DISSERTATION ABSTRACT

NAME: Catherine Morton

TITLE : Three-Dimensional Art, Craft and Design in Irish Secondary Schools

DESCRIPTION:

The aims of this dissertation are to firstly examine the role and value three-dimensional art, craft and design has in Irish Secondary School education. Having established that the area of three-dimensional art has educational value not only in learning art, craft and design, but also broader personal, developmental education in viewing the world in which we live. In researching the role 3-D art has in Irish Secondary school it was necessary to view the vehicle through which it is taught. To put this aspect into context it is also necessary to view the curriculum and the syllabi contained within. This aspect of the research led to an overview of the Junior Certificate and a limited analysis and comparison to a similar syllabus the General Certificate of Secondary Education as implemented in Northern Ireland. In doing so it became apparent that an assessment of the context in which 3-D art is taught in Irish schools could not be done through the means of solely viewing the curriculum. Accumulated further research, in the form of questionnaires and interviews, displays some of the more practical concerns of, for example resources and the effects these had on a teachers approach. While these provided some valuable insights, the gap between the syllabus and the practical application within the classroom was bridged further through the implementation of two schemes of work. These two schemes offer an example of how certain problems that were earlier identified can be overcome and how the value and scope 3-D art has to offer can take form within the classroom.

COLÁISTE NÁISIÚNTA EALAÍNE IS DEARTHA
NATIONAL COLLEGE OF ART AND DESIGN
FACULTY OF EDUCATION

THREE DIMENSIONAL ART, CRAFT AND DESIGN IN IRISH SECONDARY SCHOOLS

A DISSERTATION SUBMITTED TO THE FACULTY OF EDUCATION

IN

CANDIDACY FOR THE

B.A. IN ART AND DESIGN EDUCATION

BY

CATHERINE MORTON

DATE: JUNE 1999

STATEMENT OF AUTHENTICITY

I hereby declare that this dissertation is entirely my own work and has that it has not been submitted as an exercise for a diploma or degree in any other college or university.

Signed Catherine Morton.

Catherine Morton.

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INTRODUCTION

To begin I wish to explain the reasons and my interest behind this dissertation. My major study area is ceramics and as a result I have a personal interest in form and 3-D as a mode of creative and artistic expression. Over the last number of years I have brought this interest into the schools I have taught in and have found these 3-D projects to be highly successful. It is as a result of this I became intrigued as to the position 3-D art, craft and design has within Irish Schools and how teachers approach the area.

In approach to my research I found myself asking a number of questions. Chapter one explores the questions of firstly, what is meant by the term three- dimensional art? The answer of which provides for many definitions which displays the broadness and thus possibilities of 3-D art. Having established this meaning I felt it would be fundamental to explore the value and relevance of 3-D art, giving reasoning to why it should be taught.

In order to contextualise 3-D art, craft and design it was important to view its position within the Irish Art, Craft and Design Curriculum, particularly the syllabus governing the Junior Certificate. In order to assess this position I felt it beneficial to make comparisons between the Junior Certificate and the Northern Ireland Syllabus for The General Certificate of Secondary Education (GCSE)

Chapter three to follow, is a more in-depth analysis of 3-D art, craft and design in schools. This information was collected by two means, the first a questionnaire widely circulated among schools in the Dublin area. The second part of this research focused on the work and opinions of two teachers which provides for a clearer understanding of how teachers approach the area of 3-D. Both parts of this chapter attempts to assess the standard and availability of resources and other possible problems when working in 3-D.

Chapter four provides for the implementation of two 3-D projects in a single-sex girls school. While I feel this aspect of my research is only touching on the verge of the area of 3-D in schools and its implementation as part of an organised and continual programme of learning from first year to Leaving Certificate, it does however give a clear insight as to what I feel can be achieved within the limited time frame available.

To conclude this introduction I wish to acknowledge that while the level of personal and practical knowledge I have gained as a result has been immense, this dissertation provides for only a glance at the area of three-dimensional art, craft and design in Irish schools. An area which is as broad as it is long and which holds much more than what could be feasibility tackled within the limits of this dissertation.

CHAPTER 1

THREE DIMENSIONS;

THE RELEVANCE TO ART EDUCATION

THREE - DIMENSIONS and FORM

In answering the question "what relevance does the world of three-dimensions have to art education?" a series of other questions needed to be asked. To begin with what is meant by the term three-dimensional, and secondly what educational value does an understanding of three-dimensions have ?

Before I begin to discuss the relevance of working with and through three dimensions to art education, I feel it is important to define what is meant by the term three-dimensional.As Wolchonok defines it, "Any object or geometric magnitude that has length, breath and thickness is three-dimensional" (1) This definition gives us part of the definition of form in art in that form is an object which is three-dimensional or gives the appearence of length, depth and width. Form as Manners (1995) points out has 'many meanings' so to clarify any possible misinterpretation of the term, form in relation to a three-dimensional context describes solid shapes in space. Form also relates to the surface and may also indicate mass, weight, volume and structure. An understanding of form is vital to the design and creation of 3-D work as it is a crucial link between the two-dimensional design and the finished product.

Form is the spatial nature of the world of objects and structures both external and internal, i.e. mass and volume.The science of understanding form is geometry. Any object maybe understood in zero, one, two, or three dimensions, corresponding in visual terms to point, line, plane and solid. The relationship between these dimensions is the body and structure of art, craft and design.

The history of forms is crucial to the nature of our present day approaches to art, craft and design education. This is so because the whole culture of the west including all art, craft and design has been so heavily influenced by Greek models since the Renaissance. The Greeks were the first to make geometry a scientific and mathematical instrument for obtaining knowledge of the world. They did this as early as the 6th century B.C. by conceiving a point as a dimensionless element, a line as a series of adjoining parts, a plane, a set of parallel lines side by side, and a solid as series of adjoining planes. By dissecting objects in this scientific way, they created a simple method for the appreciation and creation of forms. It is thought that neither Greek or Roman artists ever formulated any laws of perspective, yet their art shows a perception and mastery of three dimentional form. Greek and Roman artists created these works with this mastery of space by intuition and observation. (2)

Teaching through the realm of three-dimensions is not a restriction as it very clearly covers the areas of art, craft and design. The main three-dimensional art area is traditionally that of sculpture, more modern areas would include performance, instalation and land art. Sculpture at its most basic can be described

as the art of shaping material into forms, it can be either free-standing, designed so that it can be seen from all angles, or relief, designed to be seen from limited angles. The more traditional areas of three-dimensional crafts are pottery, textiles, metal and glass work. The 3-D aspects in design would be mostly related to the areas of industrial, architecture and fashion design. These categories I have designated are by no means rigid as it is easily and acceptably argued that a designed object such as a chair is worthy of the term sculpture. However, by separating them it becomes clearer as to what our objectives are when we begin a three-dimensional project. It would be impossible to list every object or product that might be regarded as art, craft and design and equally so the means and methods of creating them. However it is important that we do have some way of defining our objectives and categorising the forms children should encounter as part of their three-dimensional education. One method of doing this is to look at the language that is involved.

The term 3-D carries with it an array of other terms, divisions and categories. Learning this language is an important part of the learning content and development of understanding three-dimensions. The term form, or art element as it is otherwise known, for example , can be sub-divided. The two main categories are geometrical and organic. Any form that is created by the artist can be called a free-form in that it is man -made. Three-dimensions can also be described according to the form or structure . A concave form has a pushed in surface that goes down like the inside of a crater or bowl. A convex form has a raised surface that goes up like a mound. A structure may also be considered open or closed.

Another approach in describing a three-dimensional object is according to its material. The list of materials that can be used to create a three-dimensional objects are endless, in order to condense it materials are usually categorised under the following headings: malleable, flexible and rigid. The use of these materials usually dictates the methods of making. Again the list of methods is as endless as the list of materials, but these too can be categorised under three headings: additive, subtractive and constructive (3) While it is difficult to include everything that is interperted when using the term 3-D using the above catergories gives an indication of what is meant in using the term 3-D.

WHY TEACH THREE-DIMENSIONS ?

As the area of three-dimensions covers the areas of Art, Craft and Design, I could begin to answer this question by answering another question. Why teach art? The general educational value of art and its worthiness as a subject on the curriculum is one which is widely explored. There is a extensive list of philosophers and educational theorists whom value the unique role of art and have put forward strong justifications for its presence in a curriculum. Dewey, Langer, Schiller, Steiner, Fry, Bell, Morris, Plato, and Munro to name but a few, each having their own approach and providing a case for the many functions art has to offer an individual. As Eisner simply states "art is a unique aspect of human culture and experience" (4) Spiritual, creative, cognitive, functional and sensory functions all provide a means through which our human potentialities can be exercised.

In summary, I feel that there are relatively few opportunities for a child to express how his or her particular life feels, to discover what its special meanings are, or to comprehend why it is like no other persons life. Art gives children one of those opportunities. Through practising art, children can acquire the knowledge, language and methods to explore their own world and the deeper meaning of visual forms. There is a strong case that the study of art, craft and design has an important role in educating the child. The question that now remains to be asked is how three-dimensional work provides a vital, if not the most important, method in fulfilling these broader educational aims.

