneficial

What qualities do you consider to be important in the design of one of the following?

- |                  |                          |
|------------------|--------------------------|
| (i) A bicycle    | (iii) An electric kettle |
| (ii) A telephone | (iv) An electric iron    |

Give a brief account of how the design of the object you have chosen evolved from earlier models and indicate any future developments that you envisage. (16)

Why envisage future developments? Why not create them? The thought process is very important in designing as is the written development of ideas but we cannot isolate design within words, we must push it to it's furthest state.



## Textile Design in the Irish Post Primary Curriculum

### The Junior Certificate Programme

Textile design is an option within the Junior Certificate Syllabus. It is reflected in many of the options such as Batik, Embroidery, Fabric Print, Fashion Design, Mixed Media Sculpture, Puppetry, Screenprinting, Soft Sculpture, Tapestry, Toymaking, Traditional Crafts (Lace) and Weaving.<sup>(17)</sup> Within each option, the appropriate design process includes drawing and visual research, also support studies are a necessary part of this learning situation. Being introduced to textile design is being introduced into a world of texture, colour, shape and pattern combined with the design elements of unity, harmony, contrast, symmetry and volume, when concerned with three dimensional design work. The design process is hugely important within textile design. Many of the options within the syllabus could be labelled craft, and some design. All aspects of textile design are concerned with the use of tools and materials, and all aspects of textile crafts emphasis planning, problem solving and completion using drawing as a means of thinking.

Textile design does not feature in the structure of the core syllabus, yet Drawing, Painting, Printmaking, Basic Photography, Graphic Design, Modelling, Carving and Construction do. I feel there should be a textile design representative within the core structure for it to be considered a nucleus of a fully functionally Art, Craft and Design Syllabus, as in the syllabus of the Weimar Bauhaus in 1923. The core syllabus within the Bauhaus school consisted of five areas of studies; study of equipment and tools, nature study, study of materials, space and colour study in conjunction with study of composition, and study of construction and

representation. They experienced these studies through different mediums; clay, stone, wood, metal, glass, colour and textiles. The graduates of this course learnt a craft in the workshops of the Bauhaus and at the same time prepared for future co-operation with industry. The student was to acquire a natural self confidence and ultimately find his vocation. People of different talents respond differently to means of expression and develop along different paths accordingly. (18)



## FOOTNOTES - CHAPTER 2

1. David Thistlewood, Design Education : a cultural model, Symposium in Design Education in Schools at the National College of Art and Design. Feb. 1995. p.1.
2. Ibid., p.4.
3. Ibid., p.5.
4. Maurice De Sausmaris, Basic Design : The dynamics of visual form, (London : The Herbert Press, 1980) p.14.
5. Peter Green, Design Education : Problem solving and visual experience, (London : Batsford Limited, 1978) p.11.
6. Ciaran Benson, Working Party on the Arts in Education, (Dublin : The Arts Council Ireland, 1979) p.
7. Ibid., p.3.8.
8. An Roinn Oideachas, The Junior Certificate : Art, Craft and Design, (Dublin Stationery Office), p.1.
9. Ibid., p.2.
10. An Roinn Oideachas, The Junior Certificate Syllabus : Guidelines for Art Teachers (Dublin Stationery Officer), p.10.
11. An Roinn Oideachas, The Junior Certificate : Art Craft and Design, p.7.
12. An Roinn Oideachas, The Leaving Certificate Programme, (Dublin Stationery Office) p.312.
13. Ibid., p.313.
14. Ibid., p.314.
15. Ibid., p.314.
16. An Roinn Oideachas, The Leaving Certificate Examination Paper, (Section III, General Appreciation) 1992.
17. An Roinn Oideachas, The Junior Certificate : Art Craft and Design, p.5.
18. Johannes Itten, Design and Form : The Basic Course at the Bauhaus, (London : Thames and Hudson, 1983), p.8.

## CHAPTER 3

### METHODOLOGY

#### Introduction to Practical Project Work

Within my practical project I aim to explore textile design as an effective medium in which to investigate the design process. My reasons for choosing this particular area of design are influenced by my personal opinions that textile design in Irish post primary schools has been

(i) Labelled as a craft and therefore preventing pupils from experiencing textiles as a craft / art form / design discipline. (ii) Neglected by post primary schools in Ireland because of a lack of teachers being experienced in this area and due to shortages of funds for textile equipment. (iii) Omitted from the Art, Craft and Design Syllabus as a core subject as it is not considered significant enough to be included. (iv) Underestimated in its ability to be three dimensional, abstract and fully functional, it has also been overlooked as a gateway to other developmental avenues within visual education.

The following project was introduced to two transition year groups, in 'High School', Danum, Rathgar. The project I introduced to **GROUP 1** was an exploration of shape, colour and texture.



### Description of Scheme Work

The theme of the project was '**LANDSCAPE**'. The brief of the project was to design a wall-hanging using colours, textures and shapes from the landscape. The following techniques must be explored; painting, drawing, spinning, carding, dyeing and weaving. All materials used within these processes must be directly linked with the landscape within the students environment. The shape and size of the wall-hanging must complement the composition. The project began with preliminary design work using paint and found materials, which led into working drawings and plans. This developed into the creation of a wall-hanging. The pupils created their own colours and textures within the project with found objects, resource materials, fabrics, fleece and yarns. The pupils spun fleece with hand spindles, they also experimented with the spinning wheel. The fabrics were dyed with natural dyes. The pupils also received a basic understanding of hot and cold synthetic dyes. The materials used throughout the project were found within the pupils environment. There was a contrast of manmade and natural materials that link directly with the contrast in our immediate environment.

The project I introduced to **GROUP 2** explored the theme of '**MOVEMENT**' through the human body. They explored this theme through life sketching. These preliminary drawings combined with resource work from Aboriginal Art lead to the designing of a series of banners within the school. The idea was to encompass all the personalities of the school and of the individuals within it. This displayed the unity of the school through the freedom and expression of our bodies and souls through movement. The banner was designed to augment batik and block printing. This will be achieved through design work and trial dyeing and





resist tests. The project was based on a lot of discussion and evaluation. The project promoted group work and co-operation.

### The Aims of the Practical Project

The transition year was first introduced in 1974, its introduction by the Department of Education is an important development in Irish Education. It is a interdisciplinary programme which lasts for one year. It is geared towards both pupils who intend to leave full-time education at the end of the year and those who intend to continue into the senior cycle. The Arts in it's broadest sense forms a more important part of the transition year programme than they do in formal schooling (1). Transition year offers the pupils a broad education that will help them develop as a person. It offers great opportunities for aesthetic development within Art, Craft and Design. The aim of the project 'LANDSCAPE' was that the pupils would

- (i) Receive a basic foundation in the technique of painting, designing, carding, spinning, dyeing and weaving.
- (ii) Appreciate the relevance of the learning process and it's importance for the development of a whole person.
- (iii) Achieve an understanding colour, shape and texture within design through a variety of media and 'hands on' experience.
- (iv) Discover, explore and manipulate both natural and manmade fibres and materials, to learn how to treat and refine them and to recognize their suitability with the composition.
- (v) Experience fully the design process, to make choices and decisions effectively and to overcome problems. To carry what has been learnt into their daily lives.
- (vi) Become aware and sensitive towards visual tactile elements within their environment.





- (vii) Be proud of their personal achievements and respect their work and the work of others.
- (vii) Develop the ability to evaluate within a group and, to become aware of it's importance for personal development as well as development within an Art, Craft and Design context.
- (ix) Appreciate and learn from the techniques and aesthetic contents of contemporary and traditional cultures and the place of textiles within it.

