TEACHER-PUPIL RELATIONSHIP

IN TRADITIONAL AND PROGRESSIVE

CLASSROOMS //

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CANDIDATE'S DECLARATION:

This thesis is my original work and has not been presented for a degree in any other University.

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CONTENTS

ABSTRACT

The objective of this study was to determine, empirically, whether, as claimed by its adherents, the Progressive Classroom is superior to the Traditional Classroom in terms of Teacher-Pupil interaction and the use of social communication techniques.

The study, carried out among 240 sixth-grade pupils from eight different schools, compared paired groups of four Traditional Classrooms and four Progressive Classrooms, on the eleven variables of Flanders' Interaction Analysis Categories (FIAC) in four subjects – Geography, English, Nature Study and History.

Statistical comparisons of the data using the Wilcoxon Matched-Pairs Signed-Ranks Test indicated that the Progressive Classroom was superior to the Traditional Classroom in a total of eight variables while the remaining three variables showed no significant difference between the two types of classrooms.

The results are in the same direction as those of the few empirical tests which have been done in this area previously. They are discussed not only in terms of their relevance to the objective of devising methods of effective communication in Kenyan classrooms but also as a tool for national development by engendering creativity among pupils.

ACKNOWLEDGEMENTS

CHAPTER I

INTRODUCTION:

Most developing nations tend to rely very heavily on the developmental techniques and policies originated in the more developed countries. In recent years there has been a tremendous shift in thinking regarding education in the West which has resulted in two types of classrooms, especially in primary schools, thriving simultaneously. These two types are the Traditional Classroom and the Progressive (often referred to as the Modern or Open) Classroom. The Open Classroom has not been introduced in developing countries, like Kenya, but there are indications that it might eventually make inroads into their educational policies. By investigating the inter-actions (teacher and pupil) and the social climates associated with either of the classrooms, it is possible to bring ourselves to a position from which we can advantageously explain the implications of retaining the Traditional Classroom or introducing the Progressive Classroom.

As indicated above, the subject of this investigation will be a comparison of the Traditional Classroom vis-a-vis the Progressive Classroom in terms of certain criteria which will be discussed later. A brief definition of the two words (Traditional and Progressive) is, however, pertinent in order to explain the context within which they are used here. Traditional refers to customary operations and particular

dimensions of outlook successfully adhered to from one generation to another. Progressive, on the other hand, wholly carries connotations of things and events pertaining to the present day, which replace what has been customary and traditional hitherto. 'Progressive' usually implies a notion of updating or modernising, and therefore hopefully a sense of betterment. As used in this study, therefore, the Traditional classroom refers to all the aspects and structure conventionally employed, including method of instruction, sitting arrangement, discipline methods of instruction and the interaction between pupils in the classroom as well as the interaction between the pupils and the teacher. The Modern Classroom which is largely based on the deveopmental stages set out by Jerome Bruner (1964) and Jean Piaget (1968) refers to the type of classroom that has emerged as a result of changes in the Traditional Classroom due to later day thinking (most of it by educational philosophers) and psychological research. These changes, according to literature that will be reviewed later, are what the exponents of Modern Classroom maintain has brought about a better classroom; hence the controversy over which is better than the other: the Traditional Classroom or the Progressive Classroom. This study sets out to find out whether indeed the Progressive Classroom is superior to the Traditional Classroom.

The Traditional and the Progressive Classrooms:

An Introduction to the controversy

The Traditional Classroom had its beginnings in the

stipulations of philosophers such as Plato (cited by Basanquet, 1900), Aristotle (cited by Berker, 1962) and Locke (cited by Adamson, 1912) with regard to the acquisition of knowledge and wisdom and the dissemination of these qualities from adults to younger generations. The educational philosophies of some of these early educators and their respective contributions to the emergence of the Progressive Classroom will be dealt with later. However, one stipulation that is shared among them and which has guided and dictated the structure and methods of teaching over many generations is that wisdom and knowledge has to flow from the teacher to the pupil.