To begin answering this question we need to become aware of how people become sensitive to visual form. An awareness of how people acquire the insight, perception and skill needed to produce visual form that will have social or personal importance is also relevant.So how do people become aware of visual form ? A major key is our senses and our human biological equipment Because we are bifocal, our vision of the world is in three-dimensions. Chapman states that it is part of our natural development in that

> from the earliest years of their (children's) lives they are educated through visual forms at home, in stores and in their neighbourhood. (5)

Our visual experiences can be said firstly to be three-dimensional, in that we perceive the world in accordance to our own physical awareness and experiences. The understanding of basic forms has been at the heart of the relationship between our inner and outer worlds for thousands of years. People throughout time have produced art when there seems to be no apparent social or practical need for artistic production. A reason for this as I have stated

before, lies in our human biological equipment, especially our hands and eyes. Our opposable thumbs and fingers and our binocular vision and perceptions of space clearly predispose human beings to form materials in the light in which he sees them in. At its simplest this could be demonstrated by noting the reaction when someone is handed a soft pliable material, like clay for example. It becomes an automatic sensory reaction to squeeze and shape it. Humans are possessed with a powerful impulse towards form and forming. As Chapman points out

> The popularity of art as a hobby reflects a widespread desire to have a hand in making things. (6)

Robertson reinforces this biological case in stating that;

> All his knowledge of the outer world comes to the child through his senses, seeing, hearing, tasting, smelling, touching and the kinaesthetic sense which gives his knowledge of the movement of his own muscles and of the extension of space. (7)

It is therefore essential that students explore their own senses if they are to grow up with confidence to explore their own world and derive pleasure from their own senses. The creation of three-dimensional objects and the manipulation of materials, through art, craft and design will allow students to do so. However as Burke stresses;

> The important point is that no matter how primitive or immature the level of forming, it is never purely mechanical or manipulative phenomenon; there is always a simultaneous reading of meaning and an anticipation of the visual outcome. (8)

In other words , it is difficult to separate making from understanding, and the understanding required is that which all areas of art, craft and design education aspires to. The fact that working from a three-dimensional understanding to the creation of something which is three-dimensional has a more immediate and direct link, means that the sensory

fulfilment and understanding develops quicker and is therefore more likely to meet with the aspirations of art, craft and design. The methods and processes of this development can be used as a guideline in the creation of a three-dimensional modular developmental curriculum. The questions of how and in what context is one which I will explore in the next chapter.

FOOTNOTES

CHAPTER 1

1. Louis Wolchonok, The Art of Three-Dimensional Design (New York:Dover Publications,1959),p.1.

2. E.H. Gombrich, The Story Of Art (London:Phaidon Press Ltd.,1989), chpt.3

3. Laura Chapman, Approaches To Art in Education,(New York:Harcourt Brace Jovanovich,inc.,1978), chpts.2&12

4. Elliot Eisner, Educating Artistic Vision,(Stanford:Macmillan Co.,1997),p.5.

5. Chapman, Approaches To Art In Education, p.54.

6. Chapman, Approaches To Art In Education, p.55.

7. Seonaid Robertson,Creative Art In Education,(London:Routleedge and Kegan Paul Ltd.,1952),p.14

8. Robert Burke , Becoming Human Through Art, (New Jersey:Prentice Hall,inc.,1970), p.43.

CHAPTER 2

CURRICULUM AND THREE DIMENSIONS;

3-D ART, CRAFT AND DESIGN IN THE CURRICULUM

The context in which three-dimensions are taught in Irish schools is through the syllabi's guidelines governing the Junior Certificate, Transition Year Programme, Leaving Certificate and Leaving Certificate Applied. As the Transition Year Programme and Leaving Certificate Applied are not available in all schools, and the current Leaving Certificate is in review under the National Council for Curriculum and Assessment, I have chosen to examine the context in which three-dimensions are placed in the Junior Certificate.

The first Junior Certificate exams took place in 1992 and they replaced the Intermediate Certificate and the Group Certificate.The Junior Certificate Art, Craft and Design Syllabus introduced many changes. The most notable one from the perspective of 3-D is that 3-D was made a core and thus a compulsory aspect of the syllabus. In making such changes it also outlined the general curriculum context in which art, craft and design should be placed.

> The general aim of education is to contribute towards the development of all aspects of the individual, including aesthetic, creative, critical, cultural, emotional, intellectual, moral, physical, political, social and spiritual development, for personal and family life, for working life, for living in the community and for leisure. (1)

The syllabus also clarified the role art, craft and design would assume in

benefiting these general educational aims;

> 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 emphasises ideas, feelings, and visual qualities
> - Craft emphasises the right use of tools and materials
> - Design emphasises planning, problem - solving and completion, using drawing as a means of thinking
>
> These unite in the basic human drive to shape the world, for functional purposes, and to express and communicate ideas and feelings. The contribution of the visual and plastic arts to life is a unique and enriching experience for all. (2)

This statement is followed by a statement explaining the unique opportunities art, craft and design can offer a student :

> Art, Craft and Design provides a unique part of the education of the whole person, through heart, head and hand, enabling the person to shape his or her world with discernment, and to understand and appreciate the work of others. The benefits of an education in Art, Craft and Design for the student at this developmental stage extend far beyond a competence in the subject itself (and the ability to apply it through life): Art, Craft and Design education develops a number of important personal, sensibility and self-reliance. (3)

As I have stated in chapter one 3-D can encompass the areas of art, craft and design and in doing so it also adopts a role in the general aims of education, as well a role in the unique part art, craft and design has to offer in these aims. This point is indirectly recognised in the course structure in that 3-D is part of the Core Syllabus. In addition to its place in the core syllabus, 3-D is also an 'option' in the syllabus. The guidelines for 3-D can firstly and indirectly be

interpreted in the Aims and Objectives set out by the syllabus.

The Aims of art, craft and design at junior cycle are;

1. To promote in the student an informed, inquiring and discriminating attitude to his or her environment and to help the student relate to the world in visual, tactile and spatial terms
2. 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
3. To develop in the student an understanding of art craft, and design In a variety of contexts - historical, cultural, economic, social and personal
4. 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
5. To promote in the student a practical understanding of and the competence in the principles and skills underlying visual and constructional design and problem - solving
6. 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. (4)

The Objectives of the Art, Craft and Design course are more specific and should relate more directly to the Assessment Objectives. Firstly the Objectives are outlined in terms of a students development of ability to;

(i) give a personal response to an idea, experience or other stimulus
(ii) work from imagination, memory and direct observation
(iii) use drawing for observation, recording and analysis, as a means of thinking and for communication and expression
(iv) use the core two-dimensional process in making, manipulating and developing images, using lettering and combining lettering with image, in expressive and communicative modes
(v) use the three-dimensional processes of additive, subtractive and constructional form-making in expressive and functional modes
(vi) use and understand the art and design elements
(vii) use a variety of materials, media, tools and equipment
(viii) use and appropriate working vocabulary

(ix) understand relevant scientific, mathematical and technological aspects of art, craft and design
(x) sustain projects from conception to realisation
(xi) appraise and evaluate his/her own work in progress and on completion
(xii) develop an awareness of the historical, social and economic role and value of art, craft and design and aspects of contemporary culture and mass media. (5)

The Objective of particular interest as regards 3-D is the fifth one, which is in direct relation to 3-D. This Objective has two parts and poses questions. The first part is in relation to the processes, listed as additive, subtractive and constructional. The wording of the objective would suggest that a student must show knowledge and ability in all three. The second part of the Objective then also states that these should be used in expressive and functional modes. This seems to be quite an overwhelming task to be achieved in just one piece of work. Does however, the Junior Certificate really require such a task from its students? The answer to this question you would expect to be found in section 7 of the syllabus, that section which deals with 3-D .Three-dimensional art, craft and design as section 7 states covers 'additive, subtractive and constructional processes.' While clarification is given as to what is meant by each of the processes and possible materials that could be used and the fact that the work can be of a communicative, functional or expressive nature, it is again stated that students should be given,

> a basic experience in each of the three processes, additive, subtractive and constructional, in order to begin to understand the different kinds of thinking involved in each process. (6)

Materials and their suitability relate to the processes used and the fact that it is

stated that 'an understanding should be developed of the characteristics of different materials.....' (7) would reinforce the conception that one piece of 3-D work even with an 'optional' second is insufficient to fulfil the 3-D assessment requirements set out in the syllabus. This aspect seems unclear and incoherent with the structure of the syllabus and the assessment requirements. While the Guidelines For Teachers offers no clarification, they do however give basic exemplar modules and a "check list of consideration" when planning a syllabus. (8)

However, the importance of drawing in 'the development and representation of three dimensional work'(9) is stressed. This is furthered in that it is stated that 'particular emphasis should be placed on analysis by drawing, and the importance of space, scale proportion and balance.' (10)

A COMPARATIVE ANALYSIS

While the Junior Certificate introduced many changes from the Intermediate Certificate and Group Certificate, it would seem more beneficial to compare it to another curriculum as opposed to the one it replaced. I have chosen to examine the British National Curriculum as it was implemented at a similar time to the Junior Certificate; geographical location and a common language have also been factors in my choice. As I have chosen to examine one syllabus in the Irish Curriculum, the Junior Certificate, it would be appropriate to chose its British counterpart, The General Certificate of Secondary Education (GCSE), and more specifically the GCSE syllabus that applies to Northern Ireland.

THE NATIONAL CURRICULUM IN NORTHERN IRELAND

The syllabus and Assessment criterion for The General Certificate of Secondary Education (GCSE) in Northern Ireland was formulated by the Northern Ireland Council for The Curriculum Examinations and Assessment. The National Curriculum was established in principle and almost completed by the Conservative Government of 1987-1992 (11) and the GCSE syllabus meets the requirements for Key Stage 4.The title of Art and Design is interpreted to be understood as including craft. The aims of the course are quite similar in outlook to those of the Junior Certificate, however they are more detailed, the Learning Objectives and the Assessment Objectives are not separated. There are two main Objectives, 'Investigating and Realising'. Four strands for assessment are identified in the investigation objective. These state that students will be assessed on their ability to;

(i) use and experiment with a variety of media, materials, processes and techniques, to explore and record ideas and observations from firsthand experience, memory and imagination;
(ii) evaluate and make decisions about their on-going work;
(iii) explore a range of reference and resource material to help establish and develop ideas for their work; and
(iv) make reference to, and imaginative use of, approaches adopted by artists/designers/craftworkers from their own and/or others' contexts and cultures (12)

The second objective of 'Realising' also has four assessment strands, which are identified as the students' ability to;

(i) use and combine elements of visual language in appropriate ways to realise their intentions;
(ii) select and manipulate appropriate media, materials, processes, tools and techniques to realise their work in two and/or three dimensions;
(iii) evaluate and describe their on-going work from initial ideas through various developmental stages, to completion; and
(iv) compare and contrast their finished work with that of

> artists/designers/craftworkers in their own and/or others' contexts and cultures. (13)

The criteria for assessment are more complex than that of the Junior Certificate. It is basically divided in two sections, Coursework and the Externally set Assignment, the weighting of each component as 60% and 40% respectively. The coursework component is divided in three units, and it is a stated requirement that

