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Colaiste Naisiunta Ealaine Is Dearth  
National College of Art and Design  
Faculty of Education

# Understanding Motivation

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by

**Deirdre Smith**

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## Introduction

The Collins Dictionary definition of motive reads as follows: "*noun 1. that which makes person act in particular way. 2. inner impulse.*" A thesaurus suggests synonyms for motivation as "*ambition, desire, drive, hunger, inspiration, interest, wish. 2. Impulse, incentive, instigation, motive, inducement, incitement, persuasion, reason, spur, stimulus...*"<sup>1</sup>

In most psychology books, such as *The Dynamics of Action* (Atkinson, 1970), *Human Motivation* (Weiner, 1980), *Motivation and Personality* (Maslow, 1987), *Understanding Human Motivation* (Jung, 1971), and *Human motivation* (Franken, 1994) motivation is defined as a reason for action. Our motivation to act underlies everything that we do, therefore the study of motivation is vast and complex. Psychologists and philosophers from Epicurus, Aristotle, Aquinas to Descartes, (1596-1650), Darwin, (1859), Watson, (1908), Skinner, (1938), to most recently Maslow, (1954), Rogers, (1974,1978,1982) and Deci, (1972,1975,1985,1991), have long been absorbed in the task of unravelling the complex nature of motivation, and many books, including the above, have been written on the subject. However, for this dissertation it was necessary to concentrate on a particular aspect of motivation theory. If motivation implies our reason for action it is vital to the area of education and learning, so therefore it is necessary to have a knowledge of the subject. One cannot apply motivation theory to classroom practice if there is no background knowledge on the theories behind motivation. For this dissertation, due to the limits of time and quantity of material written about motivation I have proposed to give an overview of motivation theory from the ancient Greek thinkers to the present day. This encompasses the most significant psychologies of motivation theory. The bulk of the dissertation



then concentrates on the latest research on motivation theory, namely that carried out by the Humanistic psychologists, which develops a more holistic approach to the field of study.

Traditionally until the 1960's the predominant theory on motivation came from the school of Behaviourism. The Behaviourists take a very scientific approach to human behaviour, they believe that human beings are conditioned to behave and therefore to act. They are conditioned by their environment, society, and genetic influences. B.F. Skinner (1938,1965) is the chief exponent of Behaviourist theory, he believes that humans are not free but are products of their environment. He believes that humans can be conditioned to behave in certain ways, and that we are driven to action through physiological needs.<sup>2</sup>

This theory differs greatly from the Humanistic school of psychology that sees the need to look at humans as individuals and puts the needs of the individual and the perception of the self as central to their theory. The Humanistic psychologists differ primarily from the Behaviourists in that they believe humans are free and can grow and change. They believe that humans are not solely driven to act by physiological needs, and that they can transcend the conditioning of their environment. Most theories on motivation prior to Humanistic psychology have concentrated on physiological drives and instincts as our reason for action. Maslow (1954,1974) and Rogers (1974, 1978, 1982) are the leaders in this new psychology. Maslow saw physiological needs/drives as primary reasons for action. He recognised the need to look at the individual as an integrated whole, who has many other needs, drives, desires, besides physiological ones. He developed a system known as the hierarchy of needs, which puts physiological drives at the bottom of a pyramid structure. When basic needs are satisfied, this allows one to move up the pyramid structure to eventual self-actualization. The revolutionary element of his theory is that



the individual has the power to change and grow; he/she is not merely a product of his/her environment.<sup>3</sup>

Much research has been carried out by the Humanistic psychologists in the field of learning and education, one of these psychologists is E.L. Deci (1972,1975,1985,1991) who developed a theory known as Intrinsic and extrinsic motivation. This theory explains how we learn and what motivates us to learn, this theory is discussed in Chapter 2. The main thrust of Deci's theory is that the individual through internalising his/her motivation can control and develop his/her learning and therefore exercise self-determination. In the third chapter I apply these theories to the classroom situation. How the teacher can enhance intrinsic motivation, using examples of research and how extrinsic motivation can, in specific cases, undermine intrinsic motivation. I discuss the necessity of incorporating the two and how, at different stages of growth, one is more prevalent than the other. In conclusion, the last chapter discusses the relevance of this theory on creativity and the role Art can play in enhancing intrinsic motivation.

Footnotes

- 1 British Library Cataloguing in Publication Data, Concise Dictionary & Thesaurus (Great Britain Harper Collins Publishing, 1991).
- 2 Skinner B.F., Science and Human Behaviour (New York Free Press, London Collier McMillan 1965).
- 3 Maslow A.H., Motivation and Personality (New York: Harper and Row, 1987), p.15.



## Chapter 1

### Motivation Theory from the Ancient Greeks to the Present Day: An Overview

Theories on human motivation can be traced back to the ancient Greeks. Since the beginning of civilisation man has been concerned with the reason for action (motivation), what drives us to do things, what motivates us. Traditionally the study of motivation has been concerned with the arousal, direction and persistence of behaviour. Current research on motivation is more concerned with the arousal and energizing of behaviour and how this is maintained. Greek philosophers such as Epicurus, tried to explain motivation as the pursuit of happiness. One could obtain happiness only through the development of the intellect (reason). Thomas Aquinas elaborated on the dualistic approach to motivation, laid out by earlier writers such as Aristotle, by defining the difference between animals and humans. They believed that humans were both physical and non physical, that is, they had a body and a soul. Their behaviour was controlled by the will (non physical) and animal behaviour was controlled by physical forces like instinct and reflexes. For examples, according to the teachings of the Church, the act of reproduction was assumed to be quite different for humans and animals. Animal reproduction was simply biological or physical act, while humans, it was taught, had souls in addition to their bodies- the soul being put there by God. René Descartes, (1596-1650), redefined this approach by stating that the behaviour of the body was controlled by instincts and reflexes, all other behaviours were controlled by the will implying willed action.<sup>1</sup>

Darwin, (1859), in his theory of evolution and his belief that human behaviour is the product of evolution changed the whole approach to the study of motivation. It was his research on the



mechanisms by which evolution operates that most influenced psychologists. This led to the study of instincts as the basis of human behaviour, one of the most famous of these psychologists was McDougall (1908). He listed ten basic instincts; flight, repulsion, curiosity, pugnacity, self-abasement, self-assertion, reproduction, gregariousness, acquisition and construction and also listed seven emotions corresponding to the first seven of these instincts. These instincts and emotions were the reason for action, he believed that behaviour was largely innate and impulse-driven. This theory was later developed into the concept of drive theory for motivation which has dominated most modern research theories on motivation. The biological approach to behaviour led to the school of behaviourism founded by J.B. Watson (1917).

The behaviourists believe that human behaviour is learnt, that there are three innate emotional reactions; fear, rage and love, everything else is learnt and that environmental factors played a significant role. This led to the research on classical conditioning, operant conditioning and instrumental learning. Another approach to human behaviour emerged with Freud's (1900,1911,1915,1913,1923) research in psychoanalysis. He believed that the source of all energy (action) was the libido, the satisfaction of the same and the direction of behaviour was due to learning and cognition. The most recent research on human motivation has come from the humanistic psychologists, namely Maslow (1954,1970) and Rogers (1974, 1978, 1982). Humanistic psychologists believe that humans are basically good and have an innate need to grow and mature. Maslow and Rogers have mainly been concerned with the importance of the self in understanding human behaviour and growth. Maslow developed a system known as The Hierarchy of Needs which explains human motivation, which will be discussed later.<sup>2</sup>



There have emerged two distinct theories on motivation which appear to be in opposition to each other. One theory which was developed by Hull (1943), known as Hullian Theory, has its roots in physiological drives. These drives are the root of all motives and they have a direct effect on the biological functioning of the organism. Deci, (1972,1975,1985,1991), states that Hull believed

...drives are motivational forces which are representations of physiological needs such as hunger. Hull asserted that organisms seek to maintain a balance of equilibrium in their physiological needs. When a disequilibrium occurs, a drive results, the aim of which is to restore the balance.<sup>3</sup>

According to Hull (1943) all drives are biological and when a disequilibrium exists it creates what is known as a drive stimulus. This activates behaviour which has been bonded to that stimulus by prior reinforcement. So we are basically driven to action by physiological needs and we are mechanically programmed to satisfy them. Of course this theory does not take into account curiosity, exploration or any non drive based behaviour. He explains this as secondary reinforcement.

If a stimulus is present when a drive is reduced, that stimulus will take on secondary reinforcing properties as a result of this pairing with primary reinforcement. Thus, for example, if exploration is paired with hunger reduction, exploration will become reinforcing.<sup>4</sup>

The concentration on physiological drives as a reason for action seems to be inadequate. It appears to explain primary needs logically but its mechanistic approach to all behaviour does not really explain things such as curiosity, exploration and the world of the mind. Freud's (1949) approach to motivation is also rooted in the physiological needs. His theories are extremely



complex and vast but in relation to motivation theory he believed basically in instinct drives, which are internal forces. These are:

...instinctual drives (or instincts) and derivatives of instinctual drives. Thus, instincts represent the basis of all motivation. Instincts are psychological representations of bodily needs which provide energy and place demands upon the organism to work toward discharge of that energy. Instincts are forces which give direction to behaviour and press to be discharged through behaving in relation to appropriate objects or persons.<sup>5</sup>

This is the basic tenet of his theory on motivation and is rooted in physiological drives. Maslow (1954,1970) points out the need for a more holistic approach to motivation as he points out for example in physiological needs/drives such as hunger that the individual when he is hungry changes in all his capacities. Perceptions change, memories change, emotions change and thinking changes. *"In other words, when people are hungry, they are hungry all over, they are different as individuals from what they are at other times."*<sup>6</sup> Therefore Maslow proposed a more holistic approach to motivation theory; the necessity to see the individual as a whole.

Our first proposition states that the individual is an integrated, organised whole. That it is an experimental reality as well as a theoretical one must be realised before sound motivation theory is possible. In motivation theory this proposition means many specific things. For instance, it means the whole individual is motivated rather than just a part. In good theory there is no such entity as a need of the stomach or mouth, or genital need. There is only the need of the individual.<sup>7</sup>

Maslow's approach of seeing the individual as a whole and that his needs and drives are interrelated rules out the previous assumption that all drives will follow the same pattern set by the physiological drives. He states that most drives are not isolable, they cannot be localised in some distinct area but they are rather a need of the whole person. He states that desires are generally a means to an end rather than ends in themselves. He clarifies this by saying:



It is characteristic of this deeper analysis that it will always lead ultimately to certain goals or needs behind which we cannot go, that is, to certain real satisfactions that seem to be ends in themselves and seem not to need any further justification or demonstration. These needs have a particular quality in the average person of not being seen directly very often but being more often a kind of conceptual derivation from the multiplicity of specific conscious desires. In other words, then, the study of motivation must be in part the study of the ultimate human goals or desires or needs.<sup>8</sup>

It is important to be aware of the different levels of motivational states. With unconscious motivation, this is the unconscious desire, there can be a great difference between the conscious desire and the unconscious aim underlying it. Multiple motivations means one desire may serve the purpose of channelling and expressing other desires/needs. Motivational states are a continual functioning process of the organism as a whole.<sup>9</sup> Each reaction or action affects another motivational state. Satisfactions generate new motivations. Once one has satisfied a desire another one takes its place, human nature dictates that we are practically always desiring something. Apart from all these motivating states, such as unconscious motivation, multiple motivation, and physiological motivation, it is important to take into consideration the environment surrounding the individual. This of course will affect the goals and desires of the individual. Any organism's behaviour is not isolated from the environment, culture and people in which it is situated.