Generally, the philosophies behind the Traditional Classroom have two complimentary facets. The first facet is based on the observation that the infant is highly vulnerable and this stipulation is coupled with the assumption that the mind of the child is blank. The classic example cited often is that his mind is like a plain piece of paper, a tabular rasa or a "mental blank" on which the guardian and the teacher make impressions as the child grows; (Locke cited by Rusk, 1969). The second facet has its basis in assumptions regarding inherent rights of adult superiority and authority over the child. Authority is the more opportune word in this respect because it connotes both power and expertise. Accordingly, the traditional notion of the teacher is that of an expert in knowledge and skill. In other words, he is "the-know-all" whose major job is to 'teach' and impart knowledge and skill to the pupil in the same manner that

the blacksmith passes his expertise to his apprentices.

Regarding authority, the teacher's word is the final authority as regards the knowledge to be acquired in the Traditional Classroom and the pupil is simply supposed to <u>imbibe</u> this knowledge more or less unquestioningly. The structure of the Traditional Classroom is such that the teacher stands in front of the pupils, who ideally should sit, <u>inert</u> and quiet, while mentally absorbing what the teacher says. Consequently, the Traditional Classroom is often described as being "teacher-centred". The following legend (Gay, 1964) is often given as an illustration of the authoritative attitude prevalent in Traditional Classrooms. The legend says that a child in a nearby town was told by his teacher that insects have eight legs. He found an insect, counted the legs and discovered the unfortunate fact that there were only six. He asked another teacher who confirmed with other examples that insects may have six legs. The child took the insect to school the next day and showed it to the teacher. The result was that the child was beaten.

This may be an extreme case, but it serves to illustrate the nature of academic teacher-pupil relationship that subsequent literature maintains is a major characteristic of the Traditional Classroom.

By contrast, proponents of the Progressive Classroom claim that the authoritative atmosphere of the Traditional Classroom with its commands, its 'dos' and don'ts' frightens the pupil and stultifies his sense of creativity and originality.

According to Holt (1968), when children are frightened, their learning is stopped dead in its tracks, whereas a free, relaxed atmosphere such as is claimed to be championed by the Open Classroom will make the school into a place where the children use and improve the style of thinking and learning natural to them, and where they grow, not just in size and knowledge, but also in curiosity, courage, confidence, independence, resilience, patience, competence and understanding.

Another distinguishing feature of the Traditional Classroom, as we know it today, is that it lays most emphasis on the content of the material to be learned and stresses habit formation and conditioning as major ways of learning. Implicitly, aspects of the personality of the teacher and the nature of his interaction with the pupils as possible change agents in the learning process are ignored. The emphasis, instead, is on the provision of rigid durable habits as tools for solving problems in later life. The Progressive Classroom on the other hand, insists on laying most emphasis on the context of the learning situation and further argues that the psychological atmosphere of the classroom is of extreme importance in moulding the character of the pupil and increasing the rate and efficiency with which he learns. Moreover, exponents of the Progressive Classroom argue that the future is too capricious for the problems that will come to be solved efficiently with ready-made repetitive habits. Thus, what the pupils need from the teacher are not durable habits but the ability to adjust to changing situations, to see

problems from different perspectives, and the capacity to respond to novel and differing stimuli with competence.

In criticising the authoritative nature as well as the one way communication channel in the Traditional Classroom, as we know it today, Flanders (1970) says that summarily the traditional teacher tells the pupil what to do, how to do it, when to start, when to stop, and how he did whatever it was that he did. Instead Flanders suggests that when the classroom interaction shifts towards more consideration of pupil ideas, more pupil initiation and more flexible behaviour on the part of the teacher, the pupils will have more positive ideas towards the teacher and school work. He quotes Dodl (1966), Parakh (1965) and Johns (1966) as offering substantial support for what he suggests.

In explaining what he calls the "present problems" in the classroom, Flanders resorts to what Cantor wrote in 1953. The most important among his many criticisms of "the false assumptions in the Traditional Classroom" are:

1. The teacher's job is to set out what is to be learned and the student's job is to learn it.

2. The subject matter is the same to the learner as to the teacher.

3. Education prepares the student for later life rather than it is a living experience.

4. The teacher is responsible for the pupil's acquisition of knowledge.

5. Pupils must be coerced into working on some tasks.

6. Knowledge is more important than learning.

Flanders adds that data, gathered from sociological studies, tend to confirm rather than contradict Cantor's views about the Traditional Classroom.