> one of the three coursework units must demonstrate the student's ability to create an art outcome (and) one of the three coursework units must demonstrate then student's ability to create a design outcome (14)

It is also required that; unit one must involve a two-dimensional activity and unit two a three-dimensional activity. Unit three provides an option that could have a three-dimensional end product provided that a different process and materials are used. This structure is similar to that of the Junior Certificate in that 3-D is both compulsory and optional, however the GCSE externally set examination could also have a three-dimensional outcome providing further scope for 3-D.The questions set out in this section of the examination lay out quite clear guidelines or briefs for students to follow, for example:

> A local nature conservation association has decide to commission a large free-standing sculpture or a high relief for the outside wall area of a warden's building. Make designs which show the association's cocern for the local area. Refer to the work of other sculptors and produce a scale model for your sculpture in any suitable material. (15)

Along with the general assessment objectives, there are specific assessment objectives for the 3-D syllabus. They are as follows;

(i) to explore the interaction of the three-dimensional elements indicated in the subject content;

(ii) to understand the spatial relationship between various forms and structures and between them and their immediate environment (i.e. The organisation of form within a context);

(iii) to gain experience and knowledge by using the skills of investigation;
(iv) to understand and use the design process and expressive process;
(v) to identify problems and seek solutions (16)

However a this point it is important to note that more time is allocated to individual subjects in The National Curriculum. It is also relevant that, art and design in the National Curriculum have a syllabus that is introduced at primary level. Three dimensions is an integral part of each of the 'key stages' and as a result Students' skills and understanding of 3-D are developed progressively through the various stages. This is an aspect of art education that the Junior Certificate ignores and there is little in terms of guidelines or references in the syllabus as to how students should accumulate skills and knowledge that would allow them to fulfil the assessment requirements.

FOOTNOTES

CHAPTER 2

1. The Junior Certificate Art,Craft and Design Syllabus (Dublin: The Department of Education,1989). intro.

2. Ibid.,p.1

3. Ibid.,p.1

4. Ibid.,p.2

5. Ibid.,p.3

6. Ibid.,p.10

7. Ibid.,p.11

8. The Junior Certificate Art, Craft and Design Guidelines for Teachers. (Dublin: The National Council for Curriculum and Assessment, 1989).p.17

9. Op. Cit.,p.10

10. Ibid.,p.10

11. Robert Clement, The Art Teachers Handbook, Second Edition(Chelten Stanley Thornes Ltd.,1993).p.18

12. GCSE Art and Design Syllabus and Assessment Memorandum (Belfast Northern Ireland Council for the Curriculum, Examinations and Assessment,1999).p.2

13. Ibid.,p.2

14. Ibid.,p.4

15. GCSE Art and Design Externally Set Assignment (Belfast: Northern Ireland Council for the Curriculum, Examinations and Assessment,1998).p.11

16. Op Cit., p.7

CHAPTER 3

RESEARCH SURVEY

In order to assess the true status of 3-D work, I devised two questionnaires.

The first (see App. I) was circulated to thirty-five teachers,thirty of which are based in Dublin. From this sample sixteen replied and it from these I received the following information;

Question 1. The Teachers area of specialisation reflects their own personal interests in the art, craft and design area.

PAINTING	**6**
TEXTILES	**2**
GRAPHICS	**3**
CRAFTS	**2**
CERAMICS	**3**

Question 3. In answer to which class groups responded best to 3-D; **75%** stated that the younger age groups responded best. From this 75%, **50%** claimed the Junior CertificateYear responded best. The reasons behind this response are cited as: Students are more motivated and enthusiastic as a result of;

1. new skills 2. new materials 3. activity based work

In the case of Junior Certificate students their level of response is attributed mainly to the fact the syllabus lays out the criteria and theme of the product to be made.**25%** of those surveyed stated that the senior groups respond best to 3-D projects. The reasons given were as follows;

have better skills and knowledge of materials;

better understanding of 3-D;
have the ability to solve more complex problems;
more patience and attention span.

Questions 5, 6 & 7 Are in relation to the resources and materials used in schools. Table 1 shows details of the results, I would however like to draw attention to some results I found of particular interest. 100% of schools use clay as a 3-D medium, however only 62.5% claim to have kilns and from this, 18.75% stated they had problems with the kilns whereby they are not in use.Table 2. gives details of how teachers rated their resources, while none reported poor levels of resources, only 12.5% rated their resources as excellent.

Question 8 Questions the dominance of 2-D in the syllabus, 68.75% stated that the Junior certificate was predominately two-dimensional, while 81.25% agreed that at senior level the art, craft and design course is prominently 2-D.

Question 9 The resulting information of which may be seen in Table 3 and it details the problems and concerns teachers had when working in 3-D. 100% stated that storage room was a problem, while 29% claimed money and resources were a concern.

Question 9, 10 & 11 In response to whether or not the curriculum should have more of an emphasis on 3-D, 43.75% stated that they would welcome the change. From this only 1 of the teachers had a ceramic speciality, 1 with a textile background, while 5 had a painting background.The reasons given were as follows;

3-D motivates and interests students;
the end products are more creative and individual;
it helps develop overall understanding of the art elements;
it improves students understanding of the design process;
improves overall skill and manipulation of materials;
it enhances visual perception and improves drawing skills;
it expands students' concepts of art

Table 1

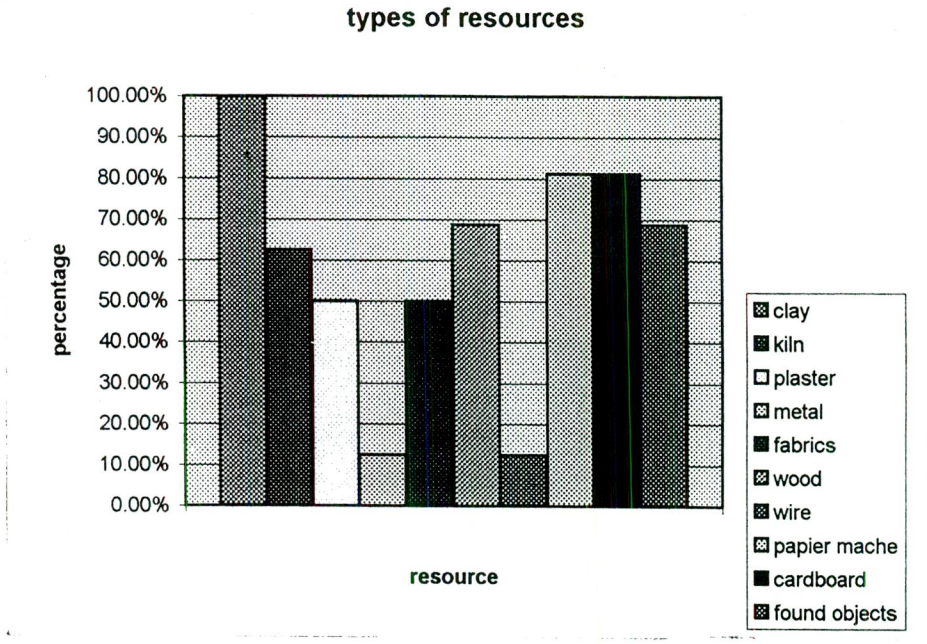


Table 2

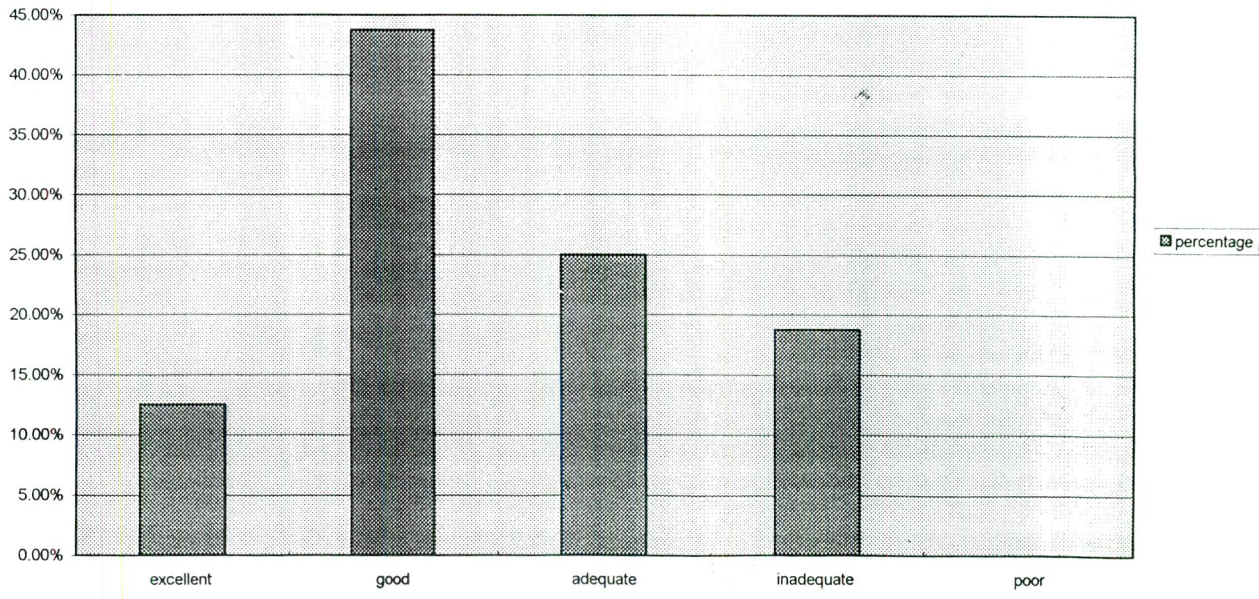
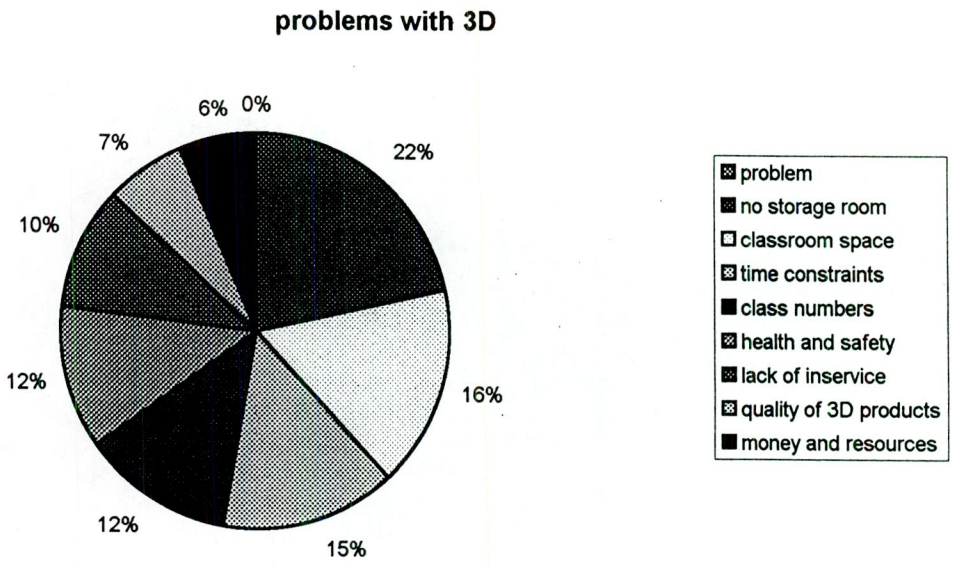