Any theory of motivation must of course take account of this fact by including the role of cultural determination in both the environment and the organism itself.<sup>10</sup>

Maslow however makes a very salient point about the effect of the exterior, culture, environment and situation on the organism in terms of motivation. He cautions against too great an emphasis on these influences. He points out that the area of study, motivation, is concerned with character structure and it is too easy to become preoccupied with outside forces which affect the individual.



It is after all the individual who decides what is an object of value and what is a barrier to that object. In psychology goals and barriers are put there by the individual. In this way Maslow's theory is revolutionary because it reinforces the need for any theory to recognise the individual and also demonstrates the possibility for changes and growth. He clarifies this by stating:

...the only satisfactory way of understanding how a geographical environment becomes a psychological environment is to understand that the principle of organization of the psychological environment is the current goal of the organism in that environment... <sup>11</sup>

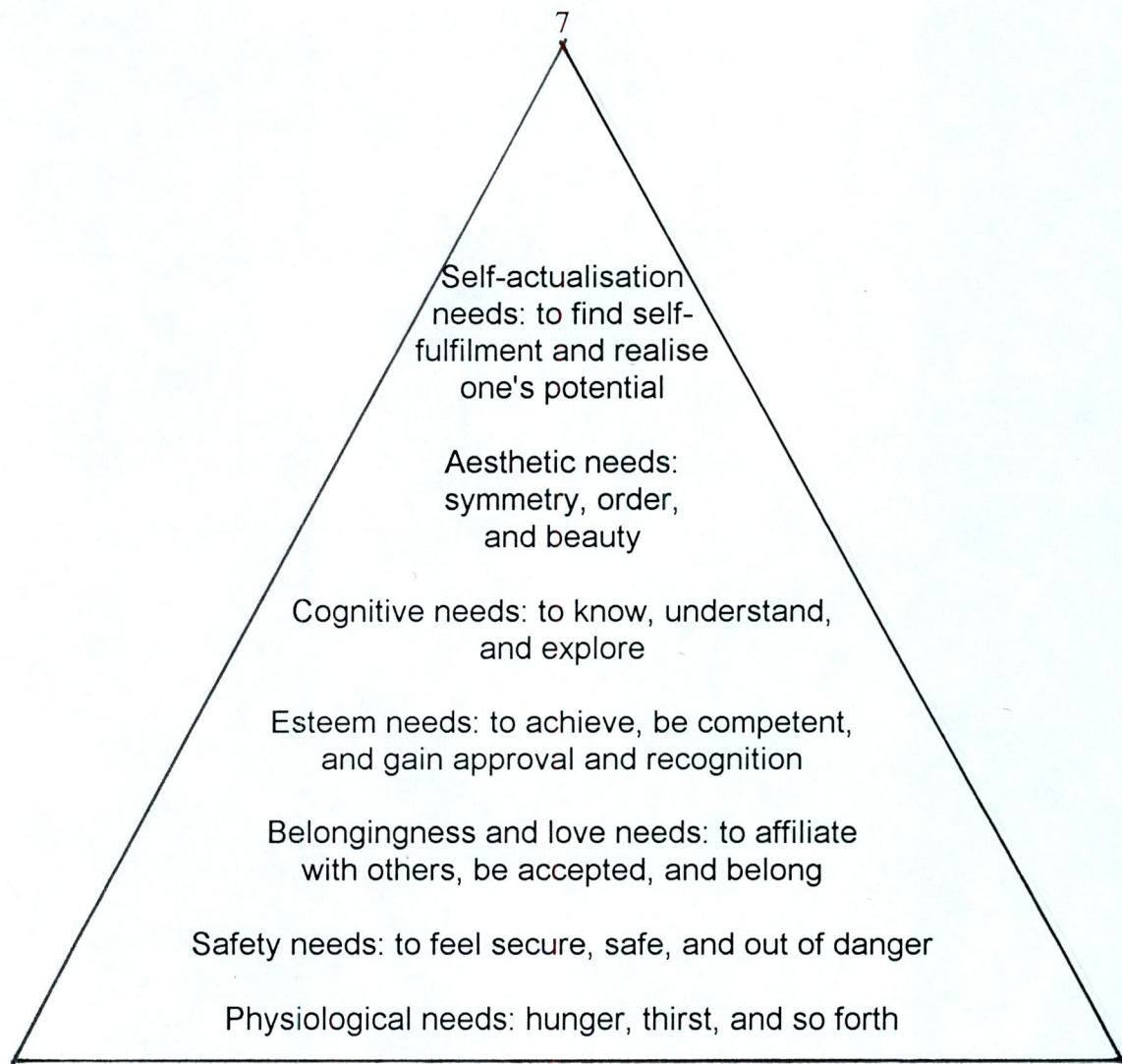
He goes on to point out:

...we are now concerned, not with behaviour theory, but with motivation theory. Behaviour is determined by several classes of determinants, of which motivation is one and environmental forces are another. The study of motivation does not negate or deny the study of situational determinants, but rather supplements it. They both have their places in a larger structure... <sup>12</sup>

Maslow's belief that listing drives was an inadequate way to explain motivation lead him to develop his system of the hierarchy of needs. This system is laid out in a pyramid structure, the basic theory is that the primary physiological needs must be satisfied before one can continue up the ladder eventually to self-actualization (see figure A).

Maslow believes that everyone is born with the need to fulfil their potential/capabilities, he termed this self-actualization. They are born with the need to feel competent and self determining, in other words to be able to control and manage the environment in which they live. Ultimate self actualization can only be achieved when the more basic needs have been satisfied.





**Figure A - Maslow's Hierarchy of Needs**

In this chapter I have broadly discussed the main theories on motivation from the ancient Greeks to present day. We can clearly see that the most recent research on motivation developed by the Humanistic psychologists, has shown the need for a more holistic approach to motivation theory, in other words looking at the individual as a whole. In the next chapter I will discuss the implications of this new research on learning, namely in the field of intrinsic and extrinsic motivation and how this new psychology can affect learning and therefore Teaching.

FOOTNOTES

- 1 Franken R.E., Human Motivation (California: Brooks and Cole, 1994), p.4-6.
- 2 Maslow A.H., Motivation and Personality (New York: Harper and Row, 1997), p.57.
- 3 Deci E.L., Intrinsic Motivation (New York: Plenum, 1975), p.39.
- 4 Ibid., p.40.
- 5 Ibid., p.30.
- 6 Maslow, Motivation and Personality, p.5.
- 7 Ibid., p.3.
- 8 Ibid., p.5.
- 9 Ibid., p.4-7.
- 10 Ibid., p.10.
- 11 Ibid.
- 12 Ibid., p.10-11.



## Chapter 2

### Intrinsic and Extrinsic Motivation

During the twentieth century, theories on motivation have relied on the behaviourist view of conditioning, up until roughly the 1950's. These theories concentrated on the physiological needs as the main reason for action. For example: "I am hungry, I need food, I receive food, I am satisfied". Need, being hunger, replaced by "reward" food.

In each approach, tissue deficits were regarded as the impetus for action, and satisfaction of physical needs was thought to be the primary reward. These theorists assumed that other stimuli might acquire secondary reinforcing properties through association with these primary rewards. Behaviourists consequently attempted to explain all of human motivation in terms of fundamental bodily needs, but this is clearly only one dimension of complex human behaviour. <sup>1</sup>

The more fundamental question seems to be why people do things when they are satisfied in all their physical needs. Why read a novel, go to the museum, do the crossword puzzle or study. These activities are termed goal orientated behaviour. A number of psychologists, such as Fowler,(1965), came up with the idea that curiosity is an innate motive. Meaning it is something all humans are born with, in other words a natural drive. That human beings are naturally curious and that this curiosity is the same as the need/drive for food, warmth and shelter. However curiosity is not necessary for survival as food, warmth and shelter is, we could say that physiological needs are survival instincts, yet it is not easy to explain curiosity, where it comes from is it learnt or is it a prerequisite to survival. Robert White, (1959), suggested another motive

that is the "...*desire for effective commerce with and control over the environment...* (White 1956)" <sup>2</sup>

This is known as effectance motivation and is what propels us to action on a higher level from the basic needs. This theory differs from the behaviourists in that the humanists believe that curiosity and effectance motivation trigger actions that are controlled by the internal interests of the individual, as opposed to external forces.

This theory appears to give credence to the individual, it is the individuals characteristics and interests which motivate the organism to action. As opposed to a strict behaviourist view which would suggest we are controlled by outside forces i.e. conditioning. This research lead to theories on intrinsic and extrinsic motivation. The theory sets out to prove that over emphasis on extrinsic rewards can damage the intrinsic motivation of a person that is the natural curiosity and interest that is generated internally by the individual. This could greatly increase our understanding of learning and Teaching and therefore make advances in education. Because I believe motivation is the primary concern of Teaching, as motivation encompasses our reasons for everything we do, it is important to try and understand it as fully as possible and to be aware of the fragile and complex nature of motivation.

First of all to begin looking at intrinsic and extrinsic motivation, it is important to understand what exactly is meant by these terms. As pointed out earlier an individual is moved to action by curiosity and effectance motivation which is controlled by internal interest. These activities are ends in themselves and what are known as intrinsically motivated behaviour. An individual is also moved to action by external motives, these are rewards or recognition and are regarded as a



means to an end, these are termed extrinsically motivated behaviour. The research on intrinsic and extrinsic motivation has primarily been undertaken in the field of learning. The theory is concerned with the balance between intrinsic and extrinsic motivation, how one shifts to the other, what long term effects extrinsic motivation has on intrinsic motivation. Its basic argument is that intrinsic motivation is internal and controlled by the self (individual) through interest and curiosity therefore the individual has a sense of self determination which effectively means they have a feeling of being in control of their environment. This triggers feelings of competence, success and control because they have a feeling of self determination. Because of this their intrinsic motivation is sustained and increased enabling them to constantly search for new and interesting stimuli, giving them further feelings of control and competence. Opposed to this is extrinsic motivation which relies on external rewards for stimulation. This motive to act relies on external controlling factors which will control the individuals reason for action therefore they feel controlled and are dependent on rewards to stimulate the interest therefore they are not exercising self determination over the activity. This can lead to negative feelings, drop of performance levels and a apathy towards learning.

The most important aspect of Deci's theory of intrinsic motivation lies in the individual's choice and control over their behaviour. He points out that:

...an interesting point about the conceptualisation of intrinsic motivation has been based in the need for competence and self determination is that it implies that people have choice about how to behave, otherwise, they could never satisfy their need for competence and self determination. Thus, acceptance of intrinsic motivation requires the other major change which has evolved in motivation theory, namely that people have the capacity to choose what behaviours to engage in. The need for competence and self determination leads people to be active in their behaving rather than being passively acted upon. <sup>3</sup>



Deci's theory on motivation is concerned with how "...*behaviour is initiated, energised, directed, and terminated*".<sup>4</sup> In developing his theory he saw the importance of emotions and cognitive structures of the individual as central to his interpretation of the environment and situation. He proposed that humans, as complex information processors, receive information from three different sources, these are the external environment which is processed through the senses, the human organism itself processed through the senses and the third is memory. These sources are known as informational inputs and the individual interprets them according to their own cognitive structures. Stimuli is therefore interpreted differently by each individual. Cognitive structures are described as internal representations of information. Deci clarifies his theory by saying:

...as people encounter information they will be partially assimilating the information (i.e. modifying the information to fit their structure) and partially accommodating to the information (i.e. adjusting their cognitive structure to reflect the new information). These processes of accommodating and assimilating are brought to each new situation along with a persons existing cognitive structures, and they are the basis of the persons unique interpretation of a situation.<sup>5</sup>

This theory reflects Piaget's theory about learning which "...*is a process of elaborating ones cognitive structures (Piaget 1952)*".<sup>6</sup>

Deci sees intrinsic motivation as an ongoing motivation, it is an awareness of potential satisfaction. Both intrinsic and extrinsic motivation involve decision making, this means selecting behaviour in order to satisfy motives. Theorists such as Lewin (1938), Shapira (1976), and Atkinson (1964) concentrated on the decision making process involved when one is intrinsically



motivated. Voorm (1964) focused on extrinsic decision making. These theorists discovered that two critical elements go into decision making for both motivations. These are:

...the psychological value of each behavioral outcome and the probability of being able to attain the outcome... Their motivation to behave is a function of the value of an outcome times the probability that the behaviour will, in fact lead to the outcome. <sup>7</sup>

There are two aspects to the decision making phase, behaviour and extrinsic rewards. When motives are extrinsic the decision involves deciding what rewards to aim for and what behaviour is needed to achieve this. When motives are intrinsic the decision making is behavioural selection. It is important not to confuse goals or goal setting with motives. The object of a goal comes at the end of a set of behaviours, or the receipt of an extrinsic reward. The object of motives, on the other hand, is a personal experience of satisfaction.

