



COLAISTE NAISIUNTA EALAINE IS DEARTHA NATIONAL COLLEGE OF ART AND DESIGN FACULTY OF EDUCATION

A RATIONALE FOR THE DESIGN PROCESS

AND DESIGN HISTORY

IN TEACHING ART CRAFT AND DESIGN

A Dissertation submitted to the Faculty of Education in Candidacy for the

I

DIPLOMA FOR ART AND DESIGN TEACHERS

by

Bernie Leahy

June 1995



A RATIONALE FOR THE DESIGN PROCESS AND DESIGN HISTORY IN TEACHING ART, CRAFT AND DESIGN. BERNIE LEAHY DIP ADT JUNE 1995

A systematic approach is examined in this study, whereby students embark upon a project and bring it to its conclusion via the Design Process. Throughout, students are developing a range of skills and encountering a variety of techniques and materials.

Support studies is presented in the form of the History of Design. Students' learning relied specifically on design methodology and design history, applied to a brief, which explores solutions traditionally belonging to the categories of art and craft.

The brief was to produce a piece of Wearable Art, using a readymade garment. The projecttook place over nine weeks. It was broadly divided into four stages: drawing; research and first ideas; further research and design work; making and evaluating. There were twenty two students in the group and were of weak ability.

The aims of the project included fulfillment of the brief through a systematic design process; exploration of all art elements; encountering a range of materials and techniques; development of abilities of decision making; selection and evaluation; development of self-confidence and the ability to enjoy the work.

The results of the project are presented in the form of comment and statistically. Samples of students' work and opinion of the project is also presented. Evaluation and assessment was on going and students were self-graded.







TABLE OF CONTENTS

LIST OF FIGURES	iv
LIST OF ILLUSTRATIONS	v
ACKNOWLEDGEMENTS	vi
INTRODUCTION	vii

CHAPTER

I

Ι	DESIGN AND DESIGN EDUCATION: A REVIEW OF THE LITERATURE	1
Π	DESIGN METHODOLOGY IN THE CLASSROOM	9
III	THE RESULTS OF THE PROJECT	35
IV	CONCLUSIONS AND RECOMMENDATIONS	54

APPENDICES	60
SELECTED BIBLIOGRAPHY	63

LIST OF FIGURES

1.	The Junior Certificate Art, Craft and Design: Choice of Options	5
2.	The Brief	12
3.	The Brief continued	13
4.	The Design Process 1	23
5.	The Design Process 2	24
6.	The Design Process 3	25
7.	Student Work: The Design Process	
8.	Student Work: The Brief	40
9.	Discrepancies Between Students Self Assessment and	47
	Teachers Assessment	47
10.	Scheme of Work	51
11.	Scheme of Work continued	52

iv

LIST OF ILLUSTRATIONS

1.	Leon Bakst, Set Design For Schéhèrezade, The Ballet Russes 1910	14
2.	English Boned Corset, c.1860 English Crinoline Frame, c 1865 - 9 Victoria and Albert Musuem	15
3.	Costume Design for an Astrologer in the Ballet du Serieux et du Grotesque, French Court Ballet, 1627	16
4.	Stockings of The Mid-Ninteenth Century, with embroidered clocks and fronts and contrasting colours.	17
5.	Fishing Boat Hat, 1980 Joan Steiner	27
6.	Manhattan Collar, 1979 Joan Steiner	28
7.	Student's Perspective Drawing	21
8.	Student Filling in the Design Process sheet while working	32
9.	Student making Furniture from soft and hard materials	33
10.	Student Work., This garment shows use of unusual materials (Jelly-baby sweets for pattern) and manipulating stripes to create depth.	43
11.	Student Work: Kitchen Corner	45
12	Student work: Bedroom Hat	56

V

ACKNOWLEDGEMENTS

Thank you

Oisín and Maurice Anne Finnegan Mary Ellen Murphy Professor Iseult McCarthy

INTRODUCTION

Design awareness and design ability are intrinsic abilities in all human beings and can be developed by education.(1) The benefits of learning about design and its history go far beyond the boundaries of the Art Department. Learning through a well-planned, pupil-oriented Design Process will not only allow the student follow their own path to a solution, but will also teach them a system through which day to day responsibilities, in their lives and futures can be dealt.

A systematic approach is examined in this study, whereby students embark upon a project and bring it to its conclusion via the Design Process. Throughout, students are developing a range of skills (discussed later), and encountering a variety of situations, which call upon their concentration, ingenuity and patience, in relation to a variety of aspects of Art, Craft and Design.

Support studies is presented in the form of Design History. The study of the History of Art and the History of Design are segregated, to the point where Art History is an important part of the Art (including Crafts) Leaving Certificate Syllabus in Ireland, but Design History plays at best a vague role, and could in fact appear to be omitted, by teachers. The place of design history in the teaching of art, craft and design could be described as more tangible or accessible to students, than that of Art History.

viii

Crouch says that the history of design is an essential process within the education of art and design. Because design history has a role in developing a sense of cultural literacy (including its history and relationship with other cultures), it is necessary to study it, to develop an understanding of the nature of made objects.(2)

Any teaching of design, or the "making" of things must constantly refer to objects old and new, which are used because of their success. There is an inevitable relationship between the practical and the theoretical. Design and technology are initimately linked. The form of an object is the result of material, technology and use, and their inter-relationship.

Today's student is familiar with mass media and problem solving instruments on a very immediate basis, as part of their culture and everyday lives. Indeed, one of the objectives of the Junior Certificate Art, Craft and Design Syllabus lays down that an awareness and understanding of mass media be developed. (3)

Throughout the vast and rich historical references of design history, it was not difficult to find examples to illustrate, illuminate and enrich the learning of all elements from line to texture to composition and beyond. This was a study whereby the students' learning relied specifically on Design History and Design Methodology, applied to a brief, which explores solutions traditionally belonging to the categories of art and craft.

FOOTNOTES INTRODUCTION

- Ken Baynes, "Defining a Design Dimension of the Curriculum", in David Thistlewood ed; <u>Issues in Design Education</u>, (London: Longman, 1990) p.55 - 60.
- (2) Christopher Crouch, "Why Teach Design History?", in David Thistlewood ed; <u>Issues in Design Education</u>, (Essex:: Longman, 1990), p.46
- (3) Junior Certificate <u>Art, Craft and Design Syllabus</u>, (Dublin: Department of Education, 1992), p.3 1

CHAPTER I

DESIGN AND DESIGN EDUCATION: A REVIEW OF THE LITERATURE

Design is a human activity. All man-made things have been designed. Design is the solution of problems. A great deal of design involves time given to research by trial and error, but design can also be intuitive and spontaneous, a spark of genius.(1) Design has also been described as essentially to do with the ability to conceptualise and evaluate plans for the future.(2) Often design is not about creating something totally original, but about developing older ideas and solutions to suit new conditions.