Table 3


problems with 3D
6%
0%
7%
22%
10%
16%
12%
12%
15%
problem
no storage room
classroom space
time constraints
class numbers
health and safety
lack of inservice
quality of 3D products
money and resources

On the other side of the coin 56.25%, the majority stated that they would not like to see more emphasis on 3-D. The reasons why, in this case however, do not appear to be as clear cut. The reasons given were as follows;

seems balanced as is, as their are choices available;
prefer more emphasis on drawing techniques;
lack of space and resources
too difficult to maintain with large classes;
time is too constricted;
no storage for work in progress and finished work:
would however like to see a design question based on a functional 3-D object;
not enough personal knowledge.

RESEARCH INTERVIEWS

The second questionnaire (see appendix II) was given to two teachers, one from the Dublin area the other from outside. Both of the teachers involved have over 20 years teaching experience and are aware of the general national standard in art,craft and design through the grading of both Junior Cert. and Leaving Cert. One has a specialist area of print, while the other specialised in painting and drawing. While neither have a 3-D background both can boost a relatively high standard in the 3-D output of their classes. While there are a number of reasons for this success, the major one would involve the fact that both stress a developmental approach to materials, techniques, processes and understanding. This approach is one that is recognised by The National Curriculum. While both these teachers work according to the Irish syllabus, they have developed their own system of progression for their students. Labelling them teacher number 1 and 2 respectively I will detail their responses to the questionnaire. Neither of theses two responses were taken into consideration when formulating the results of the first questionnaire.

In response to the question of whether the art, craft and design course in predominantly 2-D, both teachers stated that at both levels (junior and senior) the courses are predominantly 2-D. With the dominance of 2-D in the syllabus, the questions of how and which students, respond to 3-D is important in terms of assessing its position in the syllabus. Some insight to these questions has arisen in the previous questionnaire and will to some extent be developed on in evaluating the answers and opinions given in the second questionnaire.

When asked to compare the standard of 2-D to 3-D in the Junior Cert.the Junior Cert." has improved over the years, but its still not of the same standard", while at Leaving Cert. "there is next to no 3-D done, (as) the time given is insane". Teacher 2 stated that in the Junior Cert. "they are generally similar" (however it was noted that some gaps do appear). At Leaving Cert. Teacher 2 stated that, there is very little 3-D work although what exists is excellent.

In terms of students' response to 3-D projects, Teacher 1 claimed that 1st and 5th year respond best. 1st year "because it is something new". 5th year because "they are willing to spend more time, they also have a better understanding (of 3-D)" Teacher 2 claimed that 5th and 6th years respond best as "they have more skill and patience, they use their own initiative more and make better design choices".

One of the major problems I was expecting to find in relation to 3-D in schools was the lack of resources. Stemming from the first questionnaire I found that, in general while some problems arise, was that the schools participating in the questionnaire had relatively adequate resources as regards materials, whether this is the case nation-wide is questionable. However one of the major problems that was identified was the lack of space and storage facilities. 3-D at its most basic is about space, and having space is one of the most important resource needed when working in terms of 3-D.

Many problems arise as a result of a lack of space, health and safety and the possibility of students work getting damaged in progress or when completed. The difficulty of combining 3-D and large class numbers could be lessened by having an adequately laidout classroom with sufficient space to cope with the numbers.

In answer to the question of whether the standard of resources had a reflection on the standard of 3-D work.Teacher 1 stated that

> "I previously used all sorts of materials but now I just use clay. Focusing on one material means that by 5th and 6th year students are producing quite sophisticated pieces with confidence."

This answer suggests that a variety of materials are not necessary in achieving a high standard of 3-D, development of skills and techniques is more important. This teachers chose to only use clay, a very flexible material that can offer a multitude of possibilities. I would agree with this teachers approach in terms of making skills and techniques the fundamental element in developing a students understanding of 3-D. I however would still suggest that students do need to experience different materials. In the previous questionnaire it was found that the best overall response was from junior groups, to whom the materials were new and exciting. Transferring the knowledge built up from using

previous material to a new media could provide a new and exciting challenge to a 5th or 6th year group.

Another issue arises here and that is the use of clay as a schools medium, it is arguably the best 3-D material to use, this fact been verified by the previous questionnaire and by both teachers in the second. Teacher 1 by choosing it as the only 3-d medium used and by Teacher 2 in stating that,

> "the 3-d work previous to getting a kiln and clay was quite crude and unadventerous. These new resources have greatly improved the 3-d work students do."

In the questionnaire the introduction and development of 3-D became intricately linked with clay as a medium. Both teachers introduce students to 3-D through clay. The underlying reasons for which is the flexible qualities clay has, while at the same time having restrictions that students need to follow, introducing the concepts of discipline and exploration when dealing with a media. the processes that are introduced to the students as a result are additive and constructional, and in terms of clay modelling, coiling and slab-building the chosen techniques. Techniques and skill is the main emphasis at this stage, "understanding what 3-D is "as teacher 2 suggests is also vital. In terms of student development Teacher 2 who would do two 3-D projects in first year both in the medium of clay, would then introduce a different material in second year. Teacher 1 takes the same approach in first year but fails to introduce a new media.As I have already criticised this approach, what each teacher in turn expects from seniors as a final outcome oftheir approach to 3-D is the next point of focus. Teacher 1 expects a more sculptural output, having emphasised functional products in the early stages. Teacher 2 requires a "better understanding" from senior students in conjunction with the ability to design better

products. Senior students should accordingly expand and challenge their techniques, accumulating in a higher quality of finish.

The processes both teachers expect their students to be sufficient in are as before, Teacher 2 stating however that students "should be able to choose the appropriate materials and techniques depending on their designs". It was noted also that subtractive projects would only be embarked on with a particularly mature and talented class. This point is of particular relevance when looking at the Junior Certificate syllabus. It includes the subtractive process as one that students should explore. The health and safety aspects of this method should be stressed as well as the fact that the level of understanding of form would need to be quite advanced to under take such a task. The syllabus does not allow the time for this to be developed, even at Leaving Cert. standard.In criticism of the Junior Cert. the inclusion of the subtractive method is too idealistic and therefore unrealistic and also to some extend ignorant of the practical implications using a subtractive method entails.

CHAPTER 4

CLASSROOM APPLICATION

The classroom application of 3-D is quite practical, however consideration needs to be taken to a number of factors. In no particular order those I see as relevant are; students' abilities and students previous knowledge and understanding, in that these influence the decisions of materials, processes and techniques, the design process, the time needed and the product outcome. The physical restrictions and health and safety are also issues that need to be explored.

To put these into context I will refer to my situation. To begin I taught my schemes in an all girls' school to a first year group of thirty and a fifth year group of seventeen. The school is equipped with one long narrow classroom, which at a squeeze seat 30 first year students. The implications of this are that the product needs to be of a scale suitable to make the project manageable and also in terms of providing sufficient materials. As the number of fifth year students is considerably less, more scope is available to produce larger scaled work. There are many differences in these schemes in relation to the approach and despite other factors they primarily stem from the fact that I am deal with two different age groups with two different levels of ability, one which has had previous experience with 3-D and the other has had a more limited exposure.

The scheme I will look at first is that which concerns the first year group.

The aim of which is as follows;

to introduce 3-D form and relief through manipulating the

qualities of clay using the 'shoe box' as a theme.

Students have explored, in a previous scheme various art elements in relation to a shoe, which accumulated in the production of a lino print. Due to the impressionable qualities of clay this print will be used in the creation of ceramic five sided box, (see illst.1) thus bring in the previous art elements' students had an opportunity to explore. The basic design of the box is uniform in that they all contain the following features or requirements;