It would seem then that intrinsic motivation is an ongoing process because the need of a personal experience of satisfaction would be continuous. To be motivated in this way the individual would search for stimulation, cognitive challenges in order to feel personal satisfaction. They would search for the stimulation because it would give them a greater feeling of competence and commerce with their environment. Intrinsic motivation does not nullify goal setting, as mentioned above, it is rather the motive which drives the set of behaviours adopted in order to achieve the goal, extrinsic reward, satisfaction. I think at this stage, it is important to point out that it is not a case of intrinsic versus extrinsic motivation. I feel there is a place for both, obviously it is better to be motivated primarily intrinsically because this leads to personal search for stimulus which leads the individual in control of developing their cognitive structures. Obviously to be solely motivated by extrinsic rewards leaves an individual incapable of operating



except for that which is outside them. However I would suggest that a combination of the two would be the ideal situation. If we, for example, adopt Maslow's approach of the hierarchy of needs we could substitute intrinsically motivated behaviour on the bottom of the pyramid. This would represent primary needs, the necessary force which drives one to action because it is internal, a need for personal satisfaction. In order to achieve this, goal setting is necessary, in order to set a goal one needs to clarify that goal, label it, make it an extrinsic reward (means to an end) or an intrinsic reward (end in itself) in order to set in motion the behaviours which will achieve that goal. Once a person has selected a goal through their motives they begin to set in motion the behaviours necessary to achieve that goal. Research has proved that people who set specific goals accomplish more than non specific goals.<sup>8</sup> For example, a writer who specifies that he will write ten pages a day will achieve more than a writer who proposes to write as much as possible each day. Even if people are intrinsically motivated it is still necessary to set specific goals in order to achieve them. A person can be intrinsically motivated, for example, to improve their drawing skills because it will lead to a greater sense of satisfaction and competence. But in order to achieve that they have to set out specific goals which will enable them to accomplish that feeling. In other words, it is sometimes necessary to employ extrinsic motivation or external rewards to achieve goals, which are originally generated by intrinsic motivation. But primarily what the research on intrinsic motivation appears to be saying is that when an individual is motivated in this way they become absorbed in a task because of innate curiosity and interest which by completing these tasks gives them a feeling of inner satisfaction, control, autonomy. That is for the individual the gratification and not the need of extrinsic rewards or approval.

In the next chapter I will discuss how intrinsic motivation can be developed and enhanced in the classroom and how extrinsic rewards can affect intrinsic motivation.



FOOTNOTES

- 1 Deci, Intrinsic Motivation, p.39.
- 2 Ibid., p.42.
- 3 Ibid., p.46.
- 4 Ibid.
- 5 Ibid., p.48.
- 6 Ibid.
- 7 Ibid., p.50.
- 8 Ibid., p.51.



## Chapter 3

### Humanistic Motivation Theory Applied to Learning and Teaching

Children are by nature active, curious, exploratory creatures. Children actively learn and grow through play, which is a spontaneous exploration and exchange with the environment. <sup>1</sup> We could say that children are intrinsically motivated because their reason for action is curiosity and interest. Intrinsic motivation implies a need to feel competent and self-determining, therefore, in the area of learning, anything that enables or enhances this feeling will contribute to intrinsic motivation. One of the first areas in which children receive confirmation of their competence is in the area of feedback. When children try activities they receive feedback from their parents. When they move an object, or pick up an object, the response from their parents is usually, "that's very good". This is positive feedback, which enhances their feelings of competence. However positive feedback needs to occur within the context of self-determination, this means that the individual needs to feel responsible for the action or result about which they receive positive feedback. When tasks are too difficult people experience failure which is negative therefore the result is a feeling of incompetence which leads to amotivation. Similarly when a person experiences negative verbal feedback the result is the same.

...Deci, Cascio and Kruell (1973) reported that subjects who failed to solve puzzles evidenced less subsequent intrinsic motivation for the puzzles than subjects who succeeded. The researchers also found that negative feedback to subjects about their performance, administered verbally by the experimenter, decreased intrinsic motivation for the target activity. Evidence of incompetence, whether from verbal feedback, lead subjects to lose interest in an activity and thus to engage in it less during free choice period than subjects who did not have the experience of incompetence... <sup>2</sup>



We can infer from this that positive feedback, challenging activities with attainable completion and personal responsibility for success enhance intrinsic motivation. An important component for success with set tasks seems to be in the area of personal control. The need of the individual to feel he/ she is making choices and decisions about his/ her behaviour, rather than feeling controlled by external forces, is central to being motivated. This coupled with positive feedback seems to be the essential ingredient for success. When a person has choice about how to carry out certain activities they display initiative, initiative gives them a feeling of self-determination.

This suggests that the opportunity to make choices, assuming the choices are meaningful and relevant, will enhance intrinsic motivation...<sup>3</sup>

Zuckerman, Porac, Lathin, Smith and Deci conducted an experiment to prove that choice can greatly enhance intrinsic motivation. They took a puzzle solving problem as the task. They had six puzzles in total. They gave half of the subjects involved in the experiment, a choice of working on any three puzzles out of the six. They allowed them to apportion the thirty minutes of puzzle-solving time among the three puzzles. The second group of subjects were told which puzzles to work on and for how long. Subsequent to the period of puzzle-solving time the subjects were left alone and told they could do whatever they liked, unaware that they were being observed.<sup>4</sup>

Results of the experiment showed that subjects who were given free choice were significantly more likely to return to the activity during the free-choice period than those who were given no choice and experienced the activity as controlling. Rewards can also have a controlling effect which decreases intrinsic motivation. Similar research has been undertaken in this area which

proves that extrinsic rewards can devalue the activity and decrease motivation. However extrinsic rewards have their place and can enhance motivation if it is coupled with the feeling of control over the activity.

After reviewing the research they concluded that most reward structures tend to be evaluative and thus to undermine intrinsic motivation relative to comparable control conditions. However, if the reward is structured to convey positive competence feedback in the absence of evaluative pressure, it is least likely to be undermining; Indeed, it may enhance intrinsic motivation. (Harackiewicz, Manderlink and Sansome, 1984 ). <sup>5</sup>

If behaviour is dependent on receiving a reward and if the reward is anticipated before performance of the activity, it can have very disruptive consequences. Rewards motivate behaviour but when used in this way they are experienced as controlling therefore undermining feelings of self-determination. The more controlling activities are the more they involve evaluation, they pressurise people to perform and their performance is evaluated. Evaluation could seem to provide an area for positive feedback on competence. Unfortunately in a competitive society people often feel evaluations on their performance are evaluations on their personal value.

Smith (1974) conducted a study that supported this hypothesis. In his study, subjects learned about Art and were told that they would be evaluated. At the end of the task, all subjects received positive evaluations; Yet these subjects evidenced lower levels of subsequent intrinsic motivation than did subjects who had not been evaluated. <sup>6</sup>

Competition can similarly affect intrinsic motivation, if it is experienced as controlling and dependent on the winning or beating of an opponent. If the focus is on defeating another and this is of central importance the behaviour is extrinsically motivated.



Another very important area for enhancing intrinsic motivation is the atmosphere of the classroom, the classroom climate. Researchers put forward the hypothesis that teachers who supported children's autonomy would create an interpersonal climate that promoted children's self-determination. Teachers orientated towards controlling behaviour would provide a controlling context. The research proved that:

Children whose teachers were autonomy-supporting tended to display more intrinsic motivation - in the form of curiosity, preference for challenge and independent mastery attempts - as well as higher levels of perceived competence and self-esteem, than did children in the classrooms with more controlling teachers...<sup>7</sup>

From this discussion we can see specific areas of learning and teaching which can enhance intrinsic motivation. Firstly, there is Positive feedback, in other words encouragement and praise. However, positive feedback is ineffective and sometimes counter productive, if it does not relate specifically to the pupils feeling that they were responsible for the outcome from which they are receiving praise. So the pupil must feel that they have control and are responsible for what they produce. In other words, the praise is ineffective if they feel the teacher has exercised a lot of control over the task and the result of the task. Secondly, there is the need to exercise choice over the activity, this often helps to promote initiative and confidence. Thirdly, rewards can enhance intrinsic motivation only when they are structured to convey competence feedback in the absence of evaluative pressure. Classroom climate, which supports children's autonomy creating an inter-personal atmosphere, is conducive to learning. A task which is pitched at the right level for the students, relevant to them and with an attainable level of success, one in which they feel a sense of control, will help to promote intrinsic motivation. In short, a classroom with a relaxed and friendly atmosphere, a good personal relationship between the teacher and pupil, relevant and attainable tasks, lots of encouragement all help to motivate pupils and encourage



pupils to motivate themselves. This would obviously be the ideal classroom, the focus of intrinsic motivation is to try and develop children's control over their own learning and self-regulation. This preferable to having a system where a child is coerced to learn by conditioning and reinforcement of that conditioning through external rewards, competition and evaluation.

One of the concerns of teaching is with Teaching is with motivating children to learn and how and what motivates them to learn. We have looked at ways intrinsic motivation can be enhanced in the classroom in relation to task activity, relevance of activity, element of attainable success and classroom atmosphere. The important aspect of this approach to motivation is to empower children with the ability to direct and control their own learning. By trying to develop intrinsic motivation, children can internalize their learning. Researchers have noted that intrinsic motivation is most obvious during the elementary stage, in other words during primary school. But as children move up through the school system, intrinsic motivation seems to be undermined. By secondary school, children are more extrinsically more pressurised, more controlled, more evaluative, more dependent on grades (extrinsic rewards), competition and social pressures. In secondary school motivation consists mainly of pressure to perform, balanced by fear of failure, or of shame. It has been proven that children can be regulated by external constraints and controls and that eventually their inner world will match this. The question is whether it is the role of education, to produce people who are controlled and motivated by outside forces or rather is the role of education about promoting the individuals ability to have control over his/her learning and growth?

The motivation for creativity in children seems to be naturally disposed to intrinsic interest. Therefore it is an ideal subject in which to promote the learning principles mentioned above,



which enhance intrinsic motivation. Teresa M. Amabile, (1979,1982) has done much research in this area, she cites examples of highly creative individuals who reported that

...their creativity and their interest in their work were greatest when they concentrated on the work itself, rather than on externally imposed directives ... people are most creative when they are intrinsically motivated - that is, motivated primarily by interest in the task itself - and least creative when they are extrinsically motivated - that is motivated primarily by socially imposed goals that are external to the task itself... <sup>8</sup>

She uses the research on intrinsic and extrinsic motivation laid out in the previous chapter, to carry out similar experiments in the area of motivation and creativity. She discovered similar findings on how intrinsic motivation is affected by control, rewards, evaluation, competition etc. The same principles hold true for motivation for creativity. In other words the imposition of external factors and constraints can undermine creativity.