The aims and aspirations of the project '**MOVEMENT**' deals also with the design process but through different techniques and media. The aim of the project was

- (i) To develop an understanding of the balance and proportion of the human body through sketching.
- (ii) To become familiar with the movement of our bodies by using a loose and free interpretation of figure drawing (gesture drawing).
- (iii) To experience the design principles and process first hand by composing an original and appropriate design to suit the brief.
- (iv) To be aware of the importance of rhythm, balance and harmony within a design. To be able to recognize an efficient and appropriate design and to recognize that design encompasses more areas than art alone.
- (v) To experience and enjoy the benefits of collaborating and, sharing ideas and suggestions, decision making and problem solving within a group. To be aware of the value of group work for personal development.
- (vi) To explore contemporary and traditional cultures as a source material for design work e.g. Aboriginal Art stretches from traditional to contemporary culture.
- (vii) To explore the techniques and effects of resist dyeing through batik and block printing in view to using it in future projects within or outside a school environment.



- (vii) To use this group work project and its evaluative discussions as a personal development exercise as well as an opportunity for aesthetic development. The images illustrated are examples of the pupils work, technique and materials used through the scheme and the project in progress.

### Support Studies and Art Historical Reference

The support work the pupils researched and used was a vital influence on their work. It helped them appreciate and learn from the techniques and aesthetic contents of contemporary and traditional cultures and the place of textiles within them. In the project entitled 'LANDSCAPE' the pupils explored the tradition of Scottish weavers for their refining of fleece. The Scottish Weavers used male urine to clean the fleece after they had spun it. The fleece is spun first as the natural oils within it help the spinner to manipulate the fleece (Fig. 3.10). The Navaho weavers (Fig. 3.11) were investigated for an understanding of the basic technique of weaving. Their simple frames and linear pattern were a constant aid to the pupils. The Nigerian dyers (Fig. 3.9) were used as a source for techniques and natural materials for dyeing, resulting in bright rich colours from household goods such as turmeric (Fig. 4.8). The Bauhaus weavers were the main source when looking at materials and found objects, the pupils looked to the work of Anni Albers and Dorothy Liebes for their use of curled paper, plastics and metal shavings within their woven fabrics (Fig. 4.15). Involving woven fabric in chair design was discussed as a future avenue for design work this was enhanced by the work of Gunta Stolzl. Weaving techniques design work and the use of dyed materials was reinforced in work of the contemporary weaver Kaffe Fassett. In the project entitled 'MOVEMENT' the pupils looked at several artists and their work, both contemporary and historical. The collected images were assembled in wall charts, artists such



as Marcel Duchamp, Michelangelo, Degas, Norman Rockwell and Picasso were explored in terms of pose, composition, colour and balance (Fig. 4.24). Through art historical references the pupils became familiar with the movement of their bodies by using a loose and free interpretation of figure drawing (Fig.3.22).

Through support studies of human movement (Fig. 3.23) the pupils became aware of the importance of rhythm, balance and harmony within a design and were able to recognize an efficient and appropriate design encompassing more areas than art alone. Through brainstorming the pupils were enthused by designing a banner in the most general sense. They looked at kites, flags, washing lines and umbrellas to seek structure references and design ideas. The African flags of Fante, were researched for shape and rhythm. Closer to home the Stephen's Green Banners were of particular importance to the design brief.

## FOOTNOTES - CHAPTER 3

- 1 . Ciaran Benson, The Working Party on the Arts in Education, (Dublin : Arts Council of Ireland, 1979) p.3.8.



## CHAPTER 4

### RESULTS AND DISCUSSIONS

#### Introduction to Pupils Work

In the previous chapter I described the schemes of work I carried out with my fourth year classes. I also outlined the aims I wished to achieve throughout the two terms spent in High School Rathgar. My work within the school gives me the opportunity to practically apply the research I have gathered in the previous chapters to my experience as a teacher. In Chapter 4 I wish to discuss the results of the scheme. I have illustrated work related to both schemes:- 'LANDSCAPE' and 'MOVEMENT'. I have displayed samples of the following:-

- Preliminary Studies.
- Design Work.
- Art Historical References.
- Materials.
- Work in Progress.
- Finished Product.
- Final Work, Presented and Displayed.

The illustrations display the process and progress within the scheme. It is necessary to see the development and direction of the schemes to evaluate them. I approached both projects in the same manner exposing the main art elements to the pupils in an indirect way. They explored the elements by channelling them through the design process rather than approaching them separately.

The reason I have done this is so that each art element will be developed to its fullest state. I tackled the issue of the design process by placing a balance between process and product in the teaching and learning of design.

The art elements were discovered through:-

- (i) identifying the task in hand
- (ii) recording relevant information to the task
- (iii) formulating ideas in accordance to working drawings and preliminary design work
- (iv) exploring skills and techniques
- (v) experimenting with equipment and materials and
- (vi) assessment and evaluation

Both design projects are primarily problem-solving and decision making experiences, but there must be a balance between the design process and the thought process for it to be an effective learning experience.