Similarly, the findings of Harris (1969) are supportive of the views expressed by the authors mentioned above.

According to Harris, the best way to achieve rapport between the adult and the child is not to roar at the child and threaten him with punishment but to make the child understand that both him and the adult have feelings which can be pushed too far, and if that happens, both of them are going to feel hurt. This kind of adult-child acceptance or rapport cannot develop if the adult is too bent on exercising his authority on the young ones - a situation which is characterised by the adult saying: "You do that and I'll slap you, silly" or in the case of the teacher: "Repeat that and I'll cane you". All that this does is to shut up the creativity and curiosity genius of the child such that he cannot ponder the pros and cons of the issue at hand, other than get scared of the fact that he will be "slapped silly". And so the teacher becomes, in the child's mind, an alienating person who canes you when you fail to do your homework properly, rather than a friend who helps the child solve his day-to-day problems of living.

Pines (1969) offers further support and explains that the aim of the Progressive Classroom is "revolutionising education" and making school a warm place for people to stay and learn and not a place of authority which sends home bad reports about

one's child.

Writing in 1970, Freire, in a more impassioned tone, expressed the same opinion in what he called the "Banking System" of education. Freire explained that the Traditional Classroom as we have known it so far suffers from " narration sickness" in which the teacher "fills" the pupils with the contents of his narration, "which are detached from reality" and "disconnected from the reality that engendered them". He further explained that this turns the pupils into containers to be filled by the teacher, and as such the traditional teacher ends up doing less communication but issues more communiques and makes "deposits" which the pupils patiently receive, memorise, and repeat. He suggests that in order to rectify this situation, a solution should be found into this "teacher-pupil contradiction". Among the attitudes Freire (1970) associates with the Traditional Classroom, the most relevant to this study are that:-

1. The teacher knows everything and the pupils know nothing.

2. The teacher talks and the pupils listen - meekly.

3. The teacher thinks and the pupils are thought about.

4. The teacher disciplines and the pupils are disciplined.

5. The teacher chooses and enforces his choice, and the pupils comply.

6. The teacher chooses the programme content, and the pupils (who are not consulted) adapt to it.

7. The teacher confuses the authority of his knowledge with his own professional authority, which he sets in opposition to the freedom of the students.

The desirable classroom as Paulo Freire sees it, is one in which the teacher is no longer the one who teaches the pupils but one where the teacher also learns in <u>dialogue</u> with the pupils. This apparently is a proposition held very strongly by the proponents of the Progressive Classroom, as will become clear later. The Traditional Classroom is summed up by Oeser (1955) who denounces it by saying that many of the traditional methods used in the classroom are faulty because they rest on inadequate insight into social structure and function; because they rest on an out-of-date psychology; because they are inefficient to the point of wastefulness; and because they too often create anxiety and the desire to escape from knowledge.

This, briefly, is the controversy surrounding the Traditional and Progressive Classrooms - a controversy which suggests that a comparison of representative samples of the two types of classrooms in terms of teacher-pupil relationships ought to reveal substantial differences between them in favour of the following hypothetical predictions:-

1. The Progressive Classroom teacher will be more emphathetic to pupils' emotion and more flexible in dealing with his pupils than the Traditional Classroom teacher.

2. The teacher in the Progressive Classroom will engage in less direct lectures to the pupils and will spend more time clarifying and extending pupil ideas than the teacher in the Traditional Classroom. There will also be more active mutual interaction (communication) between the teacher in the Progressive Classroom and his pupils than in the Traditional Classroom.

3. The teacher in the Progressive Classroom will be less authoritative in his approach to pupils than the teacher in the Traditional Classroom.

4. Pupils will tend to resist the influence of the Traditional Classroom teacher more than the influence of the Progressive Classroom teacher.

These hypothetical predictions will be elaborated on later in a full survey of the major literature that contrasts the Traditional Classroom with the Progressive Classroom - which literature will explain how these predictions have been derived. This will be followed by the method used for investigation; the Flanders' Interaction Analysis Categories.

In the following chapter, we shall be looking at the historical antecedents that have led to the controversy between the Traditional and Progressive Classrooms. We will also attempt to show, through a review of the works of some of the major educationists, how educational thinking has changed over the years. It is this change in educational thinking that has led to the claims that the Progressive Classroom is a superior institution than the Traditional Classroom.