Designing is invariably a disciplined process in which a series of stages can be identified. In brief they involve identification of a need; analysis of its qualities; researching factors that relate to them, the envisaging of various solutions and taking decisions about them; planning then making, testing, and evaluating the outcomes.(3)

Designing therefore calls into action a number of high order cognitive skills, such as analaysis where, for example in a technological setting, scientific or mathematical analysis might be called upon, decision making, application, evaluation and so on.

The five stages of design, activity, according to Barnes are: idea generation: information gathering; evaluating; modifying and making.(3) In a class situation these may need to be rearranged, or more time given to area or another depending on the student.(4) Designers must be able to imagine as real, that which can only exist in the future; and to create ways in which that thing or that design can become a tangible fact.(5) It is this vagueness which makes designing both challenging and fascinating.

Often a good design means an acceptable solution within given constraints, but there can be no absolute principles or laws for good design, according to Aylward (6), as it is a process of development and evolution. Designs can emerge from a need for change (7), in circumstances or environment, or many other types of changes.

Design education is vitally important in developing an understanding of problems and gaining experience of how and why to evaluate if the design fulfills the brief, or solves the problem.(8) A priority of good design must be to balance function and form, so that neither overpowers the other. Barnes says that this line between art and technology can become blurred when function is a factor, as it so often is the huge range of products which need designing.(9) The idea, the definition of the problem, the thinking, the planning, the reflections, the correlation of parts, is the process of design.(10)

According to Burden, design education is crucial to every child, being essential to his/her development of creativity, and ability to evaluate both problems and solutions.(11) The education of design develops an enquiring

mind and a healthy scepticism. This experience should be built into practical projects, leaving room for imaginative creativity. This includes finding out about the character and limitations, and an available variety of materials, together with appropriate levels of techniques.(12)

The process of design is concerned with the efficient examining of a given problem in a given situation; with researching (how and where); compiling information and recording the process; in analysing that information and selecting appropriate solutions. Students must be able to analyse and evaluate their results and communicate their results to others, both visually and in notes.(13)

David Thistlewood holds a strong view against what he describes as: "a default model, a fundamentally flawed model" (14) of design education, which is in practice in Britain and in most of the western world, that of a Utilitarian Model of design education. This method is more concerned with making and producing, than it is with designing things. Its methods of assessment and evaluation favours production and especially emphasises finished presentation. Children are expected to incorporate the responses of a fickle public, and assume to identify needs, and allow elements of a marketing to condition their design. As a result, it is a method which is exploitative of needs and materials, taking possession of technology. The principle purpose, therefore, is utilitarian. This is the system which Thistlewood fears will become the system of Ireland. A system of design which favours generalised goods; not tailormade or adapted for specific needs, but necessitated by industry which produces products and goods which have a given life-span and then becomes obsolete - a throw-away culture.

The Junior Certificate Syllabus outlines that art, craft and design are three inter-dependent disciplines, but that 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.(15)

This is only by means of introduction, however, it does not imply a great void or segregation between all three areas. Design ability is something everyone possesses to some degree, requiring some amount of internal creativity.(16) It is not possible for everyone to be a great designer, but instead students are educated to be consumers, not designers. This keeps any skill base low on quality, which obviously produces a lack of excellence, geared to an opportunistic and exploitative, consumer-based market.

The term 'cognition' or 'cognitive thinking' includes all processes of perception, analysis, understanding and creativity and is vital in the process of design.(17) Aylward believes the natural link between thinking and feeling is designing, which must be done through a process of clear thinking about function and developing sensitivity to materials.

The Junior Certificate Syllabus for Art, Craft & Design requires one option for ordinary level, and two options for higher level to be completed, (See Figure 1).

In teaching any option, the appropriate design process, including drawing and visual, and the relevant support studies must be part of the learning situation.(19)

FIGURE 1

CHOICE OF OPTIONS FOR THE JUNIOR CERTIFICATE

Animation Art Metalwork Batik Block printmaking Bookcrafts Calligraphy Carving Computer graphics hedgerow Embroidery Fabric print Fashion design Film-making Graphic design Jewellery making Leatherwork Mixed media sculpture Modelmaking Modelling/casting Packaging

Photography Pottery/ceramics Puppetry Screenprinting Soft sculpture Strip cartooning Tapestry Theatre design Toymaking Traditional crafts (e.g. lace,

basketry etc.) Videomaking Weaving

SOURCE: The Junior Certificate: <u>Art, Craft & Design</u> Syllabus (Dublin: Department of Education, 1992) p.5.

These options cover the spectrum from Art to Craft to Design, and are dealt with through the design process, for the design process is concerned with a series and a system of decisions and evaluation, relevant to all aspects of the creative imagination, and its end results.

In addition to the core syllabus a minimum of one option for Ordinary Level, and two for Higher Level students, will be studied. The treatment of each option should reinforce and develop the core experiences.

Design education and design history, should enrich the pupil's natural ability to realise that much is in their imagination, and encourage them to seek out solutions and techniques central to their problem, which is a method to a child's everyday life.

FOOTNOTES CHAPTER I

- (1) Ian Burden, Morrison John, John Tiny Ford. <u>Design and Designing</u>, (Essex: Longman, 1988), p.78.
- (2) Richard Langdon, <u>Design Policy</u>, Vol.5 (London: Design Council, 1984), p.2.
- (3) John Mattick, "Is it Designing?, in John Eggleston ed The Best of Craft, Design and Technology (Trenthan, 1988) p.64.
- (4) Rob Barnes, <u>Art, Design and Topic Work -1</u> (London: Butler and Tanner, 1989) p.153.
- (5) Dr. David Thistlewood, <u>Design Education: a Cultural Model</u>, (Dublin: National College of Art and Design), 6/2/95.
- (6) Christopher Jones, <u>Design Methods: Seeds of Human Futures</u> (New York: Wiley, 1980) p.10.
- (7) Bernard Aylward, <u>Design Education in Schools.</u> (London: Tinling, 1973), p.45.
- (8) Burden, <u>Design and Designing</u>, p.77.
- Peter Green, <u>Design Education: Problem Solving and Visual Experience</u>, (London: Anchor Press, 1974) p.7.
- (10) Rob Barnes, Art, Design & Topic Work 8-13, p.145.
- (11) Donald M. Anderson, <u>Elements of Design</u> (Wisconsin: Molt, Rinehart and Winston, 1961) p.11.
- (12) Burden, <u>Design and Designing</u>, p.59.
- (13) Aylward, Design Education in Schools, p.31.
- (14) <u>Design Council, Design Education at Secondary Level</u>, (London: Design Council, 1987) p.6.
- (15) <u>The Junior Certificate: Art, Craft & Design Syllabus</u> (Dublin: An Roinn Oircheachas, 1992) p.2.
- (16) Burden, Design and Designing p.81.

(17) Langdon, <u>Design Policy Vol.5</u>, P.8.

- (18) Aylward, <u>Design Education in Schools</u>, p.5.
- (19) <u>The Junior Certificate: Art, Craft & Design Syllabus</u>, p.5.