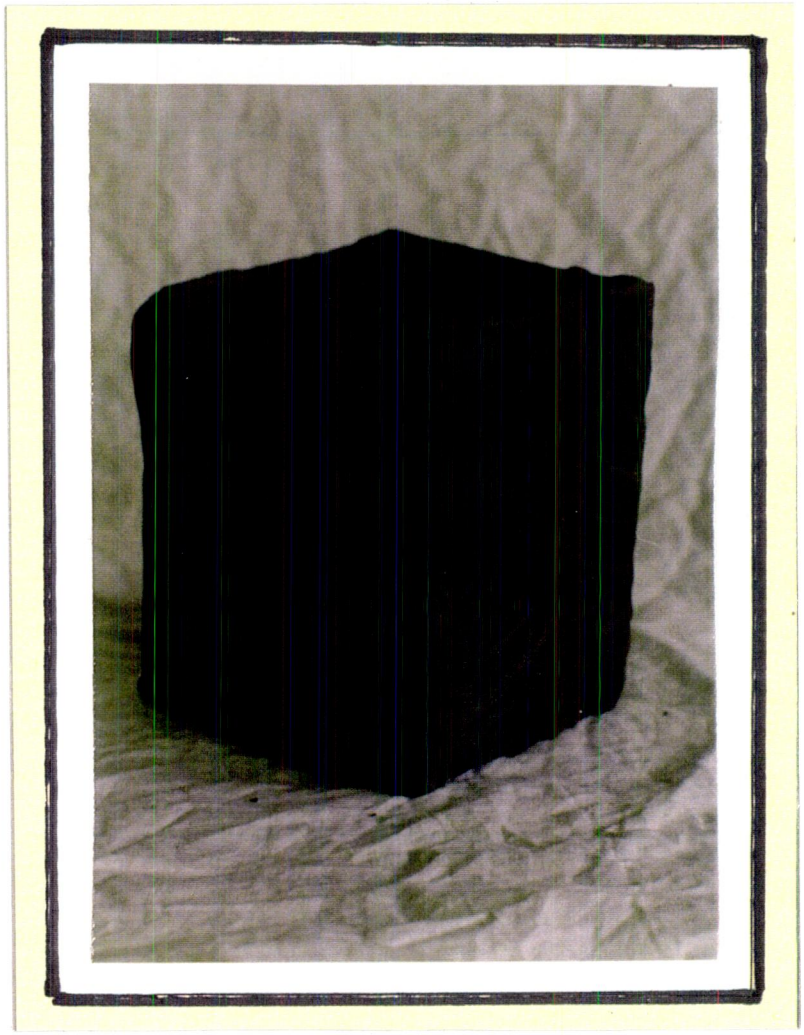
Two sides of the box must show an understanding and application of raised relief form, while the alternate sides must display impressed relief form. The dimensions of the boxes are also uniform in that they measure 12'x10' with a base measuring 10'x10'. The design for the boxes must be 3-D maquettes (illst.2) and show the intention of relief form. The introduction of a maquette at this stage is an important one. It allows students to realise their end product in the same dimensions they are aiming towards. In doing so it gives students a sense of scale and a clear vision as to the structure of their end product. It can also have motivational aspects to the student whom a first sight finds the project too challenging, in that using paper construction means that students achieve some success in a more immediate fashion. Giving students such criterion makes each stage comprehensible and understandable, leaving students to put their concentrated efforts in coming to terms with the new material of clay and the techniques and processes involved. (illst.3)

How all this evolves step by step may be seen by looking at the objectives of each lesson and the tasks' in which students are expected to engage.(see Appendix III)

While these provide an outline of what was involved in the scheme it is also appropriate to note that at all stages' students were introduced to the work of other artists in related areas and thus developing an appreciation of other influences. Support studies by Raymond Mason, Richard Shaw, Marilyn Levine (illst.4), Paul Grooms and Ancient Egyptian art where used to this effect.

All this in combination gave this group of first year students a good introduction to 3-D, one that has allowed many options for progression. The test of whether this project has broader implications on the students overall ability and understanding of art, craft and design is one that needs to examined, unfortunately however this can not be realised in the limited time frame this dissertation adheres to.

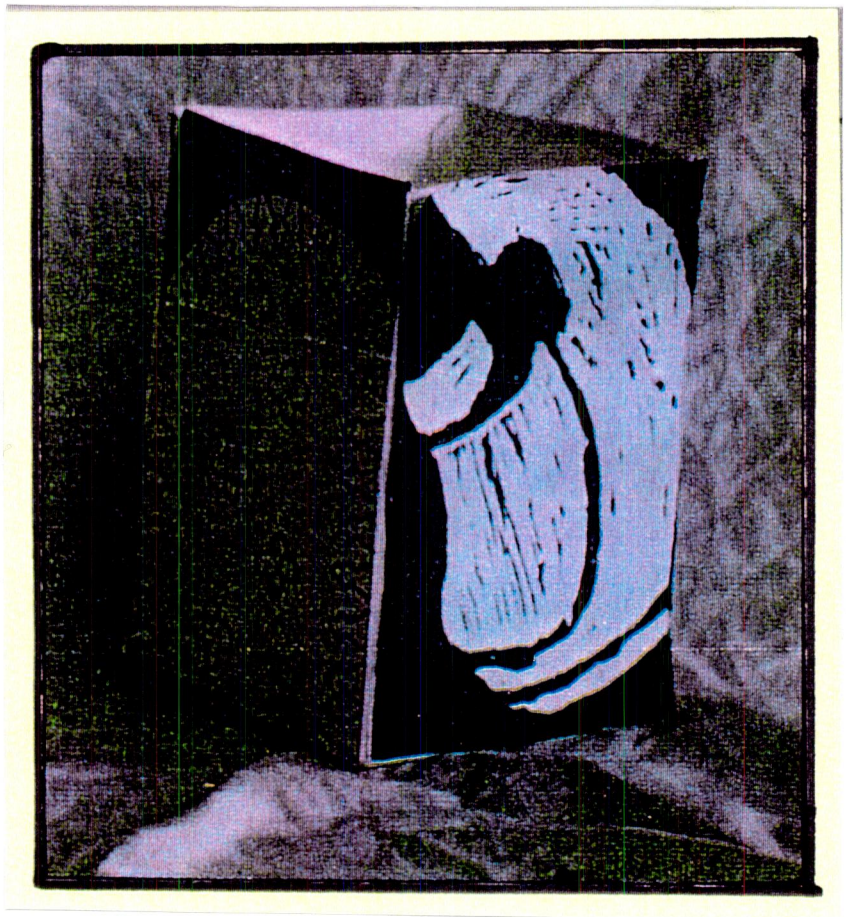
ILLUSTRATION 1



"SHOE BOX" Ceramic 10'x12'

Students work (end product)

ILLUSTRATION 2



MAQUETTE DESIGN (Paper

Student Work

ILLUSTRATION 3

STUDENTS AT WORK

Dealing with clay

ILLUSTRATION 4

MARILYN LEVINE

Cup, 1978

Ceramic, 5'

SCHEME 2

This scheme is aimed at a Fifth Year group of students the aim of which is more complex than the previous scheme allowing 3-D to be a vehicle to other educational aims. The aim is as follows;

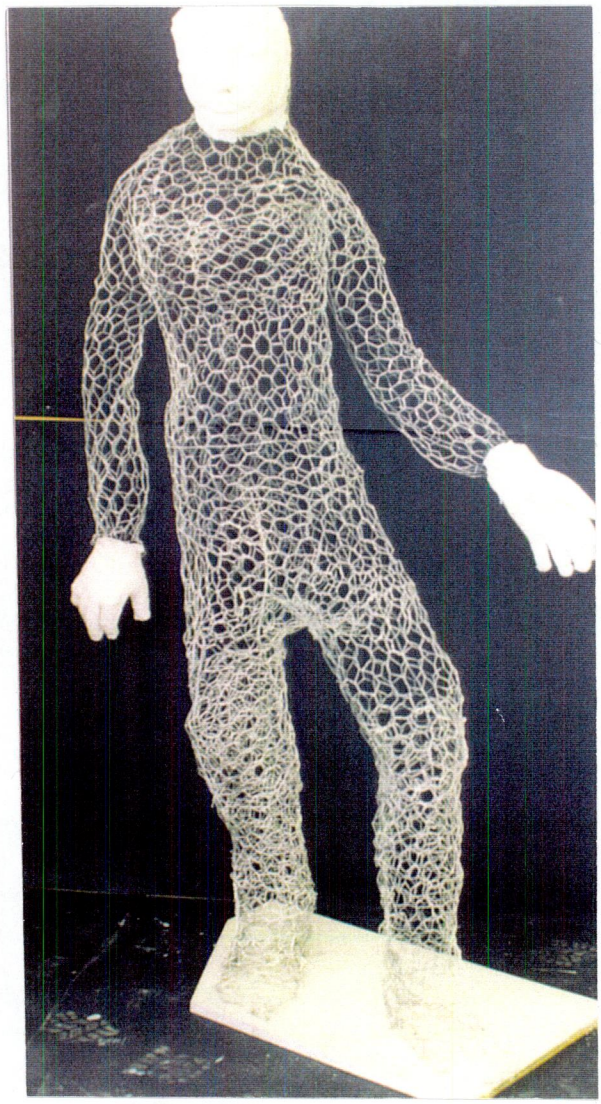
To encourage collaboration through group work in exploring movement, balance, and expressive gesture in the figure, through the construction of a life size figurative sculpture. The materials used in this project are wire and plaster, the use of which requires a greater level of responsibility and skill. The health and safety aspects were of consideration as a result.

In explaination of the aim this project basically entails the construction of life size figurative sculptures, (illst.5) which are made by moulding wire around the students' physical form and constructing accordingly (illst.6). The introduction of plaster was to allow for a contrast to be made on the student's behalf, to two different materials that have different outcomes, while using the same process of moulding.(illst.7) This is a subtly that is an advancement of the first years' exploration of clay, in terms of understanding materials. The exploration of the expressive figure allows students to develop their expressive needs while working in the constraints of their own level of skill and understanding, the restrictions of materials and processes, the restriction of form that the human body encompasses, as well as the need to create a structure that can support itself and remain balanced. All this is as the suggests is done in groups whereby all decisions are made in a collective fashion, allowing for students to analyse and evaluate their work. The structure of the scheme is one of modules and this was so designed, in order to

achieve a similar effect to that, the making, of a paper maquette design had for the first years. Primarily to allow students to see the units needed for construction of their sculptures without been daunted by the task.

The scheme of progress began with an exploration of the figure through drawing, this exploration ran the course of four weeks. Drawing the figure in terms of proportion, (illst. 9) structure, balance and expressive movement (illst.8) Throughout the drawing stage students also had the opportunity to explore a variety of drawing media, pencil, charcoal and paint. Drawing was again introduced a various stages,to examine the portrait and again the hands. (illsts.10&11) It is at this point I would like to recall a claim made by teachers in the previous chapter, that working in 3-D helps improve students drawing ability. Illustration 12 illustrates a drawing completed at a later stage in the project, following the the construction of the body of the sculpture. This drawing was completed by the same student who produced the drawing which can be seen in illusrtration 9. By comparision it can be said that improvements are indeed in evidence.

ILLUSTRATION 5



'DANCE' Mixed media

Completed Students Work

ILLUSTRATION 6

WORK IN PROGRESS

Moulding The Wire.