# PROJECT 1 'LANDSCAPE'

Figure 4.1, Source for Colour Study

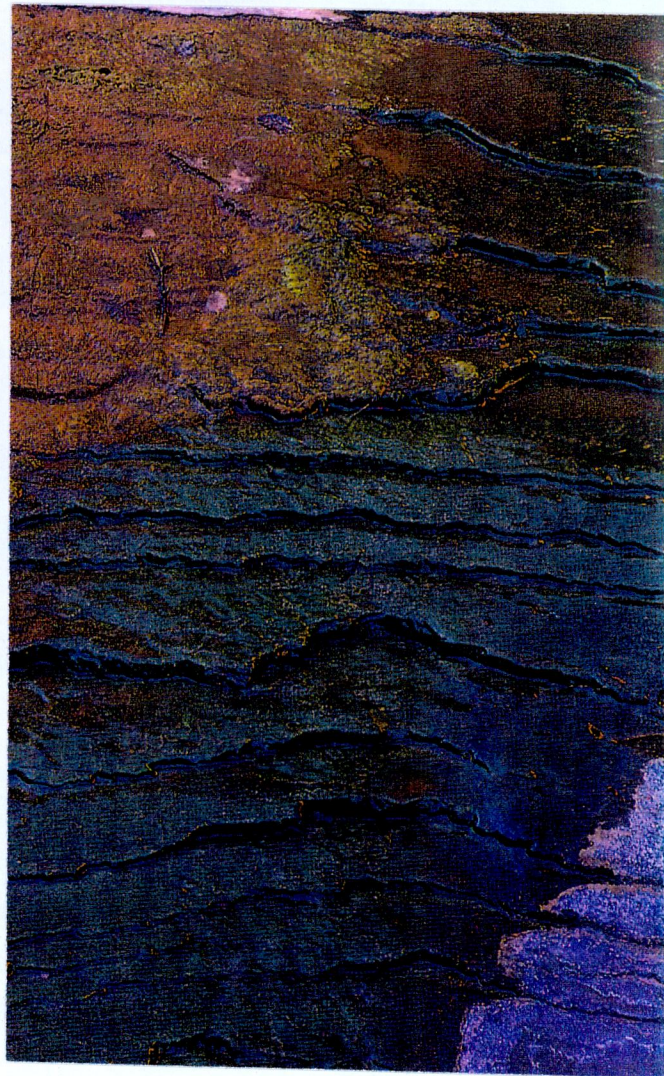


Figure 4.2, Colour Study





Figure 4.3, Materials used for Textural Study



Figure 4.4, Colour and Textural Design Work

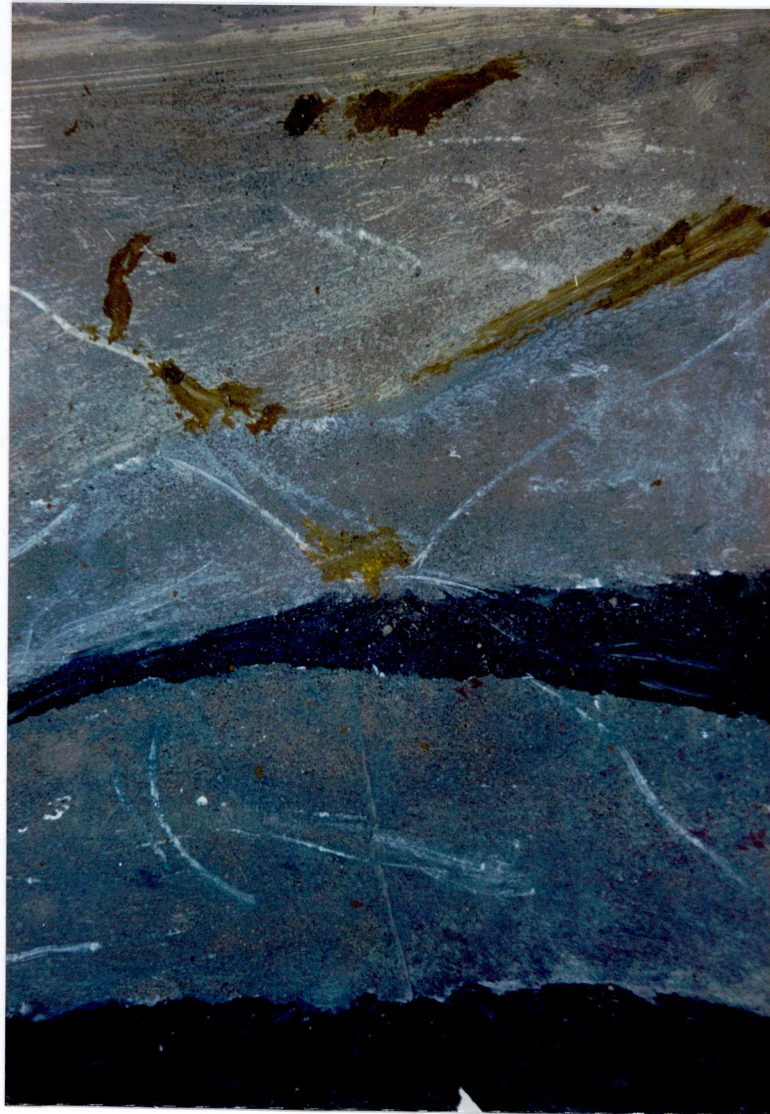




Figure 4.5, Colour and Textural Design Work





Figure 4.6, Support Studies for Preliminary Design Work





Figure 4.7, Cartoons for Design Work