CHAPTER II

DESIGN METHODOLOGY IN THE CLASSROOM

Design evolves through continual examination and research, and the capacity to evaluate and produce, in response to a given problem. Three different design methods as described by Jones are:

- Creativity
- Rationality
- Control over the Design Process

From the first, Jones says the designer achieves his results from a intuitive leap of creativity. The second viewpoint is one whereby the designer's primary concern pertains to reason. The third, that of control, is a systematic approach, applicable and adaptable to all possible situations. Jones says this latter is the one which leads us most directly to the practical value of design and design methods.(1) This method he sees as a combination of the first two, but no method is complete in itself. The personal expression and technique of the designer is what decides on the actual mixture of creativity and rationality. Each design process must be whatever is required by the activator, to enable success. Design is a combination of imagination and technique. According to Burden, observational, descriptive, analytical, critical and presentation skills are required throughout any study of design methodology.(2)



Brainstorming and classification can be used together to solve problems as part of the design process. Jones describes brainstorming as a rationalistic way of using the imagination which gives confidence in the sharing of ideas.(3) All contributors participate freely, and criticism is not an element. Classification is a creative way of producing reason-based, rational categories. The imaginative aspect is one whereby the method of grouping is subjective. An apparent confusion of ideas, can be sorted into departments, linked by a variety of common threads. The strict enforcement of these rules combined with spontaneity is what makes this a viable method.

Whatever design process used, it must help to develop that which not know but is needed to know in order to proceed in the search of a solution. The designer or student must identify which questions need to be asked, and, thereby, plan. They must be free to develop one aspect of the problem to another seemingly unconnected aspect. The apparent formlessness of the order is irrelevant.(4)

SCHOOL BASED RESEARCH

The school based research was conducted in a South Dublin all-girls school. The fifth year group who worked on this project were of weak ability, and there were twenty-two students in the class. The group had concentration problems, were mostly of low-motivation, (with a few notable exceptions) and consequently were considered a "troublesome group". This information was required to teachers who taught them other subjects. (See Appendix 3) There was an unusally high incidence of teachers not issuing homework, or when they did, receiving either shoddy work or none at all. Consequently, the majority of course work was done in class. The subject teachers, who commented included Home Economics; English; Irish and Maths.

The project itself was not one which was an obvious candidate for examining the Design Process. The Brief instructed the student "To produce a piece of Wearable Art, using a Readymade Garment." (See Figure 2) The primary aim of this project is to illustrate that the use of a Design Process is a valid and important method of teaching any aspect of art, craft and design, and hence the brief gives scope for exploring all three aspects.

The project relied on the history of design for support studies. This provided enrichment; a source of inspiration; examples of materials and techniques (including structure and craft elements) and assistance in learning. The History of Design is often considered the poor cousin of the History of Art, if indeed it is considered at all. Throughout the course of this project it was enormously relevant and beneficial in its own right. Examples of design history shown included costume design; bustles: steel corsets; decorative stocking (1700's); mourning buttons (1830's); surreal buttons (1930's); Ballets Russes set designs; interior design (USA 1904); Knox; Morris; Bauhausian architecture and graphics. (See illustrations. 1-4)

All of the elements were explored through the historical reference to design: line, tone, shape, form composition, positive and negative shape, pattern, colour, texture, theme, and material/technique based elements. The theme of environments and corners was broad, to allow scope for creativity, but with enough constraints and guidelines that the students were not in a state of vagueness or confusion.



FIGURE 2: THE BRIEF

THE BRIEF

NAME:	
CLASS:	
DATE:	

This brief is your instructions of what to do and how to do this project. At each new stage of the project, read it again and be sure you are fulfilling the brief.

On this page, also write in ideas and notes and date them.

THE BRIEF

1 To produce a piece of WEARABLE ART, using a readymade garment.

2 THEME: ENVIRONMENTS AND CORNERS. This is what you will base all your ideas on.

3 You can use your theme in many ways, but you must have one or two SPECIAL AREAS, for example:

Colour	Composition
Pattern	Showing a picture
Texture	Showing a story
Line	Using a craft technique
Tone	Other ideas?



FIGURE 3:

THE BRIEF CONTINUED

4 The garment does NOT need to be washable or comfortable! It does NOT need to do its original job or function, when you have finished, other than be able to be worn. It will become a piece of sculpture.

5 You will be given a sheet called THE DESIGN PROCESS which explains the different stages of the project and you must put your ideas and date them, on this sheet..

6 You will also be given a HOMEWORK SHEET.

7 All of these sheets will be kept in a plastic wallet, with your name on an outside label. What you write in these wallets forms a large part of your project.

Good luck!





ILLUSTRATION 1: LEON BAKST SET DESIGN FOR SCHEHEREZADE, THE BALLETS RUSSES 1910





ILLUSTRATION 2: ENGLISH BONED CORSET, C.1860 ENGLISH CRINOLINE FRAME, C1865-9 VICTORIA AND ALBERT MUSEUM








AIMS OF THE PROJECT

The aims of the project are ambitious and far-reaching. They present an opportunity for exploring a vast array of art elements; for encountering materials and techniques; for proceeding through a process; self-assessment; and for personal development and fulfillment. The brief states that the student is to produce a piece of Wearable Art, using a readymade garment (See Figure 2: The Brief). Guidelines and restraints are explained. The aims include:

- To produce a piece of Wearable Art, by exploring building on a given structure.
- To develop the perspective illusion of space and depth through the drawing elements of line and tone. To use this information as a source for the theme: Environments and Corners.
- To develop an awareness of composition and form.
- To fulfill the Brief through a systematic Design Process. To document the process; route; techniques; materials and progress on a daily basis. To date this information and understand the reason why it is being documented.
- To allow students to develop their own understanding of the Design Process, in order that they may use it as a system of making choices and decisions effectively to overcome problems both in and outside the Art Department, in their daily lives. To explore the element of theme through this process.

To receive a basic foundation in the practical skills necessary to make a piece of wearable art. These include sewing; embroidery; beading; template-making, creating three dimensional forms using hard or soft materials, or a combination of both. Encountering materials and techniques, tools and processes; introduction to the scope of found objects. (Students used a selection of these practical skills: Each student was involved in all demonstrations, but students were encouraged to choose whichever material and technique suited their design best).

- To understand how to manipulate foreground and background with varied media and tools.
- To explore the element of theme through this process.
- To explore a variety of elements line, tone, texture, composition, theme, colour, shape, form, pattern and material/technique based elements.
- To introduce students to other artists' interpretation of a similar theme or medium.
- To develop a sensitivity towards these visual and tactile elements, in their own environment and culture. To learn how to analyse these works of art, in terms of technique, materials and theme.
- To appreciate the value, scope and relevance of the history of design to their own work.
- To develop the ability to evaluate and become aware of the importance of evaluation for personal development, as well as development within the Art, Craft and Design context.

To develop self-confidence in students and boost class morale; to have fun and enjoy the work.

THE PROJECT

Students first tasks, prior to seeing the brief, was one of primary source drawings, using corridors and rooms. (See Illustration 5) At this stage they encountered perspective, to create an illusion of space and depth. Through this they gained confidence and a body of source material, from which to work.