FOOTNOTES

- 1 Vidler D.C., "Curiosity" in Motivation and Education ed. Ball S. (New York: Academic Press, 1977) p.17.
- 2 Deci E.L. and Ryan R.M., Intrinsic Motivation and Self-Determination in Human Behaviour (New York: Plenum, 1985) p.14.
- 3 Ibid., p.15.
- 4 Ibid., p.16.
- 5 Ibid., p.17.
- 6 Ibid., p.18.
- 7 Ibid., p.20.
- 8 Amabile T.M. and Hennessey B.A., "Motivation for Creativity in Children" in Achievement and Motivation a Social Developmental Perspective ed. Pitman T.S. and Boggiano A.K. (Cambridge University Press, 1992) p.55.



## Chapter 4

### The Role of Creativity in Helping to Develop Intrinsic Motivation

Creativity seems to be naturally disposed to intrinsic motivation because it is primarily generated by the internal interests of the individual. Beth A. Hennessey and Teresa M. Amabile in their investigations on the "intrinsic motivation principle of creativity" state that:

People will be most creative when they feel motivated primarily by the interest, enjoyment, satisfaction and challenge of the work itself - not by external pressures.<sup>1</sup>

Therefore, if creativity enhances intrinsic motivation, we could say that the role of art in schools can play an important part in promoting the Humanistic principles of learning that is developing intrinsic motivation and therefore self-determination. I believe the important discoveries made in the last twenty years by Humanistic psychologists such as Deci, Ryan, Lepper, Greene and Amabile in the field of learning and teaching, can make great advances in education. For is it not better to develop an educational system which empowers pupils to control their own learning and self-determination rather than having a system which coerces and conditions them to behave by external constraints and rewards. I feel the art class is the ideal subject in which to promote the principles of Humanistic psychology laid out in this dissertation. In an art class the pupils tend less to be passive receivers of information but rather, they are active participants in the learning process because of the practical nature of art.

In the previous chapter I discussed the classroom conditions which help promote intrinsic motivation. These are:



- a relaxed classroom atmosphere
- a teacher who supports children's' autonomy
- tasks which are relevant to the pupils level and ability
- tasks which have an attainable level of success
- an element of choice or control over the activity and
- positive feedback which relates specifically to the pupils feeling of responsibility for the outcome of the given task.

These conditions help not only to promote intrinsic motivation but also creativity. Carl Rogers talks about the importance of the need to develop conditions which help to promote creativity.

Hennessey and Amabile point out:

As early as 1954, Carl Rogers talked about the 'conditions for creativity' and the importance of setting up situations of psychological safety and freedom, of providing an environment which external evaluation is absent. It was Rogers contention that creativity can flourish only in a climate in which the motivation to produce comes from within, and an examination of creative individuals first-person accounts of their works supports this view point.<sup>2</sup>

This also supports the view that creativity helps to promote intrinsic motivation and that they are inextricably related to each other. Therefore any art class can help to provide the conditions for creativity by developing projects which specifically relate to the pupils interests. Then it would seem necessary to set up the conditions in which creativity can flourish. If this creativity is generated from within, it would also seem necessary to promote intrinsic interest in the creative process. This implies developing projects which have intrinsic interest for the pupils so that they can work imaginatively from within themselves. This approach to learning and teaching implies a more intimate and individual approach to a class. In order to develop projects and tasks that relate to the pupils own interests involves a need to know what those interests are, and this suggests a more personal relationship with the class.



My own experiences during teaching practice have proven to me the benefits of promoting intrinsic motivation and also how creativity helps to promote intrinsic interest. I did not carry out any experiments with my class specifically in relation to my dissertation. However, I feel that through my research for this dissertation I internalised the concepts of a Humanistic approach to teaching. In tandem with my teaching practice, I believe I developed a psychology towards teaching which reflects the approach discussed in this dissertation. Therefore, in this chapter I propose to discuss my observations of the pupils motivation towards tasks and how my approach towards teaching developed. In particular I will discuss a sequence of lessons which led to an event that highlights the main focus of this dissertation.

I began my teaching practice at St. Peter's College, Killester, a small community school with approximately 150 pupils from first year to sixth year. The college also caters for a number of adult education courses, including a portfolio course in preparation for art and design colleges. Therefore, art has quite a high profile in the school. Most of the classes in the school are classified as remedial a classification which is based on behavioural problems as well as reading and writing ability. I was assigned to three junior classes all of which were remedial ability, one first year group and two second year groups. As I have the first year group twice on Tuesdays I felt was able to develop a better relationship with this class and produce more results due to the amount of time I was able to spend with them.

Initially when I began my teaching practice I was nervous of the pupils and also unsure of what to expect. As I have had no prior experience of remedial teaching, it was difficult to know whether my projects would be successful and appeal to the students. At first I felt I was probably more controlling and anxious with my class until I got to know them better and the kind of



learning difficulties they had. The criteria for teaching remedial pupils is to give them very clear, brief guidelines to achieve a given task as their attention span is very short. They will also get frustrated if they cannot complete or achieve the task, therefore it is extremely important to provide activities that are relevant to their level and ability. Because remedial pupils have difficulty in maintaining attention and concentration, it follows that they also have difficulty in maintaining motivation. Consequently, I feel the most important area to focus on when teaching remedial pupils is motivation. Generally remedial pupils have very low self esteem and lack confidence in their own abilities. This I witnessed many times in the form of pupils destroying their own work and because of their lack of self esteem they saw little value in what they produced. Therefore, it is vital to develop intrinsic motivation for these pupils as it can enhance their feelings of self esteem and confidence by controlling their own learning and hence they can exercise self determination. So, I felt I needed to concentrate on projects which would have intrinsic interest and relevance to these pupils. The most important aspect of teaching this group was to develop a project that interested them enough for them to pick up on it themselves and to internalise their motivation for the task. I felt that if the pupils became motivated by the task because essentially it interested them, the problems of concentration and attention would be handled.

This led me to develop a project, in the second term, on cars. I felt a group of first year boys would be interested in cars. My initial idea was to develop a project based on crazy cars, like a Batsmobile®, spacemobile and so on. The idea of this project was to explore and gain an understanding of the design process, from preliminary drawings to three dimensional models. This was to be achieved in a very basic way because the group are remedial. I believed that the idea of crazy cars would be fun and would appeal to them, as I assumed they would all know of



films like Batman and other types of imaginary cars from cartoons. I also decided to provide a lot of visual aids of cars in the form of large photocopies and books. This was in order to give them the structure and form of a car as I knew they would have difficulty in drawing their own cars. The visual aids would provide the basic shape from which to develop an idea. I chose cars from the 1950's in particular because of their extravagant and often cartoon like designs. However, when I introduced the project, I discovered that the pupils were more concerned with being able to reproduce a realistic drawing of a car. This was more of a motivation for them than drawing a crazy car. I realised that the concept of designing a crazy car was a little advanced for them and at this age they are more concerned with being able to produce realistic drawings. Even though their mental ability in other areas such as reading and writing is lower than their age group, plus their behaviour, they still see themselves as eleven, twelve and thirteen year olds. They have the same concerns as this age group and that generally means not appearing childish, which, for them means drawing realistically. Remedial pupils tend to get frustrated very quickly if they cannot produce something that looks good and often destroy their work. I quickly abandoned the idea of designing a crazy car and concentrated on helping them to produce a realistic car. I gave them the option of drawing or tracing the car of their choice. This was in order to give them some control in choice over the project and at the same time provide them with the materials in which to produce a realistic car drawing. All the pupils, except one, traced their cars. This particular pupil is extremely talented at art but unfortunately he has many behavioural problems. He has been removed from art classes on many occasions for these problems.

Once the pupils had traced their cars I photocopied them twice for each pupil. The next stage was to paint their cars in two distinctively different designs. For the first design I restricted them to primary and secondary colours and restricted their use of black, as I envisaged they would all



want to paint their cars black which would result in poor definition and only serve to aggravate their frustrations. This was to develop their awareness of the use of colour in design and to reinforce their knowledge of primary and secondary colours, covered in an earlier lesson. Also it provided them with the opportunity to work out their colour scheme for their three dimensional car. While the class were painting their cars I asked them informal questions about car designs based on make, style, and year (see appendices A and B).

The third stage was to make a very quick poster to advertise their car design. This was in order to put their car into a context which would briefly introduce them to the very basic elements of advertising, for example, I asked the class what they thought they would need to know about a car if they were buying one and therefore what they would need to include in a poster advertising a car. They came up with answers such as make of car, year it was made, price and miles per hour. These elements I asked them to include in the poster and to make up a slogan if they wished.

I did not dwell too much on this area, rather I decided limit this activity to one class. I felt it was important to move on to the three dimensional car construction as I did not want the pupils to loose interest. The fourth stage was to make the car out of new clay. The pupils were all very excited when I produced the clay and were keen to get started. This reinforced my feeling that they were intrinsically interested in the class. However, I feel that what came out of this almost as an unfortunate accident was of incredible value and importance both to me as a teach and to the pupils.



The day that I introduced the three dimensional stage of the project, I had given the clay out and started the pupils making a block shape out of the clay. Then I cut my finger very badly and was absent for the next class. Their teacher took them for this class and allowed them to work on the cars on their own. When I returned the next week I had a look at what they had produced. The majority of the class had attempted to make the cars and these were quite successful. However, other pupils had also made their own objects which included a house, a bowl and one or two had begun to make heads (see figures B-K). I thought this was an interesting departure from the cars and the heads were particularly good. So, when I began the next class I asked them if they had found making the cars difficult, most of them had. I thought that my absence had provided an excellent opportunity for a natural free choice period. In the third chapter I discussed in the experiments carried out by Deci and Ryan the importance of free choice periods. They demonstrated how pupils who have experienced activities as less controlling tend to be more motivated towards the task, and will return to it during free choice periods.<sup>3</sup> I felt that the pupils through this free choice period had demonstrated motivation towards the task, choice and control over the activity, initiative and self directed learning in making cars plus objects of their own choice. I also learnt valuable lessons from this event as I gained more knowledge of what motivated and interested the pupils. I also learnt how they adapted a material which they intrinsically enjoyed working with to their own needs and abilities. How the fact that I had a hidden agenda, of introducing them to the design process, was irrelevant to the pupils needs and motivation. What came out of this free choice period was so interesting and exciting that I allowed them to continue making whatever they liked for several classes. It provided a valuable opportunity to develop a familiarity with the material and its qualities in their own way. Naturally, when one or two had made successful heads the rest of the class wanted to make heads as well. I gave them all an opportunity to do this but I also felt it was interesting and valuable that one



pupil made a house (see figure M) and was not in any way swayed by the rest of the class. This was a good demonstration of intrinsic motivation.