ILLUSTRATION 7

WORK IN PROGRESS

Moulding The Face In Plaster

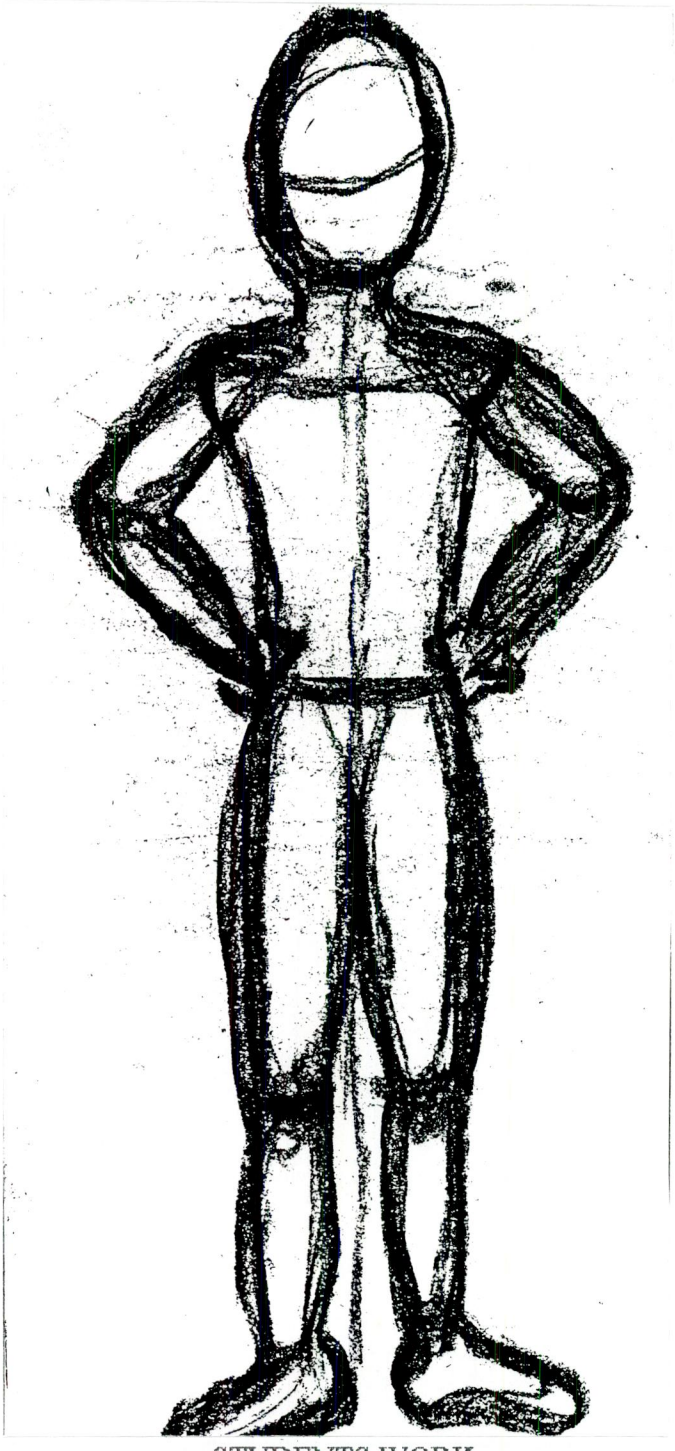
ILLUSTRATION 8

STUDENTS WORK

Drawing no. 1

Expressive Gesture

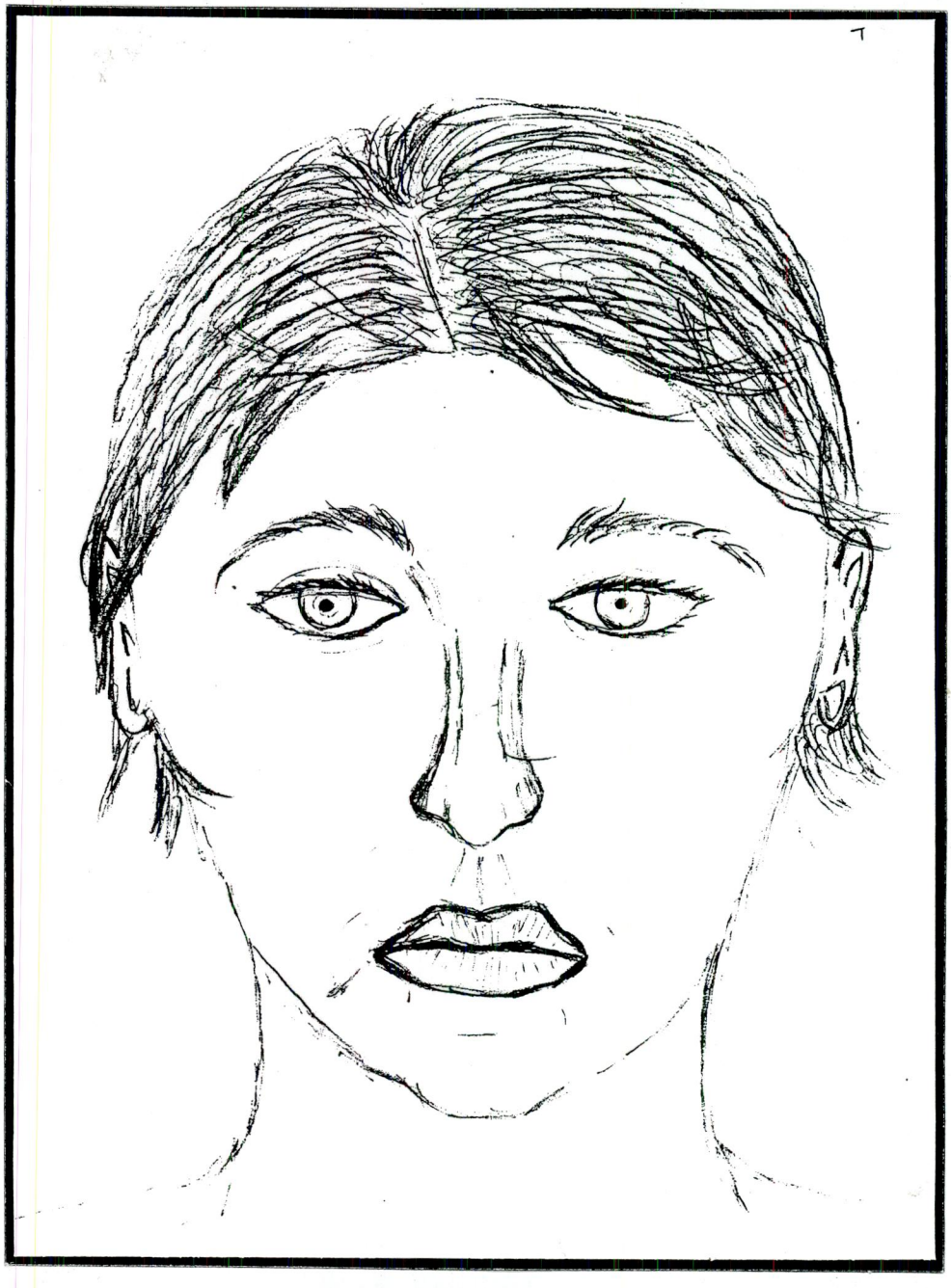
ILLUSTRATION 9



STUDENTS WORK

Drawing no. 2

ILLUSTRATION 10

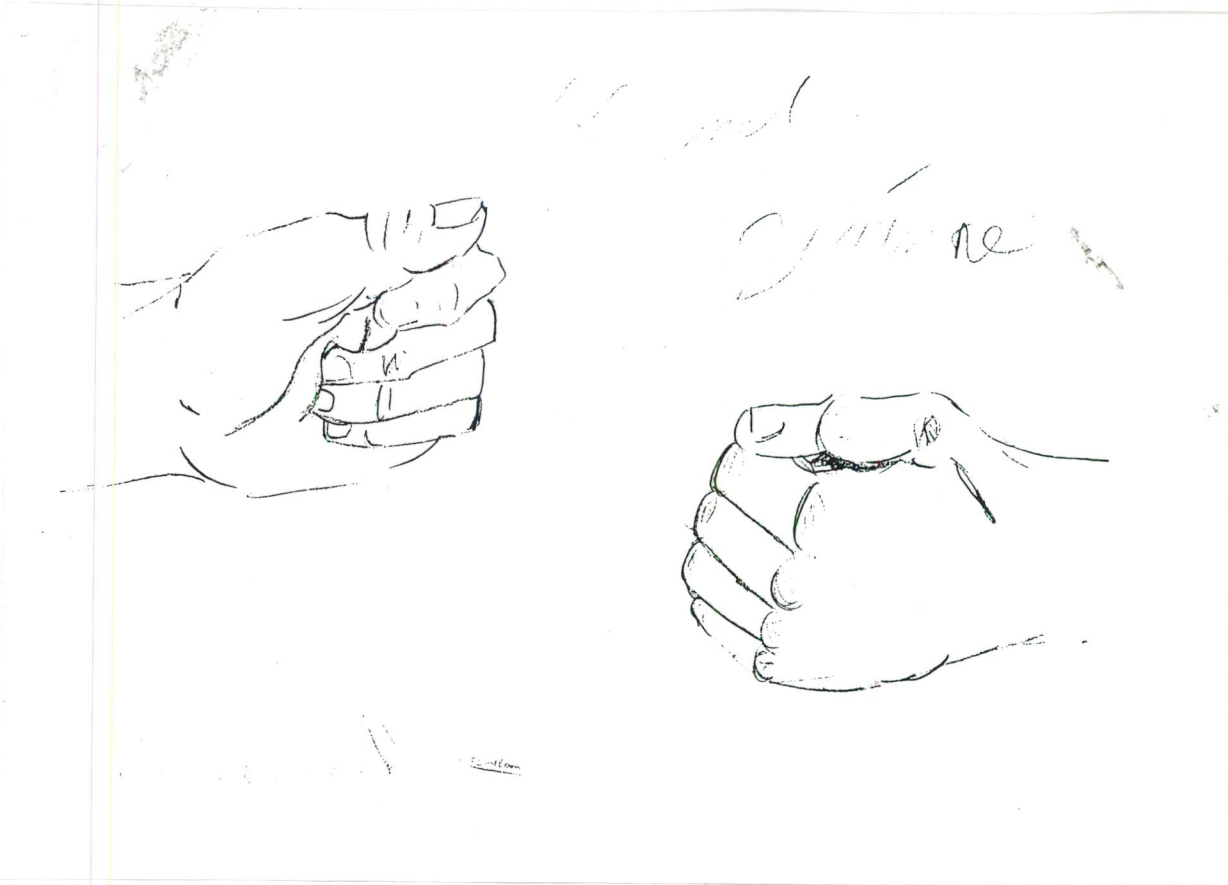


STUDENTS WORK

Drawing no. 3

Portrait

ILLUSTRATION 11

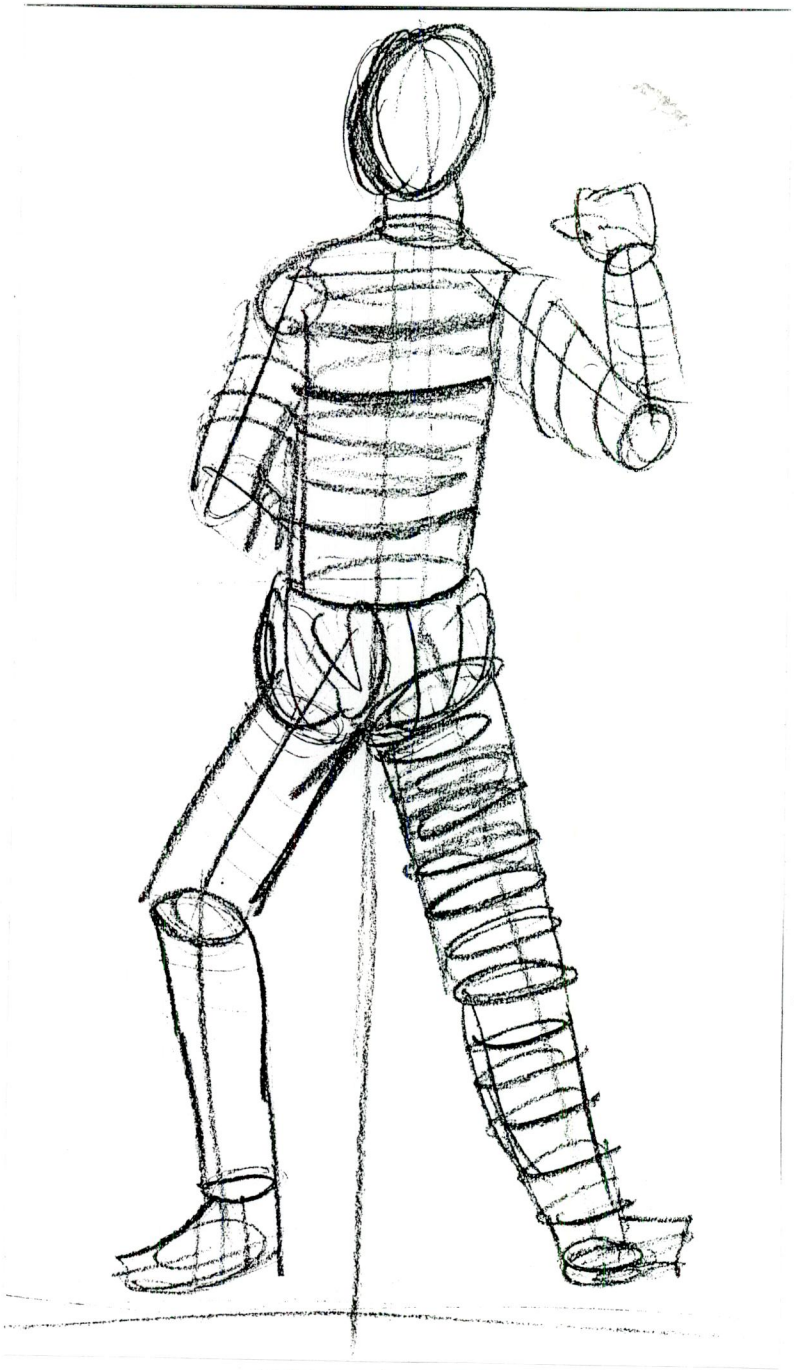


STUDENTS WORK

Drawing no.4

Hands

ILLUSTRATION 12



STUDENTS WORK

Drawing no. 5

Comparative, progressive example.

CONCLUSION

In conclusion this dissertation provides for more questions than answers, however throughout the course of the discussion and research, some questions have been approached and some answers suggested. The most elementary question posed was "what is meant be the term 3-D ?" In providing an array of terms, materials and methods of making, we are given a clearer understanding of possible approaches in the classroom and the variety of learning experiences and terminology which should be addressed. As the interview with the two teachers in chapter three suggests, learning about 3-D and gaining successful outcomes, is achieved through going beyond the process of just making and becoming sufficient in methods and materials. While it is on the other hand stressed, that the introduction of new materials and techniques provides for motivation and a new challenge, students at some stage need to experience a level of success and quality of finish. It is only through exposure to materials and making, that this can be done and thus is vital at the earlier stages in learning.

As chapter two suggests, this early exposure is achieved within the British National Curriculum at primary school level, while in Ireland, students realistically can only begin concentrated exposure at secondary level. Chapter two outlines the syllabus, the vehicle through which this exposure takes its context, however as approached in chapters three and four the situated context of the classroom is where a more in-depth view can be taken. The syllabus guidelines and the reality appear to have some discrepancies. Unless a teacher has a clear understanding of what to expect and the progression students can make

within the limited time available, these discrepancies are accepted and remain unchallenged. The need for a teacher to establish their own system of progression was explored through the outlining of the approach two teachers (cpt. 3) with considerable experience have taken. It is only through their experience, that the understanding of the practicalities of resources, feasibility and space has been tackled and overcome. There is a need I feel for a greater awareness for the value and possibilities 3-D art, craft and design has to offer, and it is only through this level of awareness that teachers will begin to realise the problems involved and the solutions to overcome them. The current syllabus does not give teachers the scope in which become aware of the possibilities and problems, and therefore it is only through experience gained through time that this occurs. I hope that my own implementation of 3-D within the classroom (chpt.4) can in some way give an example and possibly some solutions.