STAGE 1

1.	INTRODUCTION: Perspective Drawing
	Do you know what perspective means? What does 3D mean? Is a page
	2D or 3D? How could you make a page appear 3D? What does scale
	mean? How do you use it in a drawing?
2.	EXAMINING: Vanishing points in Pugin, Crystal Palace.
3.	EXPLORING: Rules of perspective, using visual aids.

- 4. BRAINSTORMING: On environments and corners.
- 5. DRAWING: Corners from imaginative sources.
- 6. **DRAWING**: Still-lifes of corners from observation.





ILLUSTRATION 7: STUDENTS PERSPECTIVE DRAWING

STAGE 2

1

INTRODUCTION: The Brief

What is a Brief? What is a Theme? What theme did you use for your Junior Certificate Project? How did you use the theme? Special Areas: What is texture? Composition? Do you remember what tone is, from your last project? Why do you think it is important to write down all your ideas? Recapitulate: What is a Brief?

2. BRAINSTORMING: On different types of clothing.

3. THE DESIGN PROCESS SHEET 1

What is a process? What is analysis? What problems might you have? Do you have any problems already? Where can you write those problems? Why write them down? Why date them?

4. SLIDE SHOW: HISTORY OF DESIGN

Discussion on each image, as to the relevance to the project. An emphasis on materials and techniques, with information on historical background.

5. FIRST IDEAS

Students now had enough information to progress to the "First Ideas" step of the Design Process. These they put on paper through drawings and written material. They were not shown other artists' interpretation of the Brief, at this early stage, as it may have given them a solution to their problem, instead of enriching their learning. This was the next stage.

FIGURE 4:

THE DESIGN PROCESS 1

THE DESIGN PROCESS

DATE NAME: CLASS:....

Here are all the stages you will go through. Take ONE STAGE at a time! Fill in all your ideas, notes and information under each heading below.

THE BRIEF

This is the first page you received. All your instructions are here. Always look back at the brief if your not sure what to do.

ANALYSIS

What exactly is required? What problems will there be? What do I have to make? What on earth is this all about ?

FIRST IDEAS

Get ALL your ideas down on paper visually, that is in drawings. These should have notes written in to explain ideas, materials, techniques, colour, texture etc....anything else? Is there more than one way of doing it? Get ALL ideas down on paper - good and bad!

FIGURE 5:

THE DESIGN PROCESS 2

THE DESIGN PROCESS

DATE

NAME:	
CLASS:.	

RESEARCH

This is looking at work which has already been done, by others. You want to find out:: HOW was it done? WHAT method/technique/materials were used? WHO did what, ie which artists?

FINALISING IDEAS

Sorting out the best ideas from Stage 3. What should be used as well as what should not be used. What will work best, for this brief? Perhaps combining a few ideas.

FURTHER RESEARCH

Do you need to make a sample or PROTOTYPE? TEST OUT a technique? HOW do I do it? eg. stitchery/embroidery/weaving/painting etc...WHAT do I need?

COLLECTING

Work this one out before you need it! WHAT do I need?WHERE will I get it? Will it cost me? (Be sure to date it, each time.)

FIGURE 6:

THE DESIGN PROCESS 3

THE DESIGN PROCESS

DATE

NAME: CLASS:....

MAKING YOUR IDEA

Did you have any problems? How did you solve them? This will be filled in as you are making your piece of wearable art.

FINISHING

Do you need to change any of your original design, at all? Why? How did you change it?

EVALUATION

DOES IT FULFILL THE BRIEF? Is there anything you would do differently to it? Change it? Do you like it and why?

STAGE 3

- 1. **RECAPITULATION**: The Brief
- 2. **REITERATION**: How and why to document stages.
- 3. SLIDE SHOW: Wearable Art.

What could the theme of this be? What do you think the artist was thinking of? How was this made/done/applied/attached etc? If you picked this type of garment for your project, how would you apply your theme or idea? What materials would you use? What techniques? (Are you taking notes on any ideas now?) What is applique? What is embroidery? What problems might you have, attaching leather or wire to a garment? How would you solve them? Where would you document these problems and solutions? The slides shown included Joan Steiner; Lannie Hart; Priscilla Snyder; Katherine Westphal; Mario Rivoli; Jo Ellen Trilling; Mark Mahall; (see illustrations).



ILLUSTRATION 5: FISHING BOAT HAT 1980 JOAN STEINER

JOAN STEINER

ILLUSTRATION 7: BASEMENT VEST 1977 JOAN STEINER STAGE 4

1.

. Template making; establishing foreground/background, with reference to perspective drawings and students designs.

MAKING: Introduction to craft techniques. Demonstrations included:

. Building three-dimensionally on a garment: how to simulate furniture; how to attach hard materials e.g. wire, plastic, metal to soft materials.

. Introduction to tools and materials: pliers, sewing instruments, properties of different adhesives.

. Potential uses for a huge range of found objects: manipulation of object, texture, scale.

- . Textile Skills: basic sewing; decorative stitchery; applique; quilting weaving; fabric painting; beading. (Most students designs were developed and finalised, not on paper but through experimentation with materials and craft techniques. The order of design process was adapted to suit individuals.)
- 2. FINISHING: Do any areas need changing? Why? How? Does your design take into account/take advantage of building on a three dimensional structure, with different viewpoints?
- 3. EVALUATION: Does it fulfill the brief? Did you succeed in what you set out to do? Would you change any of it? Would you do anything differently? Was there another technique or material which could have solved any problem equally well or better? Evaluation through self-assessment; (see Figure 7) Students mark themselves in ten key areas.

totalling 100. Critical assessment of each area is carried out in order to issue themselves with realistic results.

4. RECAPITULATION in the form of a questionnaire (see Figure 9).
Students are asked to briefly note down various aspects of the project which examines both their memory and understanding of the Design Process. This questionnaire also illustrates loopholes and areas which need developing in this specific presentation of the Design Process, Sheets 1, 2 and 3.

To conclude, the project took place over a period of nine weeks. (See Figures 7 and 8). It was broadly divided into four stages: drawing; research and first ideas; further research and design work; making and evaluating. There were twenty-two students in the group and were of weak ability.

The aims included fulfillment of the brief through a systematic design process; exploration of all art elements; encountering a range of materials and techniques; development of abilities of decision making, selection and evaluation: development of self-confidence and the ability to enjoy the work.

ILLUSTRATION 9: STUDENT MAKING FURNITURE FROM SOFT AND HARD MATERIALS.

FOOTNOTES CHAPTER 11

- (1) J. Christopher Jonew, <u>Design Methods: Seeds of</u> <u>Human Futures</u> (New York: Wiley, 1980) p.10.
- (2) Ian Burden, John Morrison, John Tiny Ford, <u>Design</u> <u>and Designing</u> (Essex: Longman, 1988) p.78.
- (3) Jones, <u>Design Methods</u>, p.1.
- (4) Ibid., p.12.