1. A D D E N D U M – Theoretical framework and the purpose
of the study.

The reason for carrying out or undertaking a particular
study or research project can be stated in a variety of ways.
The most obvious and in actual fact the simplest would be a
straightforward prosaic statement which would say, in a
prototype manner "..... the reason for this research, or
...... the reason for undertaking this research is ....".
The other ways to state the same, would be to say "the purpose
of this study" or "the objective of this research is ...".
Other varieties are also available. We could say, for instance
that "This study will be undertaken in order to ....".

With regard to the current study, the purpose, as stated
in the abstract "........ was to ascertain, through empirical
datal whether as claimed by its adherents, the progressive
classroom is superior to the traditional classroom in terms of
Teacher – Pupil interaction and the use of social communication
Techniques that facilitate learning by discovery and creativity
on the part of pupils. Further, the purpose of the study is
also to be found in Chapter 1 ...... Introduction – where it
is stated that ......" the subject of this investigation will be
a comparison of the Traditional classroom vis-a-vis the Progressive
Classroom ......'.

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CHAPTER II

THE HISTORICAL AND PHILOSOPHICAL BASES OF
THE TRADITIONAL CLASSROOM
AND THEIR CONTRIBUTION TO THE EMERGENCE OF
THE PROGRESSIVE CLASSROOM

Educational thought and practice for children has been guided by the adult world's conception of what the children should become and of what utility they eventually ought to be in perpetuating their culture. Seen in this light the idea of formal, traditional education receives its best explanation from various classic educators.

Plato:

Plato is the architect and upholder of the doctrine of formal training (Rust, 1969). In his concern for "good" education he admonishes that ".....children are your riches and upon them turning out well or ill depends on their father's house" (p.6), and elsewhere that, "No man should bring children into this world who is unwilling to preserve to the very end their nature and education" (p.6). Education in Plato's ideal republic commences on "the first years of childhood and last to the very end of life" (p.6).

Ideally, in Plato's republic parental figures were supposed to watch closely the improvement of the child as it grew up. This is a situation which well deserves the term we have used above - "formal training". The aim of the educators was to admonish the

child with material that he was required to learn by heart in order that he would imitate or emulate them. This when paraphrased means that the children should learn by rote and also disavow their originality and take in everything that the teacher offers as absolute. As will become clearer later, this is one of the major points of contention between the Traditional and the Progressive Classrooms. This format of education, based on Greek philosophy and relating to the 'placid, tractable, evilly emotional and indulgent' nature of children forms the basis for the Traditional Classroom. Stated briefly, the idea behind education was that children should be fervently infused with adult morality, philosophy of life, and behaviour; great care had to be taken to prevent them from deviation from adult edicts. This type of education, based on adult supremacy, adult monopoly of the knowledge of right and wrong and pupil dependence has continued through centuries to the present time.

John Milton:

After Plato, there were many other educators and educational philosophers who advocated 'the ideal' education for society. But it seems appropriate to take John Milton as the next landmark in tracing, however briefly, the development and perpetuation of the Traditional Classroom as we know it today and how deviation from its tenets has led to the Progressive Classroom.

Milton was one of the first educators to voice dissatisfaction with the Traditional Classroom, in that he was opposed to 'cramming'. He insisted that learning occurs best

when it is supported by practical experience, but on a larger
context, he was very much a part of the Traditional Classroom.
In his guidelines for education, religion took prominence and
discipline was a cardinal aspect. Like his contemporaries, whom
he decried for negligence and lack of discipline, he held the
opinion that physical, moral and intellectual training of the
pupil was wholly in the hands of the teacher and the other adults
among whom he grew up.

Milton's importance in the context of a survey in the
historical changes of educational ideas lies in the fact that
through his intuitive commonsense he introduced two important
general principles of educational methods: one, that knowledge
should be based on sensory experience on the part of the pupil,
that is, audial, visual and tactile experiences, and the other,
that there should be revision of the material learned. In his
educational extrapolations, he warned against what, after many
years, teachers have, through practice and psychological
research, partly realised: that there is danger in exclusive
bookishness, and that there is need to combine practical work
with theoretical instruction (Rusk, 1969). In other words,
Milton advocated the pupil's active participation in learning.
We shall be looking at this aspect of learning later in the
comparison between the two classrooms.