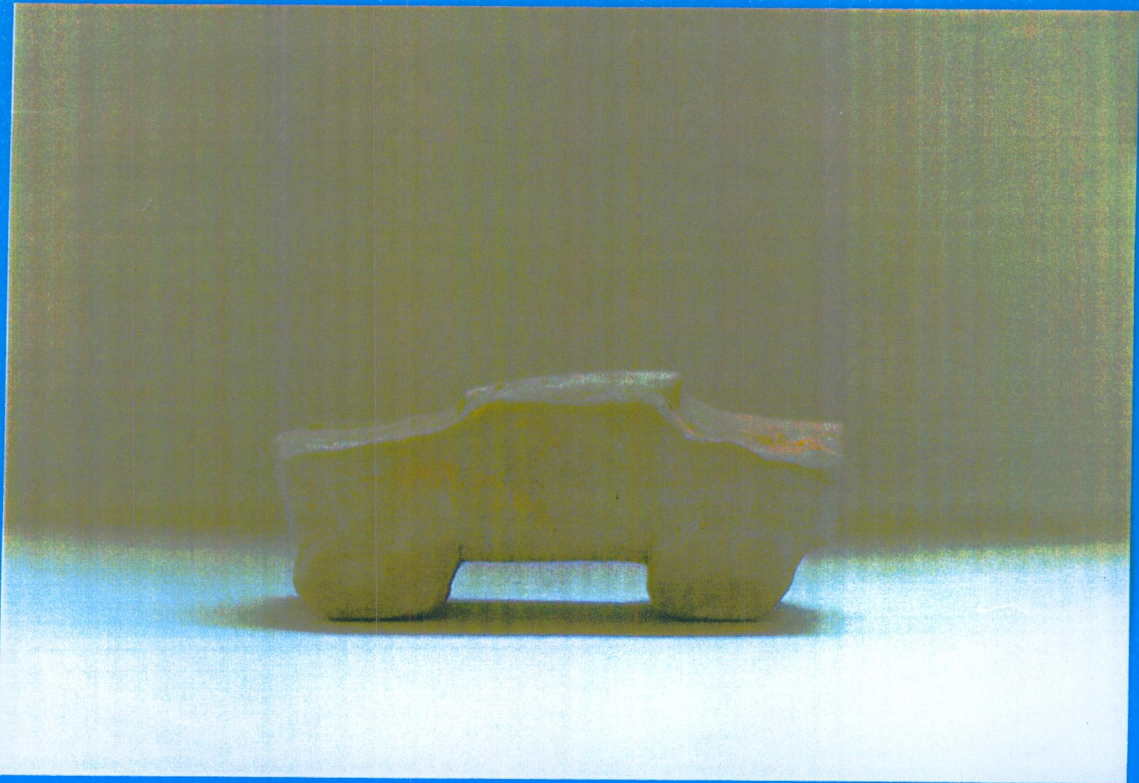
Another example occurred which I felt demonstrated how evaluative pressure can undermine intrinsic motivation. The class were very keen to take their work home and constantly asked me if they could do so. However, I had to tell them that they could not take their work home because it was going to be in an exhibition. They were told about the exhibition as a form of encouragement. Unfortunately for one of the pupils, who has extreme behavioural problems, it was very counter productive. During one of the classes he destroyed his model (see figure L). When questioned about the reason for doing this he told me he felt his car was not good enough and he was embarrassed about it. Prior to this we was quite pleased with his work but unfortunately he suffers from very low self esteem. I felt his action demonstrated how evaluative pressure can undermine intrinsic motivation and can have detrimental results.

#### FOOTNOTES

- 1 Amabile T.M. The Social Psychology of Creativity (New York: Springer-Verlag, 1983) p.11.
- 2 Ibid., p.11-12.
- 3 Deci E.L. and Ryan R.M. Intrinsic Motivation and Self-Motivation in Human Behaviour (New York: Plenum, 1985) p.16.



CAK PROJECT.



NEW CLAY MODEL OF CAV.

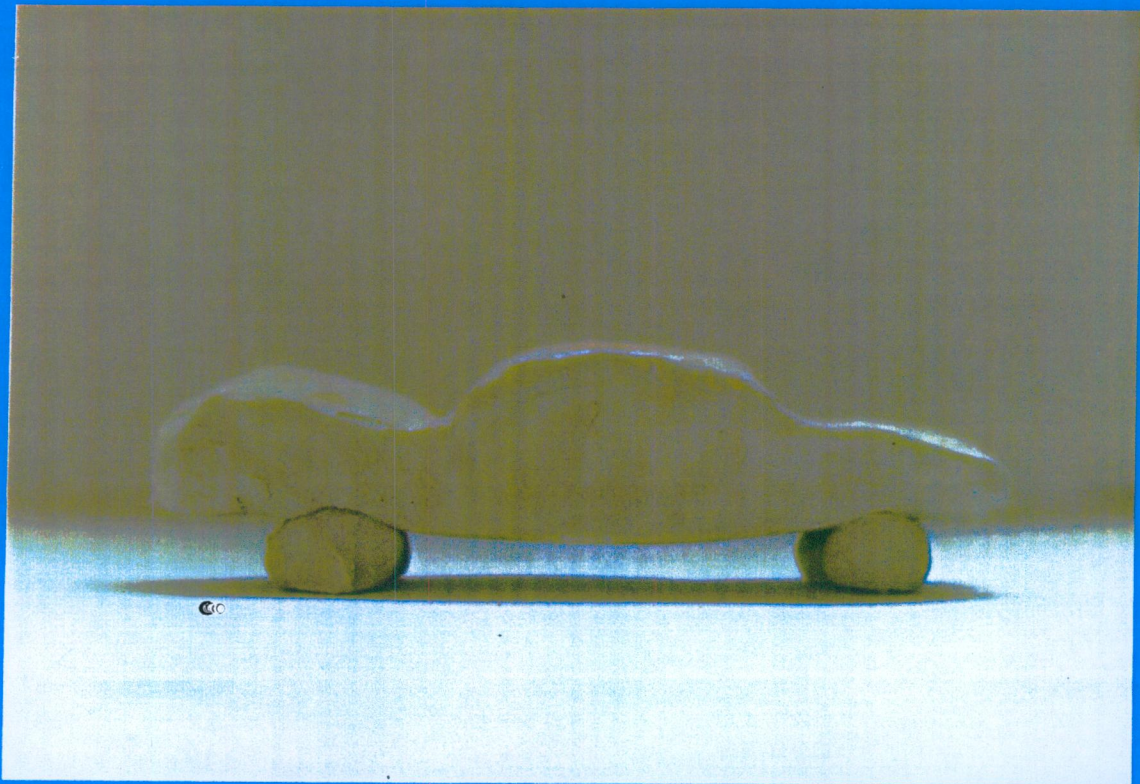
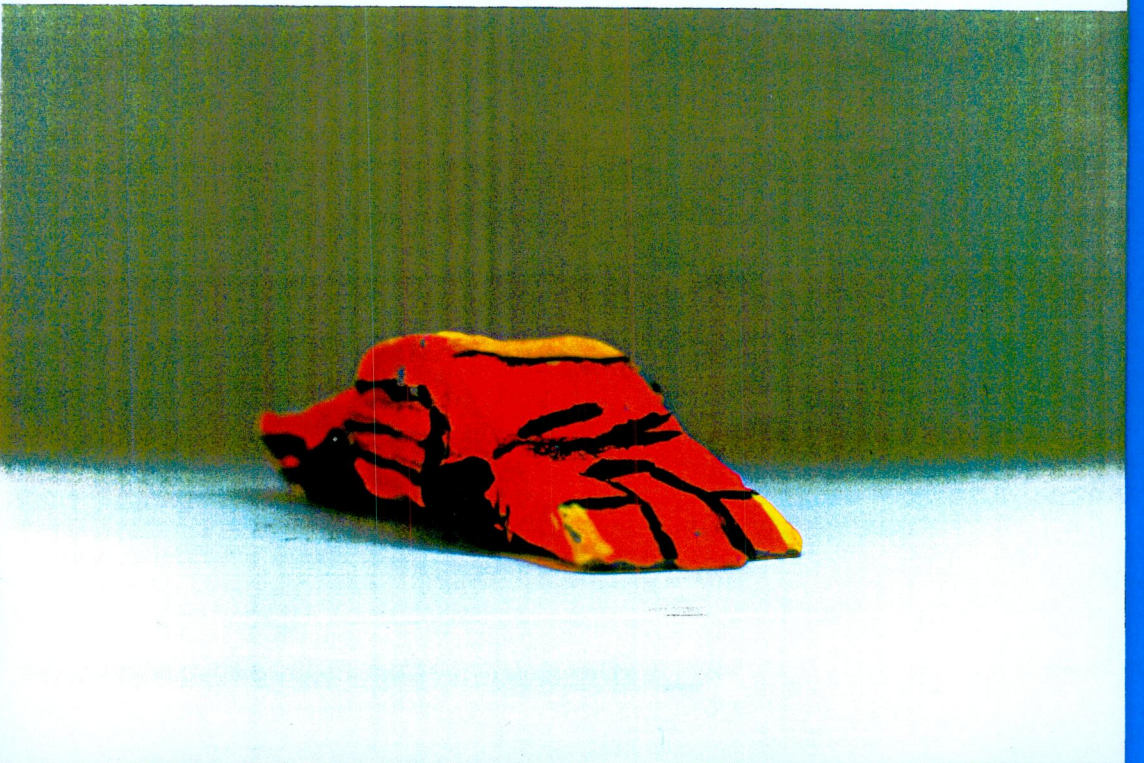
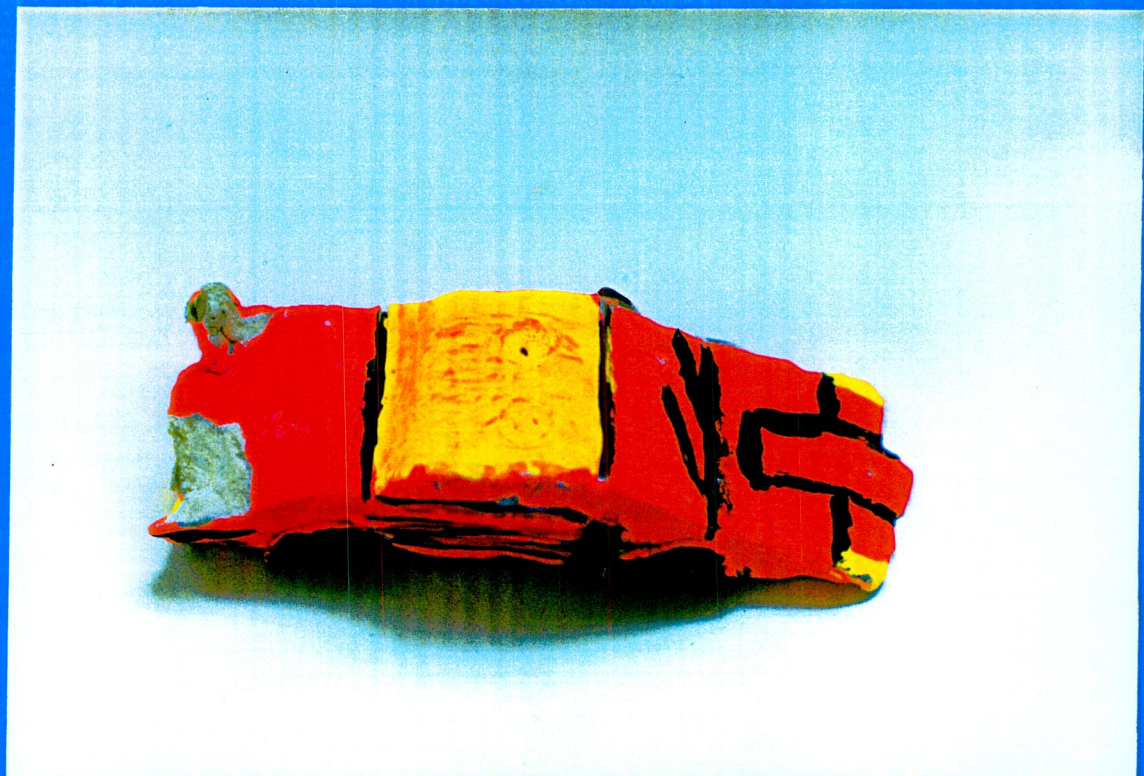


FIGURE B.