CHAPTER III

THE RESULTS OF THE PROJECT

Throughout this project the process was emphasised as much as the product. Each stage of the project was valued for its unique contribution to the educational development and learning of the student. This reflects Dewey's philosophy of education that the process and goal of education are one and the same thing.(1) Bruner considers that education should encourage intuitive thinking through problem-solving activities.(2) The Green Paper on Education encourages the development of skills associated with critical evaluation, stating that acquiring facts as opposed to developing critical abilities comprised a hindrance to young people for work and life.(3)

For this project, students considered the overall problem and the individual problems and considered solutions, evaluating and disgarding those which did not fulfill requirements. Their methods were documented. All potential solutions, including those which were tried and failed were logged and dated. There was a development from the early to the final diagnoses. The Green Paper also recommended a rational method of expressing one's view point, through education.(4) This process of documentation fulfills this recommendation. This expression of ideas in writing, made it easier for students to realise an alternative to problems encountered.

The manipulation of materials encountered. developed co-ordination and dexterity, and also an understanding of that media and its possibilities.

Before issuing the Self Assessment sheets (See Appendix 2), we had a discussion. Students expressed enthusiasm at being allowed to assess themselves. The reason being that they themselves knew how well they understood their own work, that is, if it wasn't a fact-based examination/project. They seem to be talking about what, in essence, is a design process with ongoing assessment but not using that vocabulary to describe it. The student pre-empted the self assessment sheet, by describing a system of marking where the end project is not the most important aspect.

What about when you get your English essay to do, and you know what to say and you gave ideas in the class, and all. Its not on when you write it up, but its not long enough or it sounds stupid just because its written down. I hate writing stuff up. Its boring, but that doesn't mean that I can't do it.

I encouraged discussion in this area prompting a system which issued marks for various stages. However, when the sheets were issued, the reaction was quite aggressive from some students. They seemed to feel it was an easy way out for the teacher. They also felt that because they were marking them, that meant that I did not appreciate the amount of work or the quality of work produced. One student got quite emotional and would not look at me, saying:

You are supposed to give us the marks. Now its your turn to do some work. You know, we don't normally bother finishing stuff off, as much as this. This is stupid.

I had built up a strong relationship with the class. I believe this was due, in part, to their new-found responsibility. Classes were conducted in a firm but friendly

manner. They were productive, without an overpowering authoritarian atmosphere. They felt they had been cheated, in terms of their work and themselves.

On the self assessment sheets, students were given the option to comment on their personal mark after they had assessed themselves. Eleven out of eighteen chose to make a comment (61% of students). Below are some sample comments made by the students on their Self Assessment Sheets. The grade written next to it, is the one they issued themselves, followed by my grade for them in parenthesis.

"I think I deserved what I got because I put a good bit of work into it." 68% (70%)

"No, I don't think I deserve these marks, I thought it should have been lower, because I wasn't that happy with the end result." 77% (85%)

"I'd still rather you did it. We put alot of work into it and I feel we should not have marked it because we are not the professionals." 85% (87%)

However, having re-marked them under the same system, my results were surprising close to their own. No student had given themself the exact percentage but for the most part, discrepancies were low: (See Appendix 3).

FIGURE 7:

STUDENT WORK: THE DESIGN PROCESS

THE DESIGN PROCESS

Page 2

DATE 6-2-05

NAME: Scononthia. Huggina. CLASS: D.3.

13-2-95 RESEARCH

This is looking at work which has already been done, by others. You want to find out:: HOW was it done? WHAT method/technique/materials were used? WHO did what,ie which artists? looked at slides. Different clothes and

there made and what technic they used for hav eg. Knitted, Photo, buttons etc. Looking at slides and trying To determined the technic they used and different makelie us seen a jacket made alt of everything which is very effect working and you con see all different things used there was a technic with a city mode on repet it made but FINALISING IDEAS of march bases, and powned even or a different materials Sorting out the best ideas from Stage 3. What should be used as well as what should not be used. What will work best, for this brief? Perhaps combining a few ideas. I decided exectly what I wated an my t-shirt. I wanted the telly at of material but I found it to difficult so I decided to price it an with condboard. I actied net

13-3-95

ed wool for y iron and it out in pel made

then I had to make the effect of the contains, then I had to make the over contains. I defied net rodictor at called a box i covered it with page-further RESEARCH and stuck on a tawel and mate over min, part of gracting of DEOTOTYPES (FOR OUT) Do you need to make a sample or PROTOTYPE? TEST OUT a mang ward technique? HOW do I do it? eg.

node a stitchery/embroidery/weaving/painting etc...WHAT do I need? is of knickers arrists wear pre-clearers, wice, beads and suffed I stuck them materials which looks effective they painted things to materials which looks effective they painted things to materials them lock like its in the distance of 30 Ascentbl Age thingo toghthere use tights and paint or sew winglos or it.

- 2-95

COLLECTING

Work this one out before you need it! WHAT do I need?WHERE will I get it? Will it cost me? (Be sure to date it, each time.) Wool, butcon, thread, old materizily, Scrapo, wire anything you can find tops of cons, bucker dishes talephone wire, etc. 13-2-95

FIGURE 7

STUDENT WORK: THE DESIGN PROCESS

THE DESIGN PROCESS

Page 3

DATE

NAME: marsha Hugins CLASS: DE

MAKING YOUR IDEA

Did you have any problems? How did you solve them? This will be filled in as you are making your piece of wearable art.

20.2-95.

At first it was too hard and then I found easiler ways to do what I wanted. It was hered to stick on the wire because it kept bending. The Stuffing for the toldy was too pluffy and the plupp want all a wind any in borhad the iron end I decided to put a wind any in borhad the iron FINISHING to make it more interesting. Do you need to change any of your original design, at all? Why? How did you change it?

I weded to change my idea for my iron because i 13-3-95 dight wont to much cardboard on the t-shirt. 30 1 used thread. I turned the Iron upside down to give the effect of the (t-stirt) picture continuing on , I look over my brief and asked myself whatesie i need to add to Finish it offer 13-3-95 At the end of my project i decided to put a withdu view to behind the ison to make. EVALUATION is more interesting DOES IT FULFILL THE BRIEF? Is there anything you would do differently to it? Change it? Do you like it and why?

13-3-95 1 like my t-shirt to for because it's warking at nicely (fetwas ton), changed the design of the telly at first I was cloing it in material but I found it very difficult so I decided to do it in cardboard.

FIGURE 8:

STUDENT WORK: THE BRIEF

THE BRIEF

NAME: Samantha Higging
CLASS D.3
DATE:

This brief is your instructions of what to do and how to do this project. At each new stage of the project, read it again and be sure you are fulfilling the brief.

On this page, also write in ideas and notes and date them.