John Locke:

John Locke recognised that parents (and one presumes
teachers as well) have authority over their children and like

those before him asserted that they have a duty to teach the children. But his significance in this survey is that he was among the first educators to point out the importance of the pupil in the teaching-learning process. He pointed out that the child could reach understanding only through his own thinking. He claimed that he could look into nobody's understanding but his own to see how it was wrought. He, therefore, declared that the duty of the parent and the teacher was to use their authority over children, and to govern the children for their own good till they came to the use of reason or a state of knowledge wherein they would be supposed capable to understand. What eventually became recognised as the psychological tenet of the type of education he advocated is "simple ideas and sensations", which were to be impressed upon the mind of the child - a mind that Locke conceived as a blank sheet or plain surface - 'tabula rasa', where the ideas were connected only by the laws of association. Education, Locke insisted, should be tailored to the prospective mode of life that the pupils were to lead later on. This is virtually a vocational outlook on education, implying a pragmatic attitude in the sense that the outcome must empirically have practical worth.

The progressive trait in his model of education becomes obscured by an apparent contradiction. On the one hand Locke, like traditionalists, thought that pupils should be brought up "rough and tough" to the extent of having their shoes made so as to leak water, in order to prevent them from becoming pampered and spoilt. In contrast, progressive teachers today are keen to

point out his insightful contribution in insisting that the teacher should make his subject interesting and enthuse the pupils to enjoy it the way they enjoy their play. Furthermore, he has the reputation of being the first educational thinker to point out that the teacher who finds that he cannot keep order in the classroom without physical punishment should consider a different profession. This apparent contradiction seems to make Locke a supporter of both classrooms. Advocating that pupils be brought up "rough and tough" can be interpreted to mean punitive and authoritative while his insistence that the teacher should make his material interesting and enthusing to the pupils should be interpreted to mean that the teacher should be less authoritative. These two aspects relate to one of the hypotheses that we shall be testing.

It has taken many years for the teaching profession to support the psychological aversion that Locke referred to in his opposition to severity of punishment in saying that this sort of correction naturally breeds an aversion to the things that a tutor should create a liking for.

Nonetheless, it took many years before it could be formerly accepted. The authority of the teacher in the classroom continued to get stronger, and the doctrine of formal education persisted.

Jean-Jacques Rousseau:

Rousseau excels among educational philosophers because his pronouncements are closest to what the Progressive Classroom professes today. Rousseau (1904) advocated an innate goodness

of the child. He admonished the adult world not to look upon
childhood as a wicked age but to love childhood, indulge its
sports, its pleasure, its delightful instincts and to eliminate
the old system of education which, he argued, was based on
depravity. The tests of our hypothesis that we shall carry out
later should help to show which of the two classrooms allows the
pupil more freedom to develop his talents.

In his refutation of what was then contemporary education,
he accused the parents and teachers of debauchery. Through
their assiduous desire to make the child grow into what they
considered desirable, they finally ruined his desire to learn
and what he acquired at their hands was inadequate mental and
vocational tools to carry him through life happily.

In setting out how education ought to be carried out,
Rousseau adopted a child-developmental stance and distinguished
several stages in the development of the child in order to show
that Traditional Classroom techniques do not complement the
child's stages of development. The first developmental stage is
infancy which is characterised by habit and the training of the
emotions. Secondly, there is the stage of childhood; characterised
by 'necessity' and the training of the senses. The third stage
is dominated by a desire for boyhood, 'utility' and the
training of the intellect, while the fourth stage called
adolescence - is the stage of 'morality'- that is, it is the
stage for moral, aesthetic and social education. In other words
education should essentially be a spontaneous development of the

innate dispositions of the child at different stages of maturity.

Progressive teachers today do not necessarily agree with the stages as he outlined them but due credit is paid to him for recognising that education ought to proceed simultaneously with natural developmental stages.

One of the major aims of education, as he saw it, was to produce an independent mind in the pupil, so that as he lived in the whirl of social life it was enough that he should not let himself be carried away by the passions and prejudices of men.