CAR PROJECT

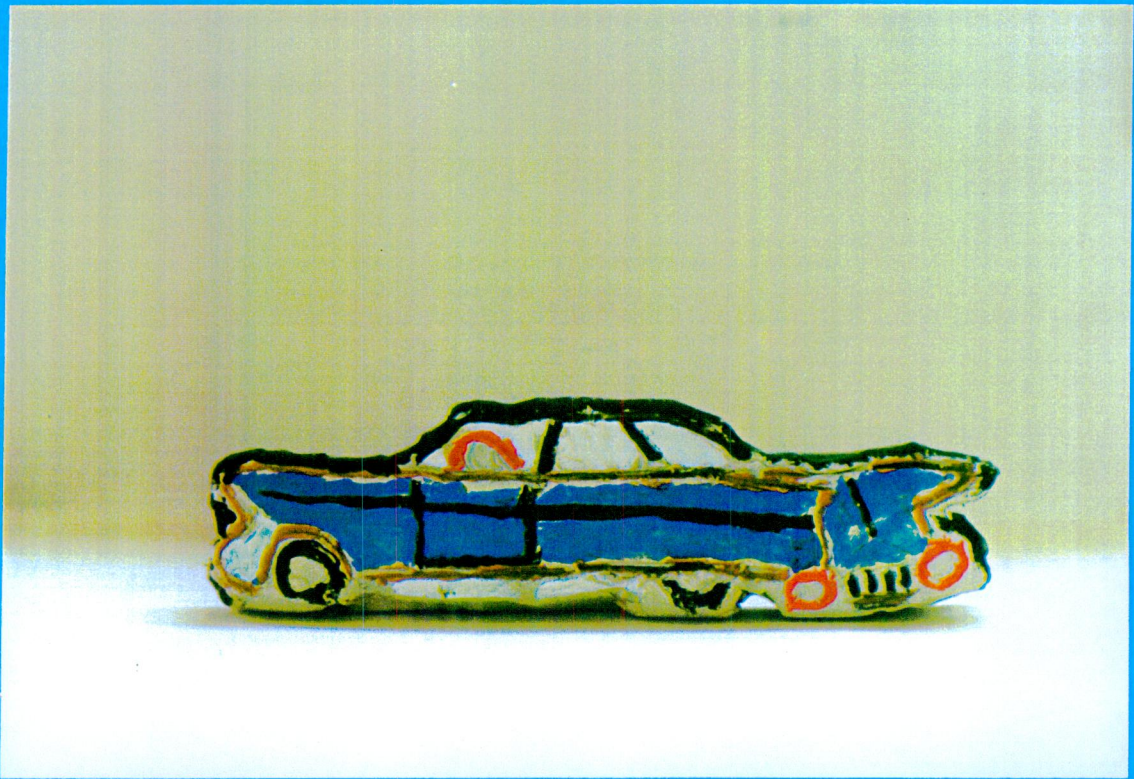


POLSCHE BY BRIAN.

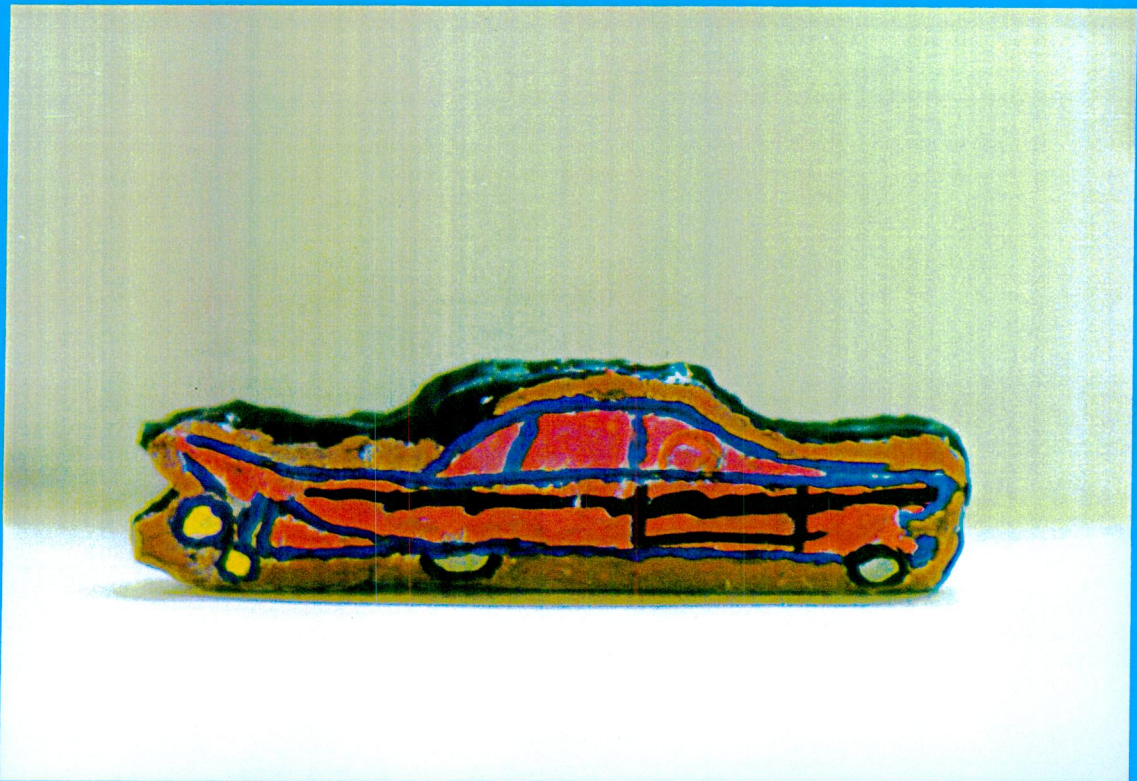
FIGURE C.



CAR PROJECT.



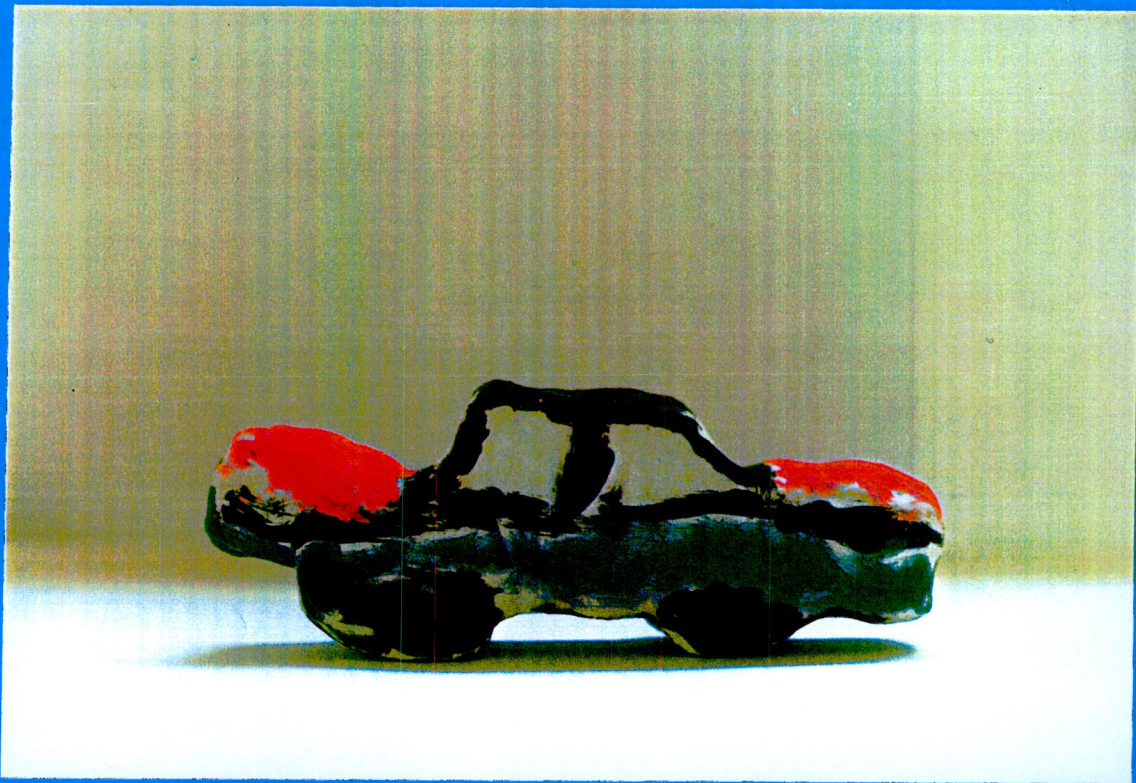
MODEL CAR PAINTED BY TONY.



CAR BY TONY.



CAR PROJECT.



MODEL CAR PAINTED BY PAUL.

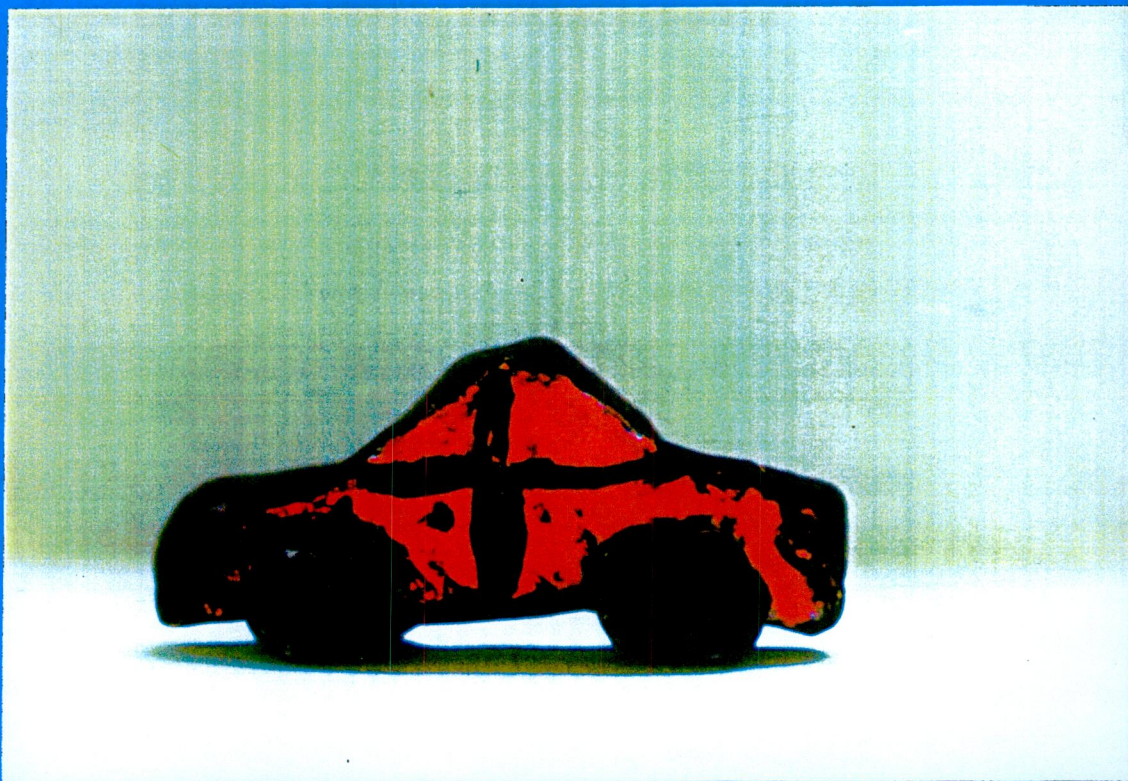


FIGURE E.





HEAD BY SHANE.