THE BRIEF

1 To produce a piece of WEARABLE ART, using a readymade garment.

Get a t-shirt and print your four units corner on it (6-2-92) your could embroid or otuff or add all defference matterials to your to shirt to get the effect your went (6-2-95) cut off your electron dominanthise one on (6-2-95) make a different kuid of could for the t-Churt (6-2-95) we as many different kunds of texture or necessary cus possibles (6-2-95) your could add different butters or zife or anything your wont (6-2-95)

2 THEME: ENVIRONMENTS AND CORNERS. De anjthing you can find This is what you will base all your ideas on. All a wire through on (6-2-95 ger a blue sheat the one that stick out and acted the it for the print things you write onto the different things you could be those to print your picture onto the territion of and then start to cick out one different things your wont to, ger a collar cut of the material (line a picture) and the the the colling and the other to cick out the different things your wont to,

3 You can use your theme in many ways, but you must have one or two SPECIAL AREAS, for example: (19) transition for the for the former of the

	WINGAL G FORLED
Colour	Composition clock i used different materia
Pattern	Showing a picture 10-2-950 pue Enece which en
Texture	Showing a story - of my (13-3-95)
Line) well une in	Using a craft technique nitchen (3-3-95)
Tone the was inthe	n. Other ideas?
Shape of on in	(a. a. a
wire glitter. 2001 Saftey pinst abric Print Icity Strict	bacopo bottelle espe 2105 b6-2-95 paper Augusto 10-2-95 unt contrains cauce
read abourd naterials in foil	Success direction busices and the of

RESULTS OF QUESTIONNAIRE (Appendix 1)

Statistics of 18 students' response:

Q.1	How did you start this project?			
	Drawing of Rooms Designing Garment	aattina	22% 39%	(4 Students) (7 Students)
	garments; watching slic	les)	39%	(7 Students)
Q.2	Did you understand it at the beginning or no			ot?
	No Yes Partly/to some degree	55.0% 22.5% 22.5%		(10 Students) (4 Students) (4 Students)
Q.3	Did the Brief sheet help	o or confu	se you?	
	Helped Confused Partly/to some degree	28% 39% 33%		(5 Students) (7 Students) (6 Students)
Q.4	Do you remember any of the slides you saw?			
	Yes No	100% 0%		(18 Students) (0 Student)
Q.5 (a)	Did you like the Slides	2		
	Yes 89% No 11%			(16 Students) (2 Students)
(b)	Why?			
	Inspired Ideas Helped to understand E Confused the Brief	7 Brief 1	2% 7% 11%	(12 Students)(4 Students)(2 Students)

Each student described at least three different pieces of work, either contemporary or from the History of Design. The questionnaire was filled in seven weeks after the first slide show.

Q6.

I

(a)

Did the Design Process sheets help during the project?

Yes	66%	(12 Students)
No	34%	(6 Students)

(b) Why did the Design Process sheets help?

Helped to understand	49.5% (9 Students)
Helped to remember	16.5% (3 Students)
Total helped	66 % (12 Students)

(c) Why did it not help?

Can't remember	11.5%	(2 Students)
Confusing	22.5%	(4 Students)
Total not helped	34%	(6 Students)

Q.7/8 List the headings or stages of the Design Process

44% (or 8 Students) answered the questions:

3 Students or 16.5% wrote one heading

2 Students or 11.% wrote two headings

2 Students or 11% wrote four headings

1 Student or 5.5% wrote eight headings

Q.9 (a)

Do you think you could use this Design Process for any other subject?

Yes	44%	(8 Students)
No Answer	56%	(10 Students)

(b) How?

49.5% (or 9 Students) answered this question

Home Economics Project	22% (4	Students)
Essays	11% (2	Students)
Open/Any Subject	16.5% (3	Students)
Total	49.5% (9	Students)

ILLUSTRATION 10: STUDENT WORK, THIS GARMENT SHOWS USE OF UNUSUAL MATERIALS (JELLY-BABY SWEETS FOR PATTERN) AND MANIPULATING STRIPES TO CREATE DEPTH.
Apart from one extra student, those who answered Q9(a) and (b) were the same students who answered Q7/8. Those who mentioned the Home Economics did so by referring to both cookery and sewing i.e. practical elements. All students mentioned a "step by step" method.

Yes, an essay. Because you would have to research and then write it and check back; and then read over it and then research more and analyse it before the end to see if it was good enough.

This was one student's description of how to use the Design Process. Another

had this to say:

Yes, if the headings were slightly different, they could give you tips on how to do something and show you where you were going wrong.

An example of a students' description using the phrase "stage by stage":

Yes, for studying or writing essays on anything or other projects because it goes through it from stage to stage, so you don't get mixed up.

Q.12 In your own words, what does the Design Process mean?

"It means the directions and instructions of how to start and finish a project."

"It means how you started it and what you did during each different stage."

"The step by step instructions of how to do your project."

The last question was answered by 12 out of 18 students, or 66% of the class. Exactlyhalf of the 12 who answered, had grasped the meaning completely (6 students, or 33% of the class).



ILLUSTRATION 11: STUDENT WORK. SHOWING A KITCHEN CORNER.





ILLUSTRATION 11: STUDENT WORK SHOWING A KITCHEN CORNER.



The students who did answer this question, but did not fully understand what the Design Process means, all made references to this specific project, i.e. Wearable Art. The following quotes clarify where their confusion lies: (6 Students or 33% of Class)

The Design Process means you design the garment and you process it = you make it.

I think it means design what you want on a garment.

It means sorting out your ideas and putting them into action and making your piece of wearable art.

The last quote, seems to show a Student who understands, but feels the need to link it to the project she completed.

FIGURE 9:

DISCREPENCIES BETWEEN STUDENTS' SELF ASSESSMENT AND TEACHER'S ASSESSMENT.



- 12 out of 18 students were plus or minus under 5% inaccurate in marking their work. (i.e. 66% of students)
- 5 out of 18 Students were plus or minus 6% 10% inaccurate in marking their work. (i.e. 27% of students)
- 1 Student was inaccurate by 14% (i.e. 5.5% of students)

SOURCE: Students self assessment (See Appendix 2)

These statistics represent eighteen out of twenty-two students. Although valid as a representation of this class, these results could not be considered conclusive, in any other light. They are merely reflective of how this project could result for any given class.

A little more than one fifth of the class connected the perspective drawing with the project. More than half of the class did not understand the project at the beginning. The brief sheet confused more than one third of the group. However, every student, after seven weeks, was able to describe and answer questions on the slides.

Almost everyone (90%), were either helped or inspired by the references to design history and artists' work. Two thirds of the group felt the Design Process sheets helped them to remember or understand what they were doing. Half of the class were able, in some detail, to describe how the design process could be used outside of the art department.

Statistics are a cold method of measuring success, failure or somewhere in between. Indeed we must look at the aims and objectives to see what exactly was to be achieved, in order to define success.

The aims of the project are stated above in Chapter two, (pages 18 - 20) To synopsise, the student was expected to:

Fulfill the brief through a systematic Design Process.

Explore all art elements.

Encounter a wide range of materials and techniques.

Develop the ability to make decisions, be selective and evaluate.

Develop self-confidence and enjoy the work.

For the Student to feel success, particularly in teenage years, an end result "a finished product" needed to be in sight.(5) Twenty out of twenty-two students succeeded by completing their piece of wearable art. Their attitude towards work and homework changed. In the last two weeks, three quarters of the group were deciding on and completing their own homework. Their own self-expections had grown. Their maturity had developed in terms of behaviour and attitude. Homework was no longer something for the teacher, but for the student to decide on and to benefit from. It was she who was disadvantaged if it was not completed acknowledged and recognised. The rigid structure of the project ensured that a set path was taken. While it was difficult to become lost on this path there was plenty of scope for creativity and imagination. In the final three weeks students became angry if they were not allowed to stay to work at lunchtime, as they were deeply involved in their own productivity.