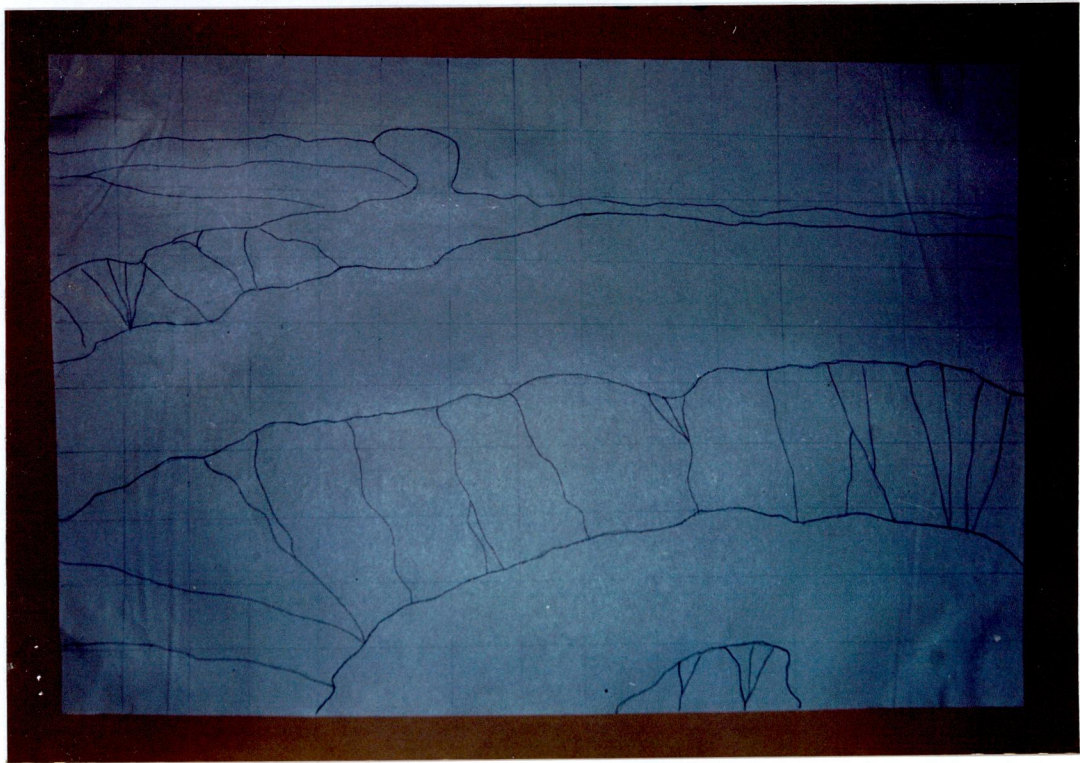


Figure 4.8, Naturally Dyed Materials

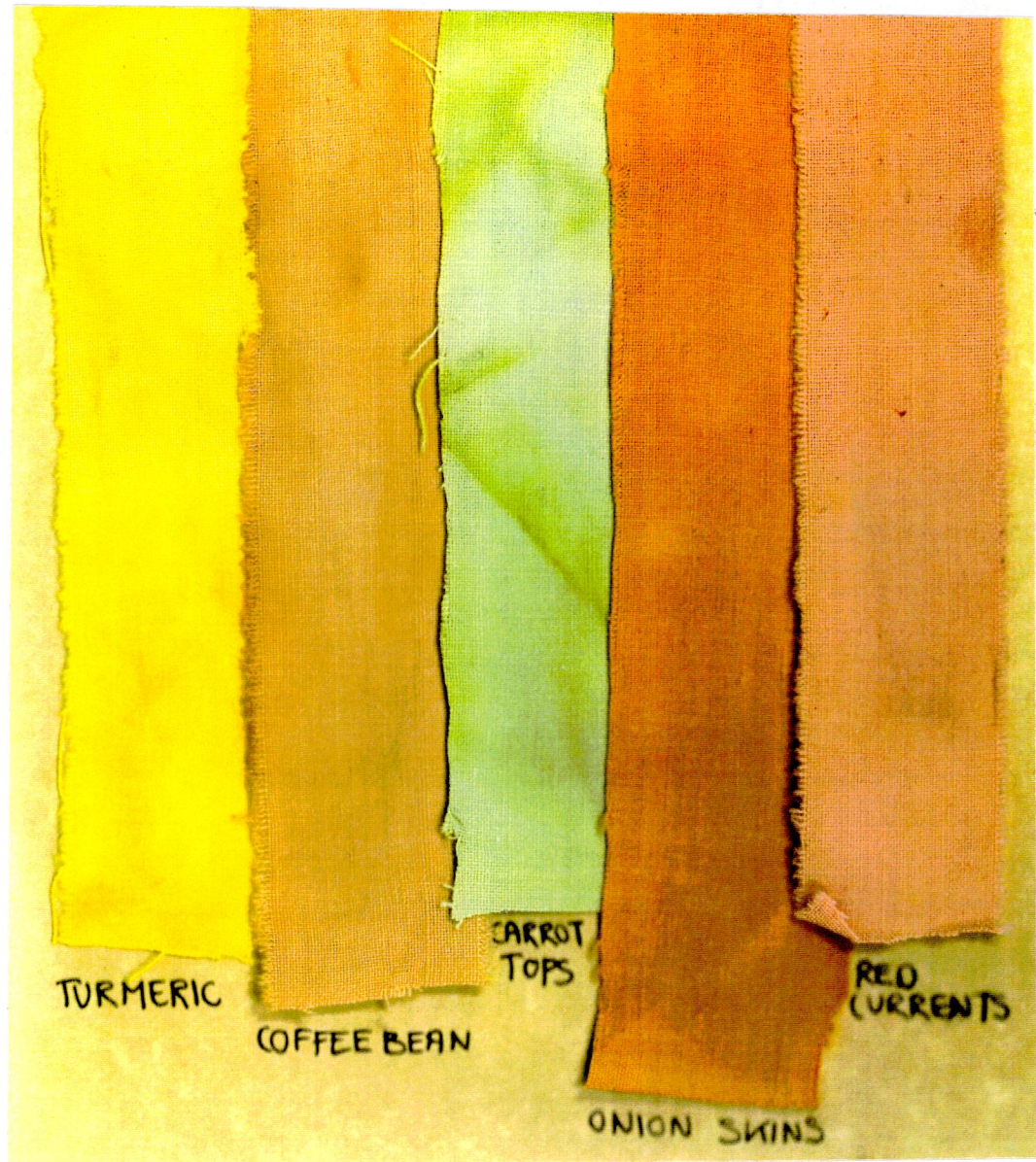




Figure 4.9, Support Studies, The Nigerian Dyers



Figure 4.10, Woven and Treated Fleece





Figure 4.11, Support Studies, The Navaho Weavers

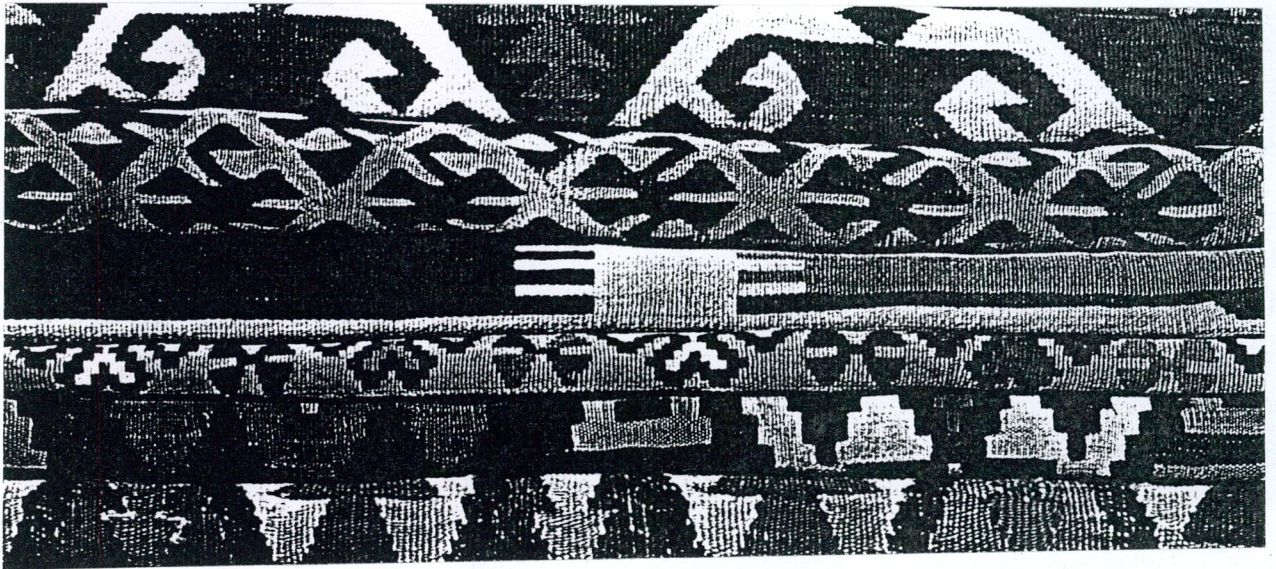


Figure 4.12, Work in Progress





Figure 4.13, Work in Progress

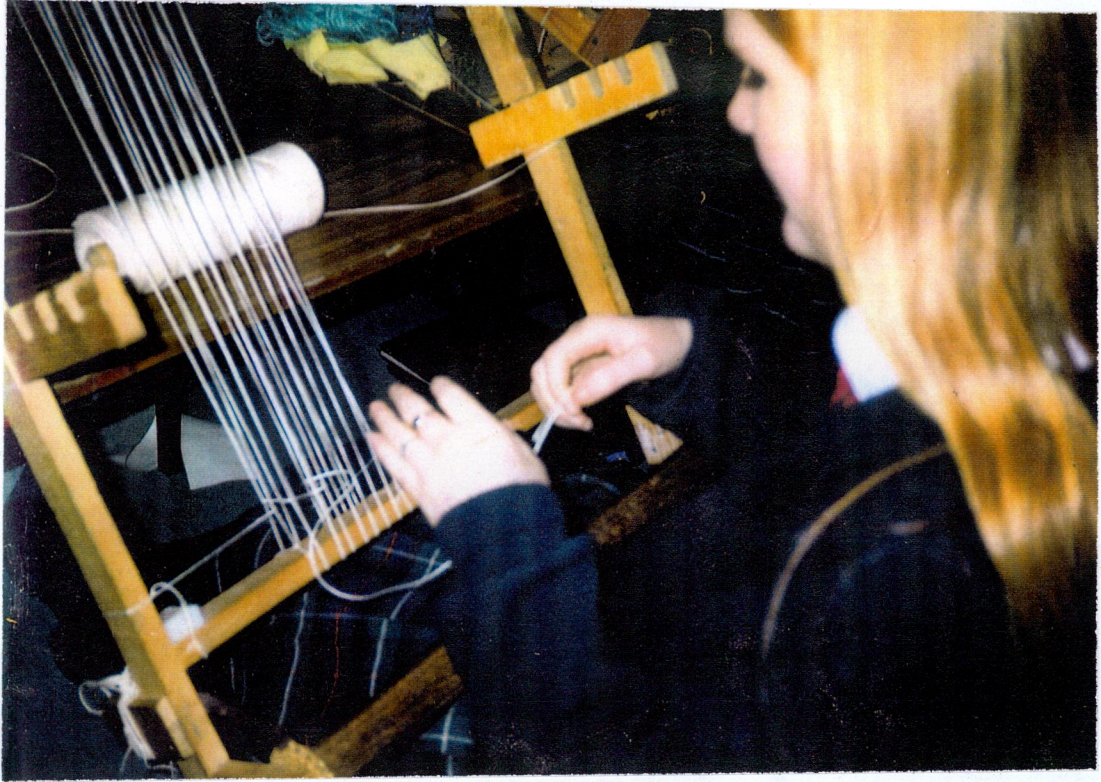




Figure 4.15, Support Studies, The Bauhaus Weavers