APPENDIX I

QUESTIONNAIRE 1

DEAR TEACHER,

I am a fourth year Education student at the National College of Art and Design As part of my degree dissertation I am carrying out a survey to assess the role of 3-D work in the Irish second level curriculum. In doing this I am hoping to formulate a programme for improving the role and quality of 3-D work in the curriculum. I would be grateful if you could fill out the following questionnaires. Please write "not applicable" if you feel a question does not apply to your situation. If you have any suggestions, queries or comments feel free to contact me. With many thanks for your help in this matter.

Catherine Morton
56 Thomas St.,
Dublin 8
Phone: (01) 4546372

IN WHICH OF THE FOLLOWING AREAS DO YOU SPECIALISE?

PAINTING TEXTILES SCULPTURE OTHER

GRAPHICS CRAFTS CERAMICS

IF OTHER PLEASE SPECIFY -

HOW MANY 3-D PROJECTS DO YOU COMPLETE WITH THE FOLLOWING YEAR GROUPS EACH YEAR. HOW LONG DO YOU SPEND ON EACH PROJECT. PLEASE INDICATE TIME IN BRACKETS.

1 ST YEAR 2ND YEAR JUNIOR CERT.

TRANSITION YEAR 5TH YEAR LEAVING CERT.

LEAVING CERT. APPLIED YR.1 YR. 2

WHICH PUPILS RESPOND BEST TO 3-D PROJECTS?

WHY ARE 3-D PROJECTS PARTICULARLY SUCCESSFUL/POPULAR WITH THIS GROUP?

WHICH 3-D RESOURCES DO YOU HAVE AT YOUR SCHOOL?

CLAY WIRE PAPIER MACHE PLASTER CARDBOARD

METAL KILN FABRICS FOUND MATERIALS WOOD

HOW WOULD YOU GENERALLY RATE YOUR RESOURCES?

EXCELLENT GOOD ADEQUATE INADEQUATE POOR

ARE THERE RESOURCES AT YOUR DISPOSAL THAT YOU DO NOT USE OR HAVE DIFFICULTY IN USING?

DO YOU THINK THAT THE ART, CRAFT AND DESIGN COURSE IS PREDOMINANTLY TWO DIMENSIONAL?

JUNIOR CYCLE YES/NO SENIOR CYCLE YES/NO

ARE THERE PROBLEMS AND CONCERNS IN WORKING WITH 3-D? PLEASE GIVE DETAILS

WOULD YOU LIKE TO SEE A GREATER EMPHASIS ON 3-D WORK IN THE CURRICULUM?

IF YES COULD YOU EXPLAIN WHY?

IF NO COULD YOU EXPLAIN WHY NOT?

APPENDIX II

QUESTIONNAIRE 2

QUESTIONNAIRE 2

DEAR TEACHER,

I am a fourth year Education student at the National College of Art and Design As part of my degree dissertation I am carrying out a survey to assess the role of 3-D work in the Irish second level curriculum. In doing this I am hoping to formulate a programme for improving the role and quality of 3-D work in the curriculum. I would be grateful if you could fill out the following questionnaires. Please write "not applicable" if you feel a question does not apply to your situation. If you have any suggestions, queries or comments feel free to contact me. With many thanks for your help in this matter.

Catherine Morton
56 Thomas St.,
Dublin 8
Phone: (01) 4546372

HOW MANY YEARS HAVE YOU BEEN TEACHING? 0-5
5-10
10-20
OVER 20

ARE YOU AWARE OF THE GENERAL NATIONAL STANDARD IN ART, CRAFT AND DESIGN? HOW HAVE YOU GAINED THIS EXPERIENCE?

HOW WOULD YOU COMPARE THE STANDARD OF 3-D WORK IN COMPARISON TO 2-D?

JUNIOR CERTIFICATE;

LEAVING CERTIFICATE;

DO YOU THINK THAT THE ART, CRAFT AND DESIGN COURSE IS PREDOMINANTLY TWO DIMENSIONAL?