This was the same group of students who had been described by teachers of other subjects, as being of low motivation, with an irresponsible attitude to homework and behaviour (Appendix 3). This description came as no surprise to me, as keeping these students interested, and achieving in a realistic sense, required a huge amount of input in terms of planning, materials and time.

Many of the end products showed a high level of sophistication and original creativity in terms of design and use of materials. Not every student's work could be described as such, but towards the end of the project every student was aspiring towards that. Some were willing to sacrifice personal time by doing extra homework or working at lunchtime and those with

communicative problems, finally asked a question or momentarily made eye contact. To raise a student's personal belief in what they are capable of doing, is an achievement and measure of success in itself. Although not listed among the aims, it gives tangible credit to a process which lays out the route, without solving the problem; which challenges the student, without presenting an impossible, unattainable goal. It could also be used as an indicator that "design should be the central plank of the General Curriculum." (6)

NEEK NO & DATE	CLASS TIME & CLASS DURATION	THEME	SOURCE	ELEMENT	ACTIVITY	Support Studies	ном Е Астініту	MATERIALS
D 140N 23 1	11.15-> 12.40 1 HOUR 20MiNS	perspective	art room & corribous	line Itone shape	Decewing from obs.	PUGIN Da VINCI GREAT EXHIBITION 1851		pen pencils A3 and A2
THE 24/1	8.55-7 9.40 40 mins	perspective	art Room & corridous	shape(tone/line	Drawing from observation	Da vinci Grent. Exhibition 1851		pen pencels A3 A2
(1) MON 30/1	11.15->12.40 1 HOUR DOMAIS	perspective	imajinative Orawing	line shape parallels Depth	Deawing from imagination	GUSTAN STICKLEY Van GOGH LEON BANST BALLET RUSSE	30 min study of a contract of a Roomat	pen/pencits colouredmedia A2/A3
THES 31/1	8.55-79.40 40 mins	corners	Imag. Dreawing	line shape tone depth space	Drawing-kom imagination	5πickley 1904.	30 min Demin of Still life details of Room	pens pencil col. niedia Az/ A3
(3) MON 6/2	11.15 -> 12.40 1400R 20 mins	WEARHBLE ART THRU' BERSPECTIVE	HAND OUTS SLIDES	Concept Analysis Research	Documentation DESIGNING	History of Design	COLLECT FOLMDODJCCTS AND BRING CIARMENT	paper pens markers A3.
THE 7/2	8.55 → 9.40 40 min 5	wearable ART	References on slides	Design Clements	DESIGNING IDEAS	H. GORDON A. OGIER	FIRST 10 IDEAS, INCL. TECHNIQUES & HATICLIANS NOTES	AB Design Process"
# 02 13/2 THE 14/2	11.15→ 12.40 1400 20 mins 8.55-79.40 40 minutes	WEARAGLE ARJ & CORNERS	SLIDES; DESIGN PROCESS & DRANINGS	KESEARCH & ANAYSIS	DESGNING; ADATING; ANALYSIS &- RESEARCH. MAKE TEMPLATE	ART TO WEAR' SLIDES - APPROX 20 U.S.A. ARTISTS	TO SEW ON TEMPLATE & COLLECT FOUND OGIECTS	Deawings; fabric recolle bacing paper; glue peng penels.

FIGURE 9: SCHEME OF WORK.

;

NO & DATE	CLASS TIME & CLASS DURATION	тнеме	SOURCE	ELEMENT	ACTIVITY	Support Studies	HOM E Activity	MATERIALS
NON 20/2 TUE 21/2	11.15 -> 12.40 14008 20 Nins 8.55-79-40 40 Nimutes	Weakable art & CORNET(S	from observational Drawing	composition colour texture	MAKING IDEA SELECTING MATERIALS TECHNIQUES	POST. AEN. PORTRATIVE RE TEXTURE REMONÀDERY	Tofinish off sectiron.	GARMENTI FOUND Objects YARN FRONC Headle Hirad que etc etc
(B) MON 27/2. TVE 28/2	Mid TERM BLEAK HOMEWORK-D	↓ ↓	DESIGN IDEAS	craft elements & composition	complete one section ortechnique	NOT in CLASS.	4-	DEPENDS ON GARMENT& JIDEA.
() NON 6 3 THE 7 3	11.15 →12.40 140un zohuins 8.55 → 9.4 0 40 mintes	÷	technique or moterial based	Craft eferients	applying secondary fechnique. eq. coketin alluminium	Alexander Calder	finish section	as required found objects, your wool, give eard needes.
B ISMAR 14 Mar	11.15→1.40 855→9.40	WEARABLE ARÎ & CORNERS	DESign Workk	composition coaft elements line; tore texture, colour pattern	Making; includio craft & assenblage	Joan Steiner	To finish garment	Yan fabric fan to sixets eve
() MONZO 3 THE 21/3	11.15 -> 1.40 8.35 ->9.40	wearnelle art & corners	Design work	evaluation texture	Finishing & expludion Drawing ont Designed week			

SCHEME OF WORK.

FIGURE 10:



FOOTNOTES CHAPTER 111

- (1) John Dewey, "My Pedagogic Creed", in Reginald Archambault, ed; <u>Selected Writings</u> (Chicago: University of Chicago Press, 1964) p.434.
- (2) Jerome S. Bruner, <u>The Process of Education</u>, (Cambridge, Massachusetts, London: Harvard University Press, 1977) pp.65 - 68.
- (3) Department of Education, <u>Education for a Changing</u> <u>World: Green Paper on Education</u> (Dublin: Stationary Office, 1994) p.84.
- (4) Ibid.
- (5) David Thistlewood, <u>Design Education: a Cultural</u> <u>Model</u> (Dublin: National College of Art and Design, 6.2.1995)
- (6) Ibid.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

The British Design Council has recognised that design education is intrinsically part of being an artist. The phrase used is "design-related activities", and it is emphasised that it is not separable from 'art'.(1) The Keith-Lucas Report states that:

To design is always to provide some form, structure, pattern or arrangement for a proposed thing, system, or event. A design is always an integrated whole, a balanced prescription - a product of judgement and invention as well as skill.(2)

This is a broad statement which makes clear that designing is not simply concerned with the making of particular objects. Design is the way in which we try to shape our environment. Anybody setting out to design anything - an object, a space, a system or a service - tries to manipulate materials, space, time and other relevant resources which are available to meet a need which she or he has identified.