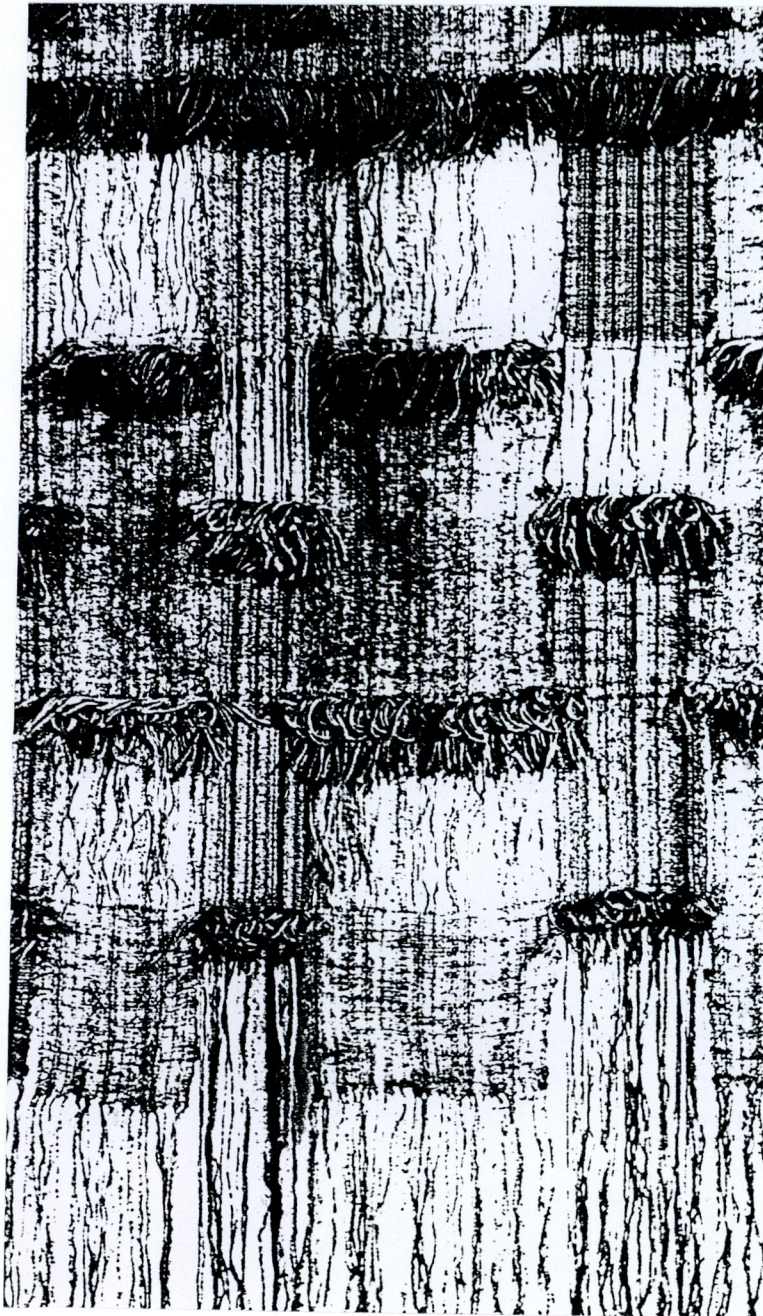




Figure 4.17, Section of Wall Hanging

Figure 4.18, Displayed Wall Hanging





**PROJECT 2 'MOVEMENT'****Figure 4.19, Life Sketching (group pose)**

Figure 4.20, Life Sketching (group pose)

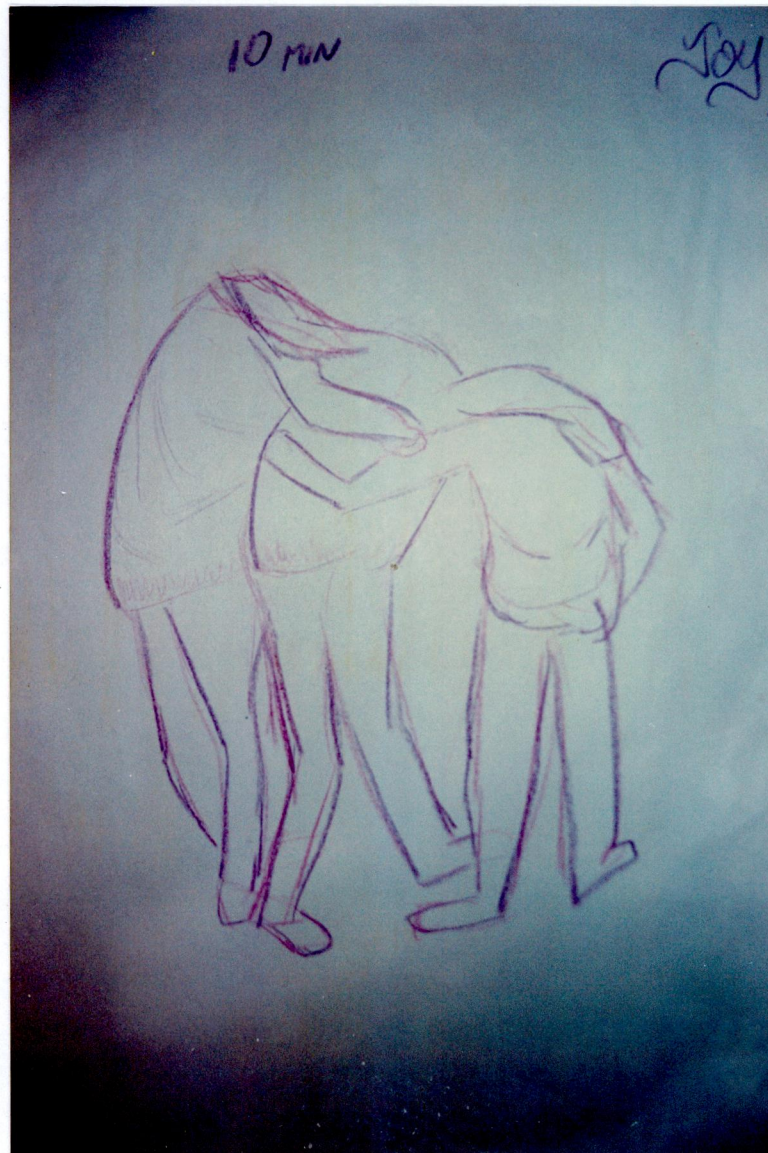




Figure 4.21, Life Sketching (single pose)



Figure 4.11. Life Sketching (action drawing)





Figure 4.22, Life Sketching (action drawing)