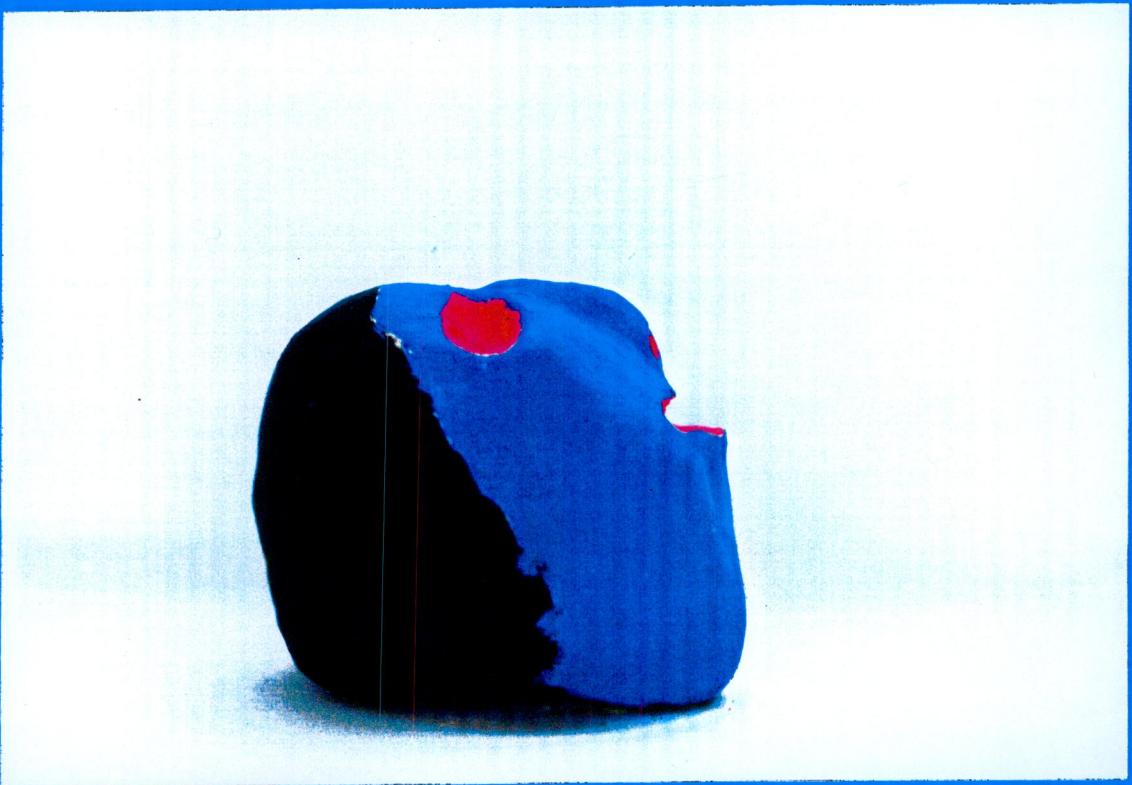
FIGURE F.



SELF DIRECTED LEARNING.



HEADS PRODUCED FROM A FREE CHOICE PERIOD.



HEAD BY JEAN - PAUL.

FIGURE G.





HEAD BY TONY.



HEAD BY FRANCIS.

FIGURE H.





HEAD BY GARRY.

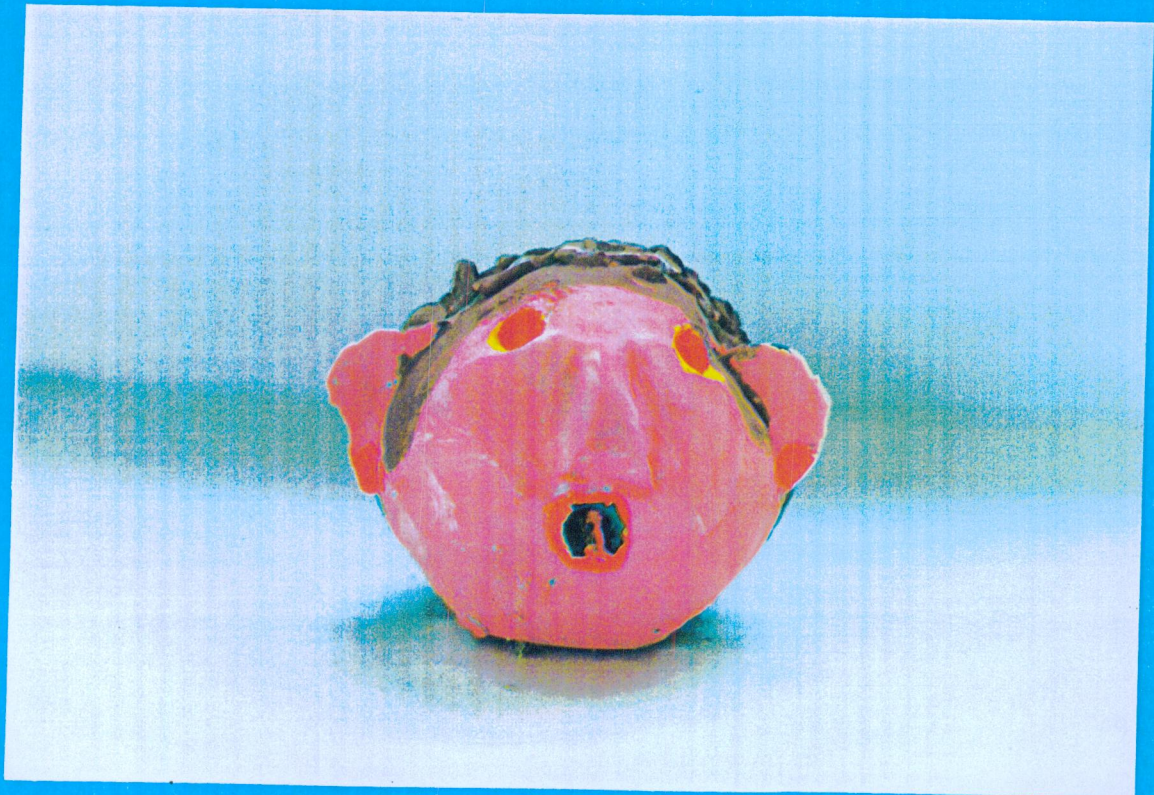
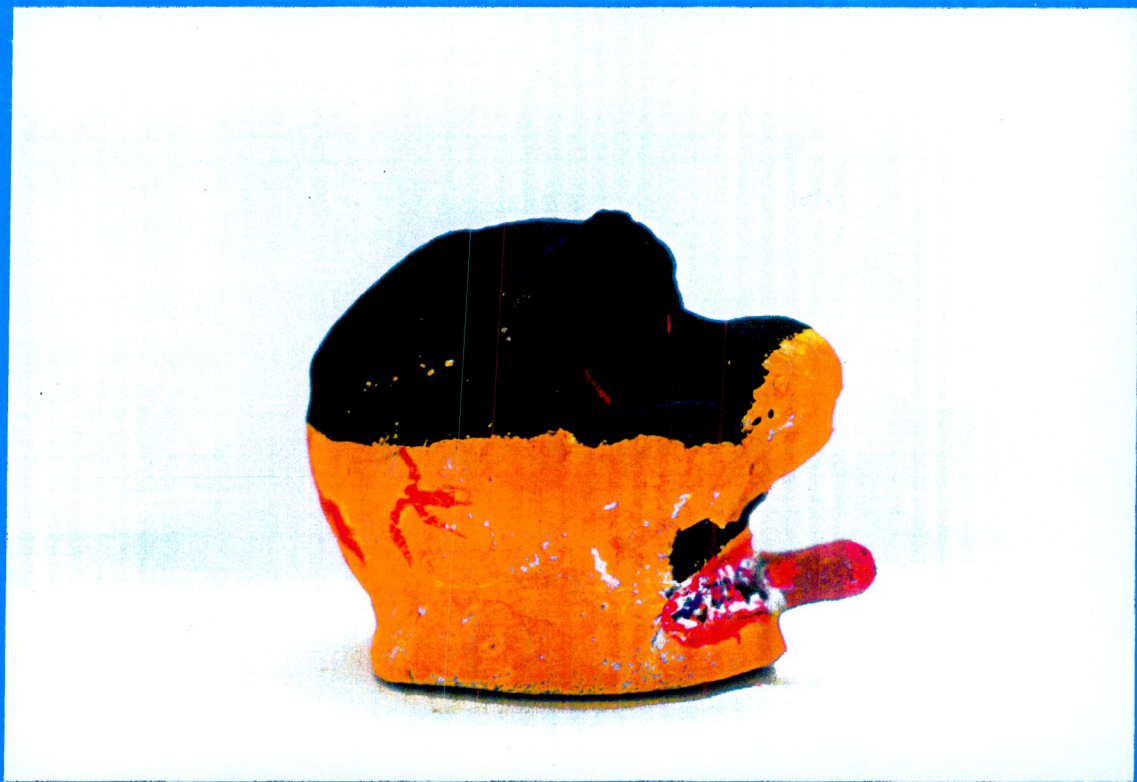


FIGURE I





HEAD BY MICHEAL.



FIGURE J.





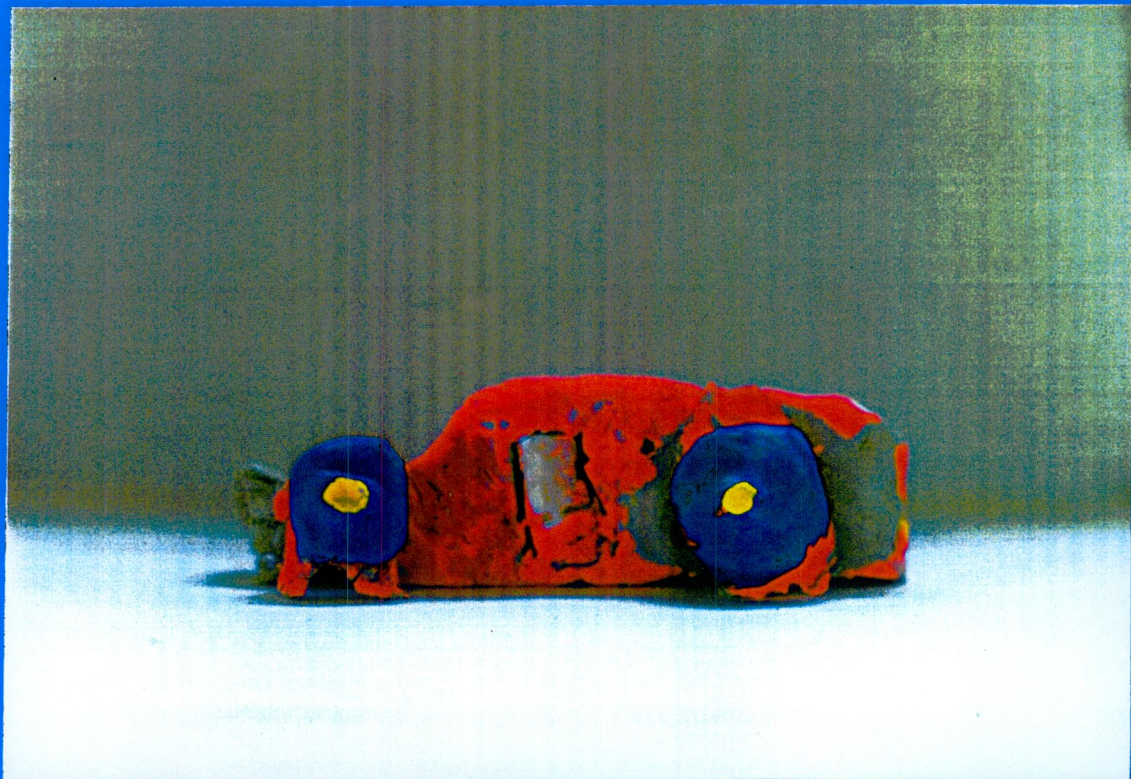
HEAD BY STEVEN .



FIGURE K.



CAR PROJECT.