Education, Rousseau insists, should shift from preparing pupils for life after school and prepare them 'against' the social conditions in which they must play a part. The way to achieve this is to abandon the traditional methods of copious drill and substitute for its guidance. Moreover, the guidance should not be into unnecessary erudite abstractions but into relevant environmental material - starting with the local to the more remote. In addition he emphasised that all the lessons of the young people should take the form of 'doing' rather than 'talking'.

Hypothetical prediction 2 in our hypothesis, refers to this situation. In actual fact, the two aspects in teaching highlighted by Piaget - 'copious drill' and 'excessive teacher talk' are some of the most important points of contention between Progressive Classroom and the Traditional Classroom. We shall be making empirical comparisons relating to these aspects, in both classrooms, in our study.

Maria Montessori:

Unlike the classic educators, we have discussed so far, Maria Montessori did not approach the process of education from a philosophical point of view. She was much more concerned with practical matters that affected pupils in their day-to-day experiences, and especially with the children living in the slums of Rome at the turn of the century. In retrospect, Maria Montessori should be regarded as the forerunner of the Progressive Classroom. In her application of experimental psychology to the classroom, she considered that the first duty of the teacher was to train the pupil to be independent of both the teacher and other pupils with regard to the ordinary practice of daily life. This is to be done through 'education by touch' and not through the traditional method of 'education by drill'.

Montessori also advocated what educational research has revealed during the first half of this century, that learning has to be matched with the maturational stages of the pupil. This implies that the educative process has to be adapted to the stage of mental development of the child, and to his interests, and not to be subordinated to the necessities of a curriculum or the teacher's scheme of work. She emphasised that education must be understood to mean the active help given to the normal expansion of the life of a child, and that in this, it is necessary to offer those exercises which correspond to the need of development felt by an organism, and if the child's age has carried him past a certain need, it is never possible to obtain

in its fullness, a development which missed its proper moment.
The exercises in turn have to deal with objects met in daily life
- table tops, doors, window-frames. These are necessary because
apart from giving the child training in sensori-muscular
co-ordination, they enable him to meet the social situations
which arise in everyday life.

Montessori's theories, which are in actual fact, precursors
of the stage theories (cf. Piaget, Bruner, are not directly
related to the hypothetical predictions that we have already
made. Like the theories of Piaget and Bruner, however, they
are very important points in any discussion aimed at improving
'teacher effectiveness', and in so far as they have been greatly
instrumental in the emergence of the Progressive Classroom.

Individual attention was another of Montessori's favourite
methods in teaching. Based on the psychological concept of
variations in individual development, this concept, in practical
terms, was explained by Montessori to mean that if a child fails
to perform a task or to appreciate the truth of a principle, the
teacher must not make him conscious of his error by repeating
the lesson; he must assume that the task was presented
prematurely.

But for the child to develop and learn spontaneously, he
needs to have freedom of movement and action and not be forced
to act only on the orders of the teacher. These connotations of
'freedom', and 'openness', as we found in our discussions of
Rousseau, are a recurrent theme in theories and discussions of

the teaching-learning process. Hypothesis 3 that we shall be empirically testing later is an indirect measure of the relative degree of freedom enjoyed by pupils in the two types of classroom.

In an attempt to cater for individual variation, Montessori's classroom, like most Progressive Classrooms today, had furniture that was suited to the age of the children. The pupils then, handled and moved the furniture - thereby acquiring further exercise in the development of their motor dexterity. Her description of an ideal classroom painted the picture one sees in some modern Progressive Classrooms. She said that the children in such a classroom were occupied with different things so that while one child was going through one of the exercises for the senses, another was doing an arithmetical exercise, and another handling the letters while others were seated at the tables, and some on the rugs on the floor.

One of Montessori's major contributions in education was her insistence that reading should be seen and treated as an interpretative procedure rather than a sing-song of half conceptualised ideas. In other words, reading should be the interpretation of an idea from the written signs, and until the child learns the transmission of ideas from the written words, he does not read.

The kind of education that Maria Montessori advocated for has as its basic aim the concept of self-development. Accordingly, the teacher should be the kind of guide who does not interfere

with the pupils unduly but watches them keenly. By doing so, the teacher learns more about child development and the process of learning which directly affects adult behaviour.