Figure 4.23, Support Studies







Figure 4.25, Constructed Silhouette Display







Figure 4.26, Outline Drawing from Silhouettes



Figure 4.27, Support Studies for Silhouette Drawings





Figure 4.28, Design Work using a Viewfinder

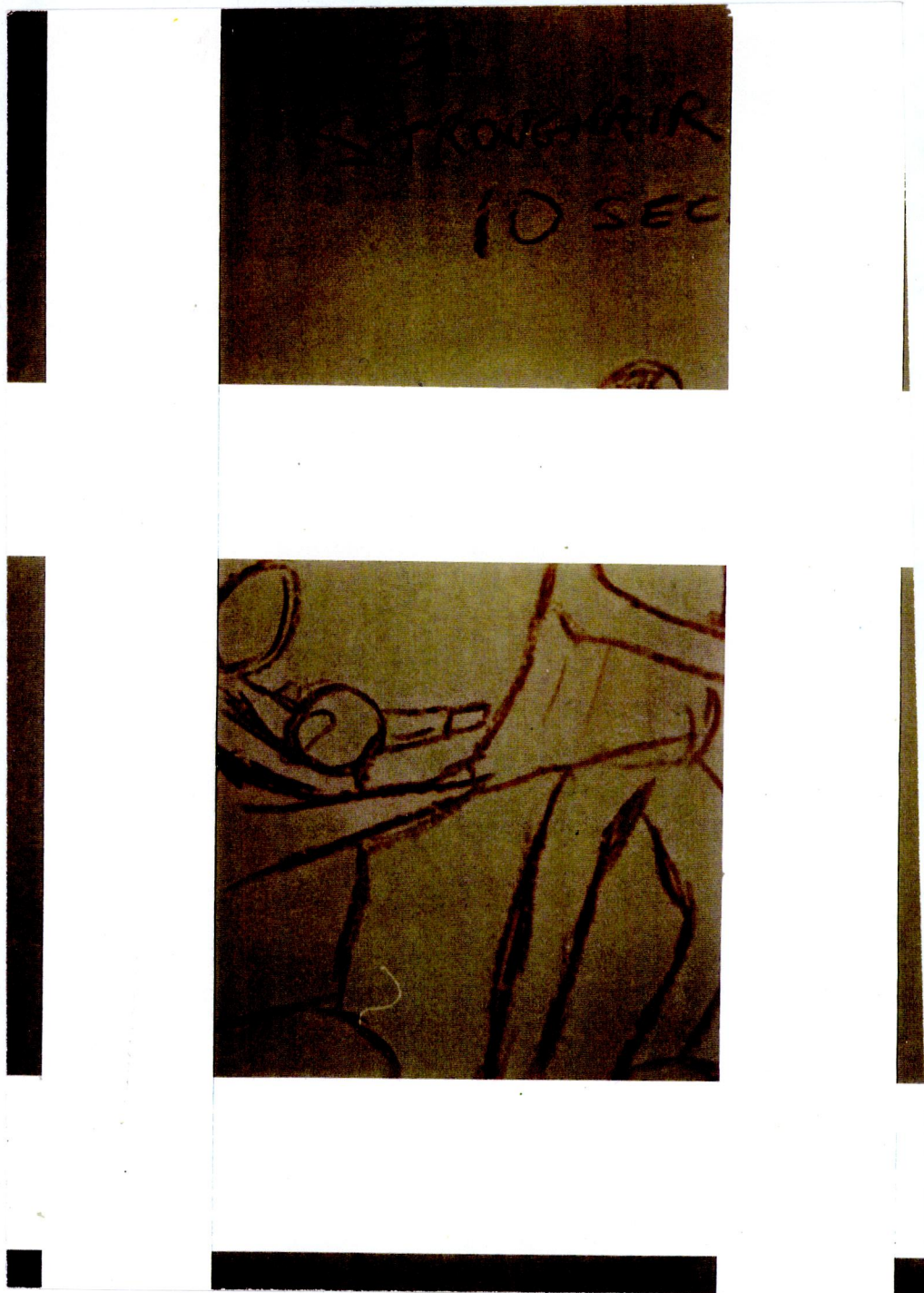


Figure 4.29, Design Work

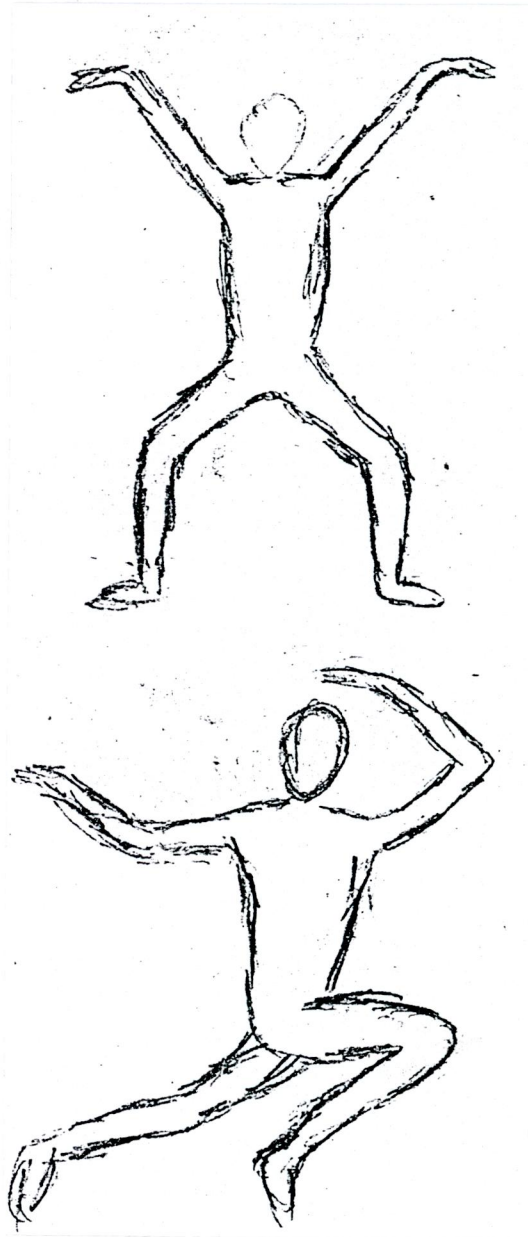




Figure 4.30, Colour Studies

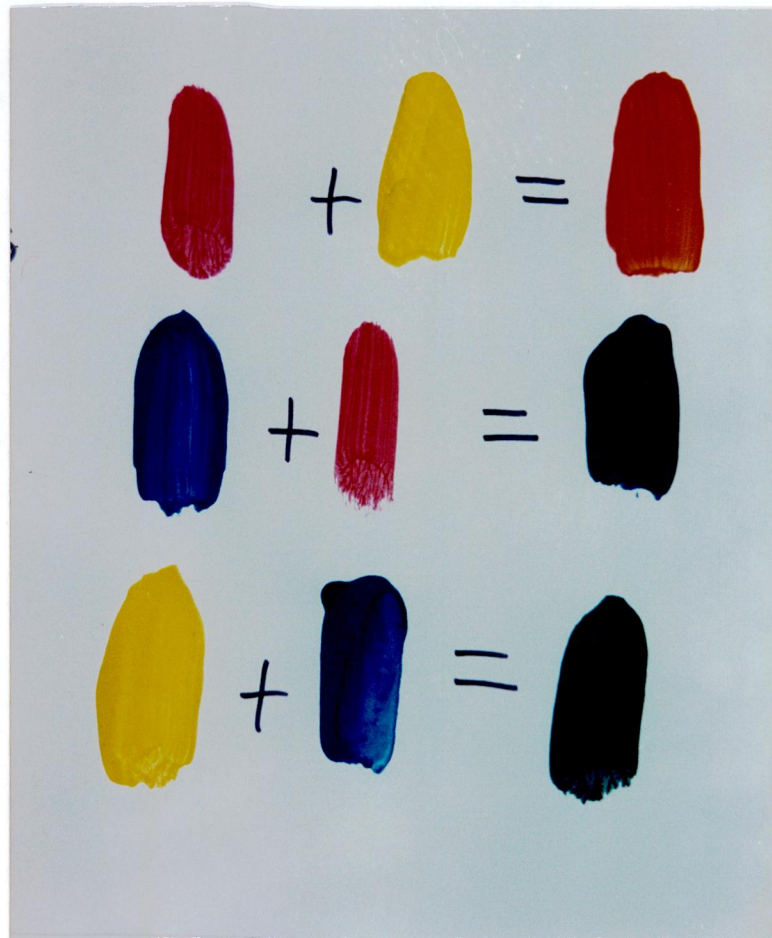
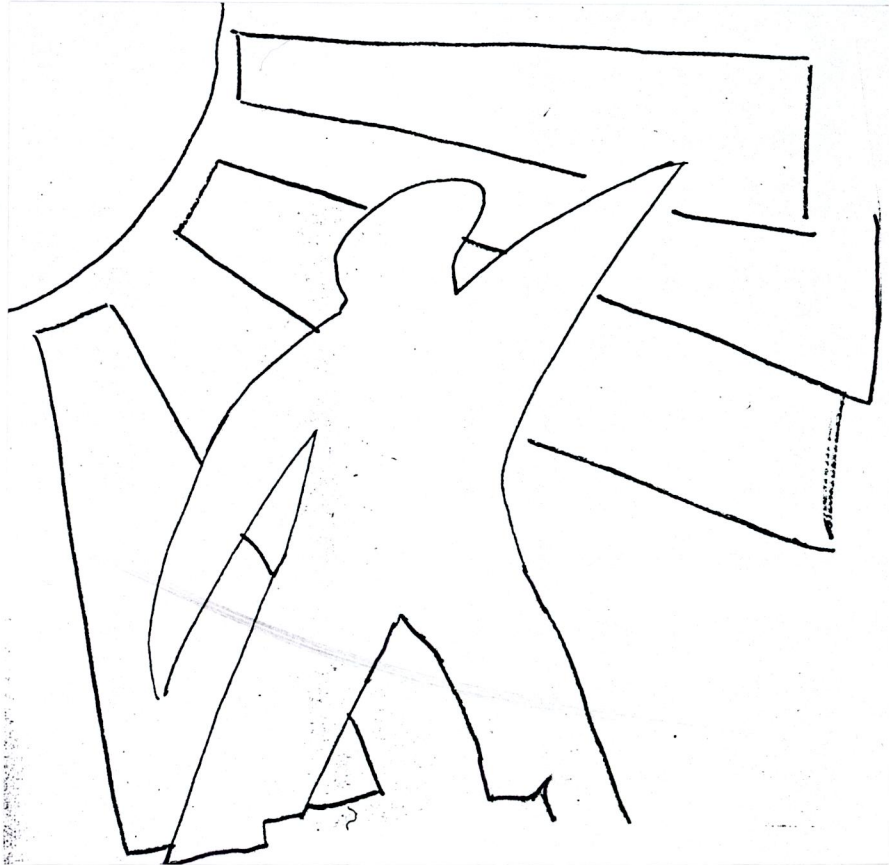