The importance of design across the whole curriculum is needed to make a distinctive contribution towards children's education. Much of the ugliness we see about us derives from our failure at home and school to instil in children an appreciation of good design. Thistlewood says that we in our educational system have not seen the value and function that a design can have. To be educated in design is to learn a formula, one which is non-rigid and of an adaptive structure .(3)

Although there is little evidence of design being any part of our primary school syllabus, design education has gained status in the second level Junior Certificate Syllabus in Ireland, discussed above in Chapter one. In the art, craft and design project work, the graphics is afforded the same importance as the painting. The options also give a varied scope which could be interpretted in terms of design. (See Figure 1) The new syllabus for Materials Technology and Home Economics emphasise the process and the activity of designing. The value and central role of design in the new programme for Materials Technology is "concerned with solving problems in a manner which reflects individuality and creativity."(4)

The British Design Council states that "Design should be an essential part of the education of all children at all stages of education, up to the age of sixteen and should be taught and examined in that light."(5)

The ultimate aim of all education should be to help individuals achieve a full and satisfying life. Design education should be a response to social necessity.

Throughout the course of the project discussed in this dissertation, students were conscious of the Design Process at all times. At first they felt it awkward and irritating that they had to constantly record their activities and ideas. But when this process started to be of benefit to them, and fully understood why they were recording, it was no longer an effort or a hindrence.



ILLUSTRATION 12: STUDENT WORK BEDROOM HAT



Over half of the class said they did not understand the project at the beginning (See Chapter III: p 48) yet all students fullfilled the brief and achieved the aims. Every student remembered a selection of slides and was able to describe them in terms of theme, technique and materials. All of the students who were able to explain accurately what the Design Process meant, were also the same students who were able to list the stages of the Design Process and explain how it could be used in another subject area.

However, as these statistics reflect the results of this particular class, which is only a small sample, they could not be considered definitive by any means. They do, however, reflect the views of many design educationalists, discussed throughout this dissertation.

Problem solving is a sequential process, but the Design Methodology towards the solution can come from the student's response to the problem. His/her search for decisions on how to proceed, will help develop a personal methodology and therefore understand the system within which he/she is working. Eileen Adams says of her role in this system:

> I do not consider my job is to teach children to paint or pot or print, but to promote the development of the child's perception and further his emotional and aesthetic development. I do not consider art as a frill, an extra, ...or as a subject more suitable for the 'pactical' or less able child. Nor do I see it ... for the gifted few. Art should be a part of everyone's educational experience. The development of a visual language is as important as that of verbal literacy and numeracy.(6)

The teacher must help develop the child's visual language both in understanding and expression and relate that language to his/her everyday world. Thus art education based on investigation and design provides rich educational opportunities for training in observation; the encouragement to think; research; compare; experiment, analyse and synthesise. Such experience leads our students to the development of positive attitudes and the ability to make qualitative judgements.

REFERENCES

- (1) Rob Barnes, <u>Art, Design and Topic Work;</u> (London: Hyman Ltd; 1989) p.143.
- (2) Keith-Lucas Report, <u>The Design Council</u> (London: 1994)
- (3) David Thistlewood, "What is Design Education?", in David Thistlewood ed; <u>Issues in Design Education</u>, (London: Longman 1990) p.
- (4) Department of Education, <u>Rules and Programmes for Secondary</u> <u>Schools</u>; (Dublin: Stationary Office 1994) p. 88
- (5) The Design Council, <u>Design Education</u>. at Second Level; (London: Belmont Press, 1984) p.18.
- (6) John Hanrahan, <u>Design in general education</u>; (London: Design Council, 1978) p.84.

APPENDIX 1

FIFTH YEAR QUESTIONNAIRE

FI	FTH YEAR WEARABLE ART PROJECT NAME:
Co	mplete the following questions as best you can,
1	How did you start this project?
2	Did you understand it at the beginning or not?
3	Did the 'Brief' sheet help or confuse you?
4	Do you remember any of the slides you saw?
5	Did you like the slides and why?
6	Did the'Design Process' sheets help during the project? Why?
7	List any of the headings you can remember from these sheets.
8	What order were these headings or stages in?
0	1
	Any other headings?
9	Do you think you could use this 'Design Process' for any other subject? How?

10 Did you enjoy any or all of this project? Why?

11 What part would you like to have done differently?

12 In your own words, what does the 'Design Process' mean?

SELF ASSESSMENT SHEET

FIFTH YEAR

WEARABLE ART PROJECT

Fill in the mark you would give yourself, out of ten, for each area below.

DID	YOU	STUDENT MARK OUT OF TEN
1	Understand the Brief	
2	Gather information from the slides	
3	Collect any of your own materials	
4	Use your perspective drawings to	
	design your wearable art	
5	Complete your homework	
6	Show respect for materials and	
	other students' work	
Ŷ	Show creative originality	
8	Follow the stages of the Design Process	
9	Listen to and follow all instructions	
10	Complete the Wearable Art, to the level	
	of your design idea	
	TOTAL	
ANY	COMMENT ON YOUR MARKS OR YOUR WORK	· · · ·

SELF ASSESSMENT SHEET

APPENDIX 2

APPENDIX 3

TEACHER'S QUESTIONNAIRE

SCHOOL PERCEPTION OF FIFTH YEAR GROUP TEACHERS' COMMENTS

I

I

1	Do you teach any of these students? ALL HALF LESS THAN HALF
2	What subject do you teach them?
3	Do you give them homework? ALWAYS SOMETIMES NEVER
4	Do you get the homework back? ALWAYS SOMETIMES NEVER
5	Describe their attitude to classwork:* Highly motivated Unmotivated Erratic/Varied Lazy Easily Distracted Frustrated *Tick whatever boxes clarify your description. Any further comment:
6	Describe their behaviour: Excellent All students Good Most students Good Approx. half Some students Poor Very few Any further comment:

7 Do you have any further comment to describe any aspect of this group:

SELECTED BIBLIOGRAPHY

Anderson, Donald M. <u>Elements of Design</u>. Wisconsin: Molt, Rinehart and Winston, 1961.

Archambault, Reginald, ed. John Dewey on Education: Selected Writings. Chicago: University of Chicago Press, 1964

Aylward, Bernard. <u>Design Education in Schools</u>. London: Tinling, 1973.

Barnes, Rob. Art, Design and Topic Work 8 - 13.London: Butler and Tanner, 1989.

Bruner, Jerome S. The Process of Education. Cambridge: Harvard University Press, 1977.

Burden, Ian; Morrison, John; Ford, John Tiny. <u>Design</u> and <u>Designing</u>. Essex: Longman, 1988.

Department of Education. <u>Education for a Changing World:</u> <u>Green Paper on Education</u>. Dublin: Stationary Office, 1994

. The Junior Certificate: Art, Craft and Design Syllabus. Dublin: Stationary Office, 1992.

Design Council, <u>Design Education at Secondary Level</u>. London: Design Council, 1987.

Green Peter. Design Education: Problem Solving and Visual Experience. London: Anchor Press, 1974.

Jones, J. Christopher. <u>Design Methods: Seeds of Human</u> <u>Futures</u>. New York: Wiley, 1980.

Langdon, Richard. <u>Design Policy</u>. Vol. 5, London: Design Council, 1984.

Thistlewood, David, ed. <u>Issues in Design Education</u>. Longman in Association with the National Society for Education in Art and Design, 1990.