JUNIOR CYCLE YES/NO SENIOR CYCLE YES/NO

IN WHICH OF THE FOLLOWING AREAS DO YOU SPECIALISE?

PAINTING TEXTILES SCULPTURE OTHER

GRAPHICS CRAFTS CERAMICS

IF OTHER PLEASE SPECIFY -

HOW MANY 3-D PROJECTS DO YOU COMPLETE WITH THE FOLLOWING YEAR GROUPS EACH YEAR. HOW LONG DO YOU SPEND ON EACH PROJECT. PLEASE INDICATE TIME IN BRACKETS.

1 ST YEAR 2ND YEAR JUNIOR CERT.

TRANSITION YEAR 5TH YEAR LEAVING CERT.

LEAVING CERT. APPLIED YR.1 YR. 2

WHICH PUPILS RESPOND BEST TO 3-D PROJECTS?

WHY ARE 3-D PROJECTS PARTICULARLY SUCCESSFUL/POPULAR WITH THIS GROUP?

WHICH 3-D RESOURCES DO YOU HAVE AT YOUR SCHOOL?

CLAY WIRE PAPIER MACHE PLASTER CARDBOARD METAL

KILN FABRICS FOUND MATERIALS WOOD

HOW WOULD YOU GENERALLY RATE YOUR RESOURCES?

EXCELLENT GOOD ADEQUATE INADEQUATE POOR

ARE THERE RESOURCES AT YOUR DISPOSAL THAT YOU DO NOT USE OR HAVE DIFFICULTY IN USING?

DO YOU FEEL THE STANDARD OF RESOURCES REFLECTS THE STANDARD OF 3-D WORK? EXPLAIN YOUR ANSWER?

WHICH OF THE ABOVE LISTED MATERIALS WOULD YOU INTRODUCE IN 1ST YEAR?

WHY WOULD YOU USE THOSE PARTICULAR MATERIALS?

WHICH OF THE 3-D PROCESSES ARE YOU MOST LIKELY TO USE IN 1ST YR.

WHAT WOULD YOU HOPE TO ACHIEVE WITH A 1ST YEAR PROJECT?

AT WHAT STAGE WOULD YOU INTRODUCE THE SAME GROUP TO A DIFFERENT MATERIAL?

AT WHAT STAGE WOULD YOU INTRODUCE A DIFFERENT PROCESS OR TECHNIQUE?

WHAT LEVEL OF DEVELOPMENT WOULD YOU EXPECT FROM A SENIOR GROUP?

WHAT PROCESSES, TECHNIQUES AND MATERIALS WOULD YOU EXPECT THEM TO BE ABLE TO USE?

WHAT WOULD YOU SEE AS THE MOST IMPORTANT ASPECTS WHEN TEACHING 3-D?

WHAT EDUCATIONAL VALUE DO YOU ATTACH TO 3-D?

WHAT WOULD YOU SEE AS THE PROBLEMS AND CONCERNS WHEN WORKING IN 3-D?

DO YOU THINK THEY AFFECT THE STANDARD OF WORK?

WOULD YOU LIKE TO SEE A GREATER EMPHASIS ON 3-D WORK IN THE CURRICULUM?

IF YES COULD YOU EXPLAIN WHY?

IF NO COULD YOU EXPLAIN WHY NOT?

APPENDIX III

CHAPTER 4

OBJECTIVE AND TASK OUTLINES FOR CLASSROOM APPLICATION

AS APPLIED TO SCHEMES 1 AND 2

SCHEME 1

LESSON 1

OBJECTIVES:
To create an understanding of the relationship between shape and form.

To introduce relief as a way of showing form.

To further develop analytical and observation skills.

TASK:
Identify 3 different surface levels of depth within a shoe. Draw them, indicting the levels using different weights of pencil or different shades of one pencil in respect to, the further away the level the darker it will be.

LESSON 2

OBJECTIVES:
To further develop an understanding of the relationship between shape and form;

To advance an understanding of form and 3-D;

To develop 3-D design skills;

To introduce skills in paper manipulation and 3-D construction.

TASK:
Draw a plan template for a box measuring 10'x12' which has a 10'x10' base;

Use previous deigns to indicate the relief sides;

Cut the template and construct a paper box, creating a 3-D design.

LESSON 3 & 4

OBJECTIVES:
To reinforce an understanding of relief form;
To further develop an understanding of the relationship between shape and form;
To introduce clay as a medium;
To develop manipulation and modelling skills with clay.

TASK:
Roll out a slab of clay of approximately 1cm thick, use slats as guidelines;

Cut out rectangle from this that measures 10'x12';

Use excess clay to cut out required shapes to create relief or roll out more clay as required;

Starting at the lowest level attach the shapes using slip;

Build up the layers to the highest level of relief.

LESSON 5

OBJECTIVES:
To reinforce an understanding of relief form;

To develop students understanding of terminology;

To create an awareness of the malleable qualities of clay;

To further develop skills in the manipulation and modelling of clay.

TASK:
Roll out two slabs of clay and cut, according to previous guidelines;

Impress the lino block from the previous project into the clay;

Roll out the base slab according to measurements.

LESSON 6

OBJECTIVES:
To advance an understanding of form and 3-D;

To further develop students understanding of terminology;

To create an awareness of the constructional qualities of clay;

To further develop skills in the manipulation and modelling of clay.

TASK:
Using the paper maquette design as a guide and the previous work construct a clay box;

Make sure the sides to be joined are cross-hatched and secured with slip:

Use modelling tools to define the joins creating a finish.

SCHEME 2

LESSON 1, 2, 3 & 4

OBJECTIVES:
To create an understanding of line and form;

To introduce the proportions and scale of the figure;

To introduce gesture, movement and balance in the figure;

To develop an appreciation of sculpture design;

To develop observation and life drawing skills;

TASK:
Assess each pose and establish the central line of balance.

Measure the figure in 'head' units marking off each relevant point.

Determine the angles of the hips, head, shoulders, head and knees' etc, Indicate these angles.

With these guidelines draw the form of the figure.

The structure of the above tasks changed emphasis over the course of the four weeks and they took the form of a variety of drawing exercises such as using the non- writing hand to draw, not looking at the page, as well as time limitations. A variety of poses were also captured through the use of different media, paint, pencil and charcoal.

LESSON 5, 6 & 7

OBJECTIVES:
To further develop an understanding of form and the structure of the human figure;

To introduce wire construction techniques and skills;

To introduce the qualities of wire as a medium;

To develop an appreciation of sculpture;

TASK:
Using a model to mould from, define the figure by moulding the body in wire.

Take construction into consideration and mould the appropriate parts in sections, joining them as you progress.

Start at the feet and progress up wards.

LESSON 8 & 9

OBJECTIVES:
To create an awareness and understanding of line and its ability to describe shapes of the face;

To create an understanding of form as described by tone.

To develop a knowledge of the proportions of the portrait;

To further develop observation and drawing skills;

TASK:
Using a mirror observe your own face in relation to the shapes and forms it contains.

Using firstly line and then tones produce two portraits.

pay particular attention to the proportions and relationship of one feature to another.

LESSON 10

OBJECTIVES:
To further develop an understanding of the form of the face;

To introduce students to the media of plaster as a way of achieving form through moulding;

To further develop an appreciation of sculpture.

TASK:
Prepare the model and materials;

Apply the plaster to the face, defining the features as you progress;

Wait for the plaster to dry and remove.

LESSON 11 & 12

These lessons follow the same structure as lessons 8, 9 and 10, in this case however the objectives and tasks are in relation to the hands. I found students needed very little input from me as they easily applied their previous knowledge to the creation to a different form. It is this evidence of progression and understanding that will inevitably feed into other projects these students undertake in the future.

LESSON 13 & 14

OBJECTIVES:
To create an awareness of structure and support as vital concerns in a sculpture;

To encourage visual awareness and broadening of visual sources;

To encourage refinement of a product through critical awareness;

TASK:
Analysis the sculptures in terms of how they could be supported and balanced making them free-standing structures;

Draw a sketch indicating the areas that need to be supported;

Attach the base of the sculptures to a plinth;

Use a stronger strength of wire to make the sculpture more structurally sound;

Refine the overall appearance of the sculpture.

SELECTED BIBLIOGRAPHY

CHAPTER 1

Burke, Edmund. *Becoming Human Through Art.* New York: Prentice Hall, Inc., 1970

Chapman, Laura. *Approaches to Art in Education.* New York: Harcourt Brace Jovanovich,Inc.,1978

Eisner, Elliot. *Educating Artistic Vision.* Stanford: Macmillan Co.,1997.

Gombrich, E.H. *The Story Of Art.* London: Phaidon Press Ltd., 1989

Larkin, Diarmuid. *Art Learning and Teaching.* Dublin: Wolfhound Press,1981

Nobel, Agnes. *Educating Through Art.* Edinburgh: Floris Books, 1996

Nuggents, Patrick. *What Should We Teach? How Should We Teach It?.* Hants: Wilwood House Ltd., 1988

Robertson, Seonaid. *Creative Art In Education.* London: Routledge and Kegan Ltd., 1952

Wolchonok, Louis. *The Art Of Three-Dimensional Design.* New York: Dover Publications, 1959.

CHAPTER 2

Clement, Robert. *The Art Teachers Handbook, Second Edition*.Cheltenham: Stanley Thornes Ltd.,1993.

Read, Bill. *GCSE Art and Design Revise Guides*,Essex: Longman Group Ltd.,1988

Read, Bill. *GCSE Art and Design Coursework Guides*,Essex: Longman Group Ltd.,1989

OTHER SOURCES

The Junior Certificate Art,Craft and Design Syllabus Dublin: The Department of Education,1989.

The Junior Certificate Art, Craft and Design Guidelines for Teachers. Dublin: The National Council for Curriculum and Assessment, 1989

GCSE Art and Design Syllabus and Assessment Memorandum Belfast: Northern Ireland Council for the Curriculum, Examinations and Assessment,1999.

GCSE Art and Design Externally Set Assignment Belfast: Northern Ireland Council for the Curriculum, Examinations and Assessment,1998.