Figure 4.31, Design Work for Banner Design





**Figure 4.32, Design Work for Banner Design**







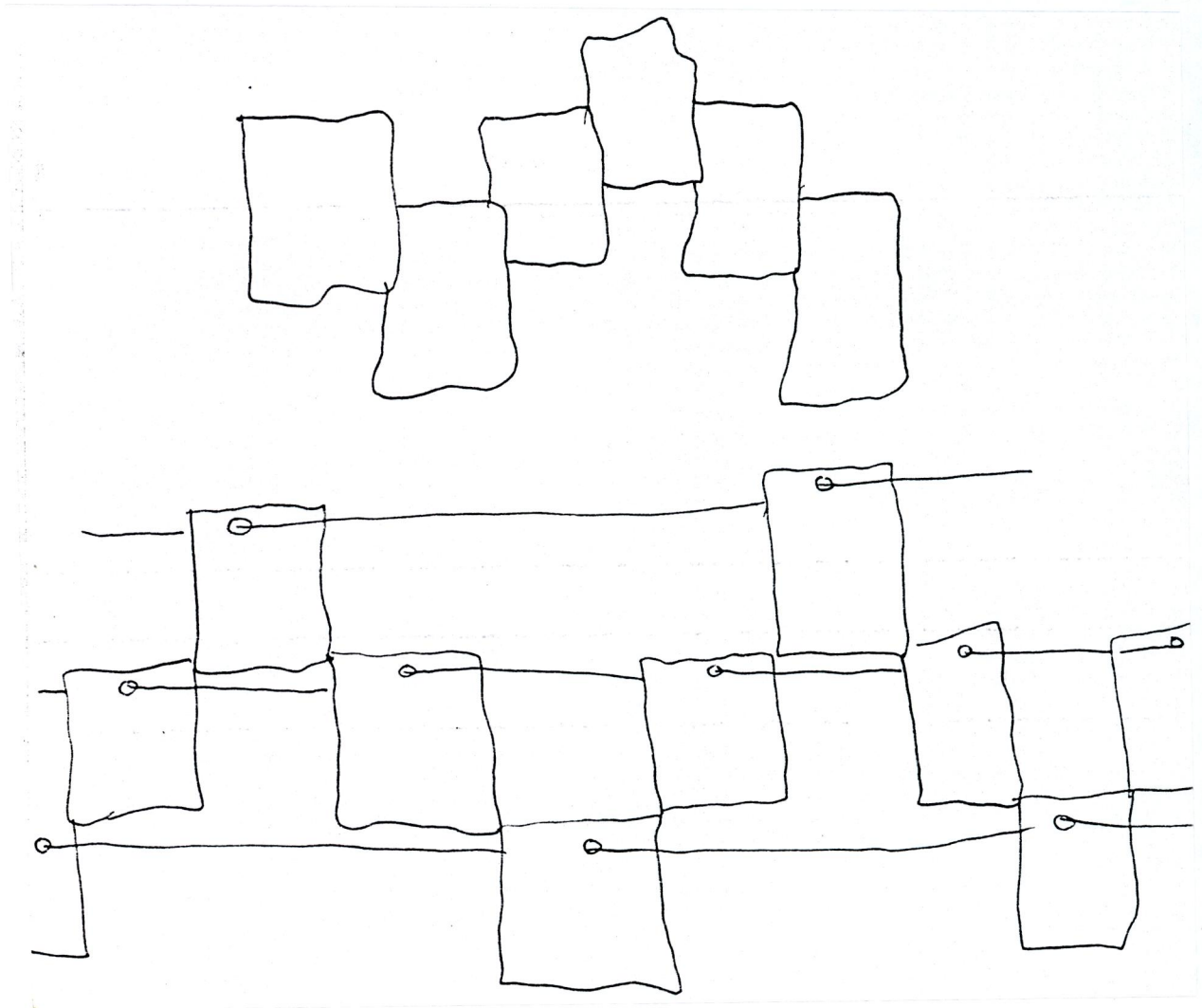
Figure 4.34, Print Work for Banner Design



Figure 4.5. Design for Banner Design



Figure 4.36, Design for Banner Design



## **Results and Findings Through Project Work**

### **Motivation**

Within the project entitled LANDSCAPE I used the source as an element of motivation. The source was the pupils landscape, i.e. their environment and all it holds. This was reinforced within the sources and materials the pupils used throughout the project. The materials used within the colour and textural exercises consisted of lentils, cornflakes washing up liquid, egg yolk, clay, etc. The materials used for the natural dyes included carrot tops, turmeric, coffee, tea and onion skins. Among the materials the pupils used within the wall hanging were fabric, fleece, plastic bags, cables and wire. The introduction to found materials motivated the pupils to create and invent new materials suitable for different stages of the project. From this the pupils created a sub-theme for the project which was NATURAL VERSUS MANMADE. The project thrived on their use of contrasting materials. The versatility, suitability, colour, volume and texture of both natural and manmade products. My aim was to use the source as a starting point from which the students would find their own direction.

### **Design Work**

The design process was filtered throughout the project, there was a decision making and problem-solving element within each class. I found that although I worked out stages to guide the class through the design process, I was constantly revising previous class situations to reinforce the process. I realized that in order to get the ultimate learning experience from the process you could not stick to a clear cut method. For example, although following criteria the design work needed to be reassessed once brought to



its final cartoon stage. Although the student had designed a cartoon based on a linear design stylised from preliminary work, alteration still had to be made when dealing with the technical side of the woven design. I don't think this takes away from the learning process as I feel revision and reinforcement is very important in the development of a process. I found I had to apply the process so that it would suit the particular class without taking away from the learning experience. Decision making within the scheme was experienced most when choosing materials for the woven wall hanging, the pupils had to take into consideration; strength, flexibility, suitability, colour and texture. Most of these decisions were overcome through dyeing which created suitable colours and spinning which created a variety of different textures which were flexible and strong. The pupils explored the idea of using different yarns and materials together as one yarn and mixing natural and synthetic dyes for different effects of colours and textures. The pupils combined different materials and techniques to suit their individual design.

### **Techniques and Skills**

The techniques and skills introduced to the pupils within the scheme incorporated problem-solving and decision making situations. I was reluctant to tell them the problems they would encounter and how to overcome them although I was aware where the difficulties would appear. Even so I was surprised at how well they coped with what I would consider the difficult problems and how they had difficulty with the easier situations. I feel this is due (i) to understanding their experience of adapting to new techniques, and their enthusiasm to learn. (ii) to taking for granted that they would be as familiar with the basic skills as I am. The techniques and skills that were



new to the transition group were carding, spinning, dyeing and weaving. I introduced the group to the technique of carding and spinning in one class and dyeing in another. The pupils alternated the two skills within the following classes. I instructed and supervised the class while the students taught each other the techniques. The areas where I felt the pupils were lacking, were organization of tools and equipment, dexterity when using equipment, neatness, respect for materials and patience. All these factors added to the difficulty of learning a new skill and had to be tackled before effective learning took place. I felt the pupils disregard for classroom property and their lack of patience stemmed from a lack of self confidence. I overcame this by groupwork, time tables, time sheets and work sheets. I also used the group teaching method with the pupils as a method to increase self confidence within the art room when using the materials and equipment and when experiencing new techniques. This was especially common with students who were more comfortable and excelled within a academic or sport environment. Introducing all students to the design process which fosters an imaginative thought process, a process where ideas and plans can be related to a football pitch, a home economics recipe or a maths equation makes it easier for students to adapt to the atmosphere, techniques and the learning process of the art room.