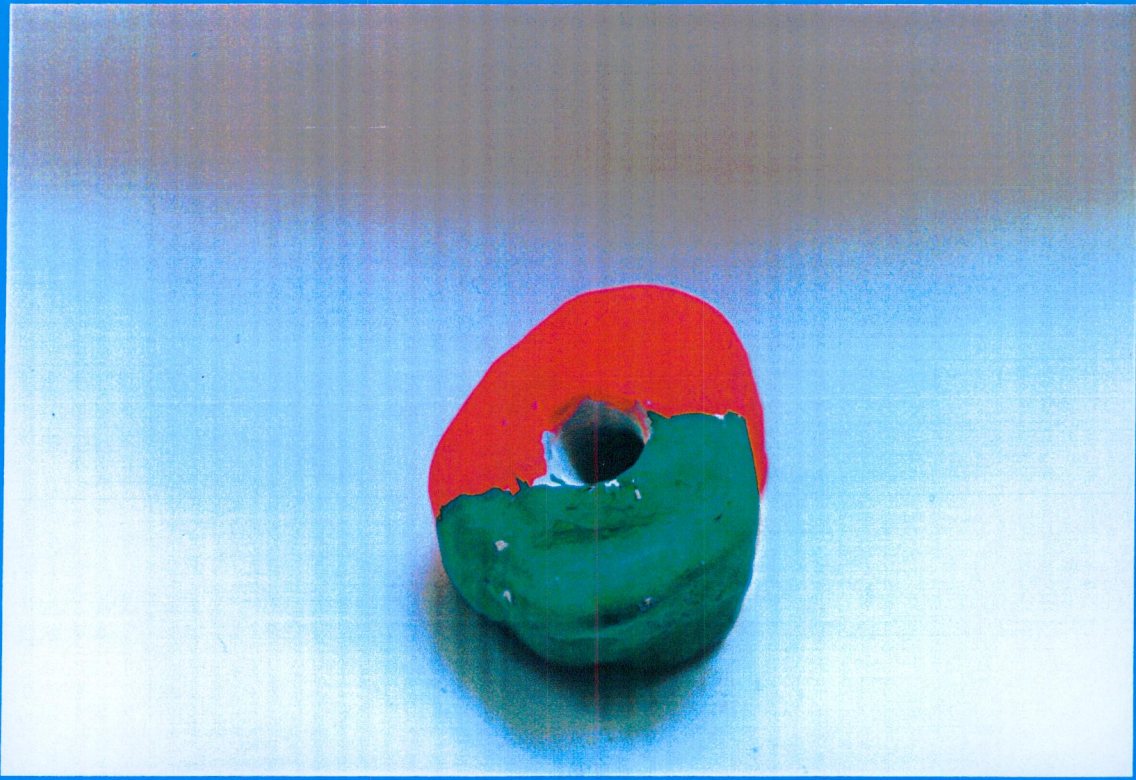


CAR BY ROBERT.

ROBERT BROKE HIS CAR WHEN HE WAS TOLD IT WAS GOING TO BE IN THE EXHIBITION. HE TOLD ME HE BROKE IT BECAUSE HE THOUGHT IT WASN'T GOOD ENOUGH. PREVIOUS TO THIS HE THOUGHT IT WAS GOOD.



SELF DIRECTED LEARNING.



PENCIL HOLDER BY TONY.



HOUSE BY GARRETH.

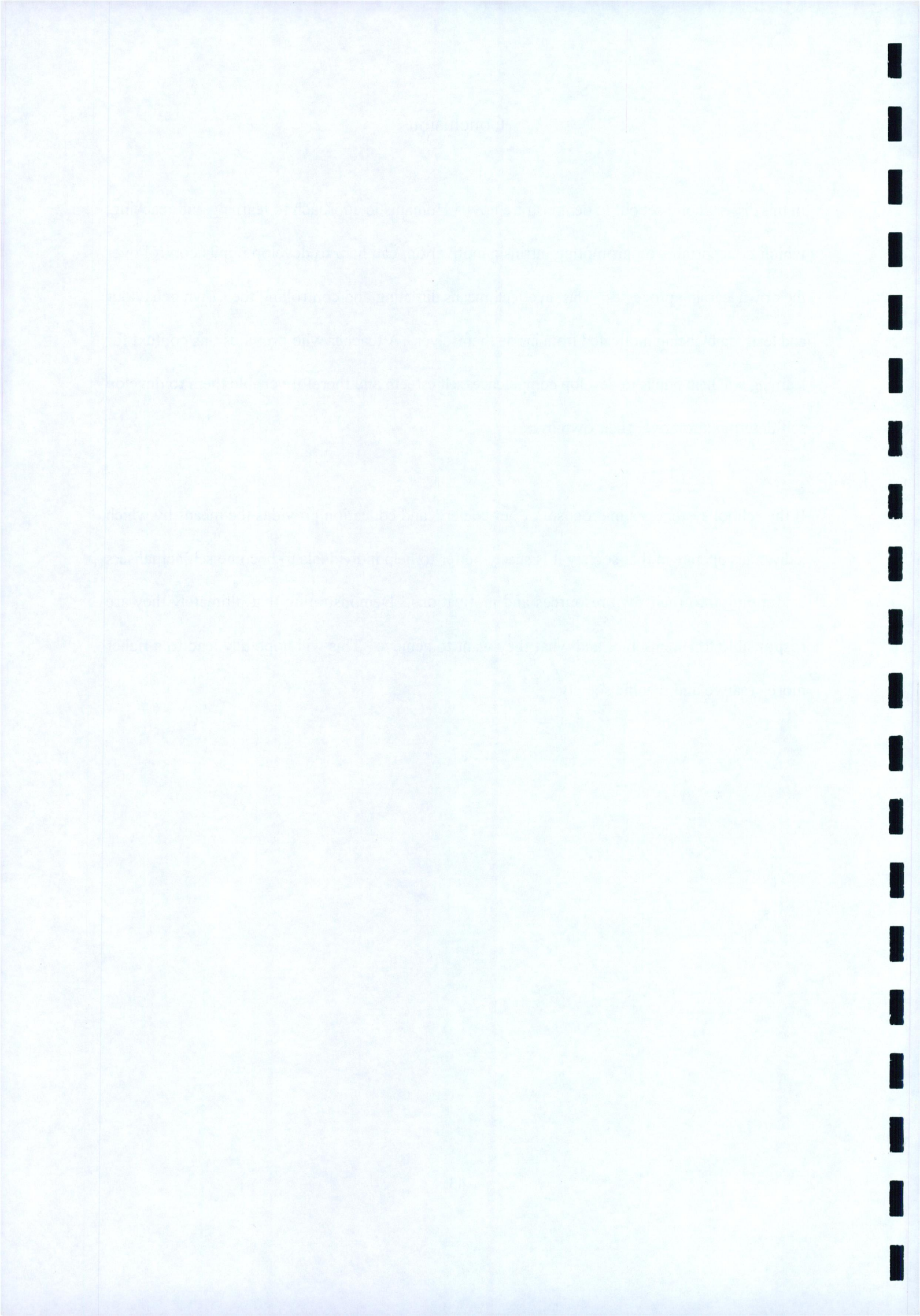


## Conclusion

In this dissertation I set out to demonstrate how a Humanistic approach to learning and teaching, which concentrates on promoting intrinsic motivation, can help to develop pupils control over their own learning processes. This, in effect, means directing and controlling their own behaviour and learning by being motivated from inside themselves. A teacher who provides this context for learning will help pupils to develop competence, self esteem and therefore enable them to develop self determination over their own lives.

If the school system is a microcosm of our society, and education provides the means by which individuals operate in that society it is surely better to help individuals to become self actualisers by tapping into their own resources and motivations. Demonstrating that ultimately they are responsible for themselves and what they want to achieve. This will hopefully lead to a richer more creative and flexible society.







## Appendix A

### Lesson Plan

Lesson	:	Lesson 1
Date	:	22 February 1994
Class	:	Elm 1 (Remedial)
Time	:	10:00 am to 11:00 am
Project	:	Car Design & Modelling
Aim	:	To explore and gain an understanding of the design process from preliminary drawings to three dimensional models. This is to be achieved in a very basic way because this is a remedial class.
Objective	:	To gain an understanding of line, structure and perspective through car design.
Motivation	:	I chose cars for this project as I have a group of first year boys who I feel will all be interested in cars. Therefore I feel this will stimulate and motivate the class as it will be a project that will be relevant and of intrinsic interest to them. It will provide an opportunity to expand on their existing knowledge of cars by giving them a brief history of car design, from the 1920's to the present day.
Visual Aids	:	Large photocopies of cars from the 1950's, drawings of car designs and models of cars by designers. Books on the Volkswagen Beetle and American cars from the 1940's to the 1990's.
Introduction	:	Show the class the pictures of the cars and introduce the project. Ask the class if they can name any of the makes of the cars. Ask them to describe the shape of the cars. Have a free discussion on cars to establish the pupils own interests. Ask the pupils to select one of the cars and copy it, either by hand or by tracing.
Set Task	:	To pick a car and draw or trace it.



## Appendix A

Lesson	:	Lesson 2
Date	:	22 February 1994
Class	:	Elm 1 (Remedial)
Time	:	2:00 pm to 3:00 pm
Project	:	Car Design & Modelling
Aim	:	As Lesson 1.
Objective	:	As Lesson 1.
Motivation	:	As Lesson 1.
Visual Aids	:	As Lesson 1.
Introduction	:	Photocopy all the drawings or tracing of the cars twice. Hand out the photocopies and tracings to each pupil.
Set Task	:	Ask the class to paint their car drawings in two completely different ways, only using black as an outline or to fill in small spaces. I want the pupils to avoid using black as I think most of them will end up painting a whole car black.
Introduction	:	While the class are working, ask casual questions about cars, for example when do they think a certain car was made, why, how can they tell what makes it different - shape, style, use of colour, etc. Do they think American cars from the 1950's are more exciting than cars made now. Why do they think cars in the 1930's and 1940's were mostly black and cars from the 1950's used bright and loud colours.
Self Evaluation	:	<p>I was very please with the way in which this class went. The pupils were immediately excited by the project and enthusiastically answered questions about the cars, as they were keen to demonstrate their knowledge of the subject. All the pupils traced the cars and I was impressed with the attention paid to accuracy and detail. They were also impressed with the photocopies of their work as it looked very professional. They enjoyed painting their drawings and restricting their use of black proved to be a necessary precaution.</p> <p>I was pleased with the response to questioning about cars in the second class. They imagined that some of the cars from the 1960's were made now, their answers were mainly accurate about cars made in the 1950's. When I asked questions about the change in colour and design from the 1940's to the 1950's one or two pupils came up with the idea that it was due to the second world war.</p>



## Appendix B

### Lesson Plan Sequence for Elm 1

Week & Date	Class Group and Time	Theme	Source	Element	Activity/Skill	Material	Support Studies
1 - 22 Feb 1994	Elm 1 10:00-11:00 2:00-3:00	Cars	Magazines, books, toy cars	Line, structure, perspective, shape	Drawing and tracing	Paper, pencils, tracing paper	Car designs, designers, cars from 1950's to 1980's
2 - 1 Mar 1994	Elm 1 10:00-11:00 2:00-3:00	Cars	Drawings	Line, structure, perspective, shape	Painting	Paint	Books on the VW Beetle, examples of unusually painted cars
3 - 8 Mar 1994	Elm 1 10:00-11:00 2:00-3:00	Cars	Drawings	Line, structure, perspective, shape, form	Modelling car in new clay	Clay	Examples of model cars
4 - 15 Mar 1994	Elm 1 10:00-11:00 2:00-3:00	Cars	Models of cars	Line, structure, perspective, shape	Modelling cars and painting	Clay and paint	Examples of model cars
5 - 23 Mar 1994	Elm 1 10:00-11:00 2:00-3:00	Cars	Models of heads	Line, structure, perspective, shape	Modelling heads and other objects	Clay and paint	Examples of model cars



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