### **Evaluation**

The Assessment and evaluation is very important throughout the project not only in the final stages. I used evaluative methods throughout the class to reinforce what was being achieved, how it was being achieved and why it was being achieved. I used the evaluative method also to ask myself am I achieving what I set out to do and if not, why? Evaluation is as beneficial to



the teacher as it is to the pupil. I used evaluation as a form of reinforcement, revision and assessment. I also used evaluation to boost the pupils' self confidence; within themselves, their ideas and their work. My reason for this was due to discovering particular students lack of confidence in the art room. Support work was reinforced with work sheets and home activity exercises. Questioning techniques were used to investigate pupils' responses to personal and group work. Evaluation formed a critical stage of the design process for this particular class in terms of self confidence, visual literacy and design awareness.



### Pupil Participation

To discuss the results and findings I encountered through my project work I examined the scheme entitled 'LANDSCAPE'. To discuss the pupils participation I now wish to examine the scheme entitled 'MOVEMENT'. My reason for picking this particular scheme is that the structure of the scheme lends to discussion, brainstorming and pupil / teacher interaction. The scheme began with a brainstorming activity examining the world of movement under the headings - human movement, and natural movement: Human movement was decided on as a starting point. The pupils expressed ideas as other pupils wrote the suggestions on the board. Personal brainstorms were also developed at home. The pupils entered into a world of sport, danger, adrenalin, street brawling, celebration, carnival and rioting. Others opted for ballet, drama, music, drum beat and rhythm, lifesketching in the form of gesture drawing, action drawing and silhouette work were explored through the titles The Bank Robbery, The Street Brawl, The Finishing Line, The Big Escape, The Football Riot and The Curtain Call. Gestures and expression were taken into account when posing. The poses were created and acted by the pupils, while the remainder of the class drew. The decision making behind the lifesketching sessions was left up to the pupils, although I introduced and directed the class, the pupils participation was immense. The silhouette study was a problem solving activity where the pupils were given two easels, a sheet, thumbtacks and an overhead projector. The pupils had to compose a screen that would create silhouettes when pupils posed, so outline drawings could be taken from the images. The pupils had to overcome the problems of construction, light, distance and stability. This worked beautifully as a problem solving activity and was recorded by the pupils through photography. The design work was taken from the lifesketching drawings. Firstly using a view-



finder and developing from there, the pupils were looking for movement within a composition. The composition had to be balanced and have unity and contrast. These three art elements came quite naturally to the pupils. The design of the banner itself was introduced through a work sheet (See Appendix A) for initial ideas and then as the scheme developed the pupils were placed in groups. The worksheet was very effective and the pupils participation was inspiring. Here is a compilation of different answers.

### QUESTION 6

Where will it be hung?

In the front lobby of the school so everyone can see it.

### QUESTION 7

How and with what shall it be hung?

It should be hung from the ceiling by translucent thread which will be attached to copper or wooden rods which will hold the banner.

### QUESTION 8

How will you express this theme through hanging or displaying your banner inside or outside?

I will express the theme movement by putting wire in the side of the banner, and shape it so it ripples as if it is shaking from the wind it will be hung inside, or you could put a fan behind it but that would be very expensive.

### QUESTION 9

What size will you banner be?

It will be roughly 5ft by 2ft.

Due to the continual pupil participation within this scheme the pupils received a better grasp of the decision making and problem solving than they would have in a scheme that was less self directed. The pupils reinforced the design process themselves by creating the problem, solving the problem and recording the solution. By self direction, the pupils were evaluating as they developed. Design awareness was promoted in the form of work sheets. The fourth year students were involved in two work experience blocks in which they encountered problem solving and decision making tasks. Work sheets (See Appendix B) and discussions envisaged design within their work environment, for example, the implication of a badly / well designed environment on the pupils work and morale. Allowing the pupils environment outside the school gates to be involved in the project resulted in effective pupil participation, healthy class atmosphere and a good pupil / teacher interaction. To achieve an understanding of design, and its implication on our environment, pupil participation is necessary.



## CONCLUSION

To achieve an understanding of Design Education, we must start with design and the design process. In teaching design, we must teach the design process effectively. We need Design Education to achieve a design awareness within our environment.

We live in a man-made environment and some one is responsible for the form of things around us and consequently the very quality of our lives.(1)

Design is only effective when there is a balance between process and product. The design process can only be a learning process if a solution is made and evaluated. A design product can only result in a learning experience if a process had been developed.

It is also important to note that Design Education forms only a part of any comprehensive coverage of art and design. Art is a wide ranged activity, design education is only one section of the subjects 'range of education potential'.(2) If all art was limited to design education the syllabus would be as restricted as if design education did not exist. It is essential that neither Art, Crafts nor Design exist in isolation, they should interact to form creative work. Neither one of these subjects has more intrinsic creative value than another, they all belong to one creative exploration and study.

We must look to the future of Design Education in our country, we must explore developments that alter attitudes to the teachers role, equipment, assessments, timetables and the syllabus. Social attitudes to design education



must change. As long as cultural divisions keep art separate, improvements will not occur. Design should be central to our lives, not just the art room. This is essential for the development of the whole person.

As well as it's intrinsic value, arts education, where appropriately designed and taught can contribute to the development of thinking skills and to a range of entrepreneurial skills and attitudes. (3)

We can often accommodate art, design and creativity in very narrow terms in school and society, however we need to recognize the many forms design can take and to make sure they are accommodated fully.



## FOOTNOTES - CONCLUSION

1. Peter Green, Design Education : Problem Solving and visual experience, (London : Batsford, 1978) p.7.
2. Ibid., p.125.
3. National Council for Curriculum & Assessment, Towards the New Century, p.3.

## APPENDICES



## APPENDIX A

### Design Project

1. What is design?
2. Why do we need design?
3. What are we designing?
4. What is a banner for?
5. Where will it be hung?
6. How and with what will it be supported?
7. What is the theme of the project?
8. How will you express this theme through hanging or displaying your banner inside or outside.
9. What size will your banner be?
10. Will your banner be part of a series or an individual banner?
11. Through thumb-nail sketches draw a series of ways you could hang your banner. Draw up a larger draft with your final design. Take into account:
  - Theme
  - Materials
  - Cost
  - Measurements
  - Brainstorming could be helpful for this exercise
12. Comment on the decisions you had to make and the problems you had to solve

**APPENDIX B****4th Year Design Work Sheet**

1. What did your work experience involve?
2. What was your particular job?
3. What did this involve?
4. How was the room / office / shop / factory designed?
5. Did your job include designing / how?
6. How were the following designed?
  - Counter tops
  - Store rooms / stock
  - Drawers / cupboards
  - Layout of the room
  - Working areas
  - Staff facilities
  - Equipment
  - Etc.
7. How did you consider the design of the above?
  - Sufficient
  - Inadequate
  - Very good
  - Inappropriate
8. Why?
9. How did the design of your working environment effect your work?
10. What would you change about the design to make it a  
1) Cleaner, 2) More comfortable, 3) Efficient, 4) Warmer  
5) Aesthetically pleasing, 6) Productive place to work.



## SELECTED BIBLIOGRAPHY

Aylward, Bernard. Design Education in Schools. London: Evans Brothers Ltd, 1973.

Benson, Ciaran. Working Party on the Arts in Education. Dublin Arts Council of Ireland, 1979

D'arbeloff, Natalie. Designs with Natural Form. London: BT Batsford, 1973.

De Sansmarez, Maurice. Basic Dynamics of Visual Form. London: The Herbert Press Ltd. 1980.

Green, Peter. Design Education : Problem Solving and Visual Experience. London: BT Batsford, 1978.

Itten, Johannes. The Basic Course at the Bauhaus. London: Thames and Hudson, 1983.

Thistlewood, David. Issues in Design Education. United Kingdom : Longman Group, 1990.

Wortmanweltge, Sigrid. Bauhaus Textiles : Women Artists and the Weaving Workshop. London: Thames and Hudson, 1993.