Neill (1960) whose work on Summerhill, 'the free school', began at about the same time as Maria Montessori was running her classes, however condemned Montessori for her idea of 'guided education' and ran his school on a policy of complete freedom for the children to play and learn when they felt like it. For Neill, the teacher is not even a guide for the pupil, he is just a reference point on which the pupil may rely as he sees fit. But as Summerhill relates more to fringe culture than to any institutionalised form of education, we shall not go through its details here. Nonetheless, his ideas on the theory of "the free school' have obviously influenced many progressive teachers.

John Dewey:

While Maria Montessori may be regarded as the forerunner of the Progressive Classroom in practice, (at least in some respects) John Dewey, her contemporary, is to be credited for setting out in clear philosophical terms the need for such a classroom and explaining the basic tenets behind it. Dewey (1922), more than anybody else, explains in detail what education should mean if it is going to achieve its goal of equipping the pupils with adequate tools for managing their lives and adjusting to the environments they find themselves in.

Dewey advocates a system of education that would bring the

explorative behaviour of the children to fruition. He argues
that the early nature of children and their thirst for exploration
are not allowed a fair chance to guide the developmental path
of the child in the Traditional Classroom. Dewey (1922) maintain
that the children have been opposed and loaded with convention,
which is biased by adult convenience in a system of education
that has been made into an equivalent of originality and which
insists on a pliant accommodation to the embodied opinions of
other people.

Dewey strongly contends that the traditional school system
kills initiative by insisting authoritatively that the child
should sit docilely and quietly in the classroom, unless required
to move or called upon to talk, by the teacher. Dewey and
Rousseau tally in their implications that the freedom of
expression, (both verbal and in action) they advocate for the
pupil, brings a high degree of social responsibility; that is,
not freedom to become capricious and whimsical, but freedom to
become a free-thinking but useful member of society in that the
pupil is allowed to discover and understand his environment. In
order to achieve this, Dewey explains that it is necessary to
control intelligently, the means by which behaviour is formed;
and that the teacher should select the influences that shall
affect the child and assist him in responding to those influences.

Dewey deplores those who see no alternative between
cramming predigested knowledge down a child's throat and leaving
him alone. He strongly holds the idea that through careful guidance

on the part of the teacher, a child's originality can be nurtured and matured. As we shall see later, most of the literature on the Progressive Classroom claims that this is what the new system is attempting to do. Further, Dewey explains that custom has deeply entrenched into the classroom a lot that it is undesirable, anti-life and anti-growth, by strict adherence to, and the worship of old habits which have strengthened the teacher's power over his pupils.

As we mentioned in a discussion of Maria Montessori, one strong implication of this type of thinking is that there should be a difference in the amount of authoritative behaviour exhibited by teachers in the two types of classroom. Prediction 3 of our hypothesis will attempt to determine which of the two classrooms exhibits more authoritative behaviour. Supporters of the Progressive Classroom emphasise this idea - that all education is interaction between the potentialities and impulses of the individual and the opportunities and the demands of society; good education therefore, should be geared towards development through mutual communication between the teacher and the pupils.

The quantity of 'teacher-talk' and 'pupil-talk' in a classroom is one way to find out whether the communication in a particular classroom is a two-way process or a one-way process from teacher to pupil. Teacher-talk and pupil-talk are some of the factors we shall be testing in this study.

With regards to knowledge about child development and learning, the Progressive Classroom as we know it today, has

been extensively influenced by two child psychologists, whose main views are briefly presented here below:-

Jerome Bruner and Jean Piaget:

According to Bruner (1964), intellectual growth involves the process of mastering techniques and skills which are transmitted by the child's culture. Language is one of the primary skills, but later on it becomes the major vehicle for mastering other skills. Learning itself is the development of cognitive structures, and the culture presents the child with ways of processing information and this aids intellectual growth in stages.

Piaget (1954), also believes that intellectual growth is achieved through stages and the child develops from simple to more complex structures of thought. Both Piaget and Bruner stipulate that intellectual growth involves the ability to organise and integrate information to solve problems which the child encounters in his daily life. This ability, they stress, is more integral if it is achieved through the child's own efforts with the guidance of those around him, than if those around him force the information on him through cramming and rote-learning. One of the questions we shall be trying to answer through this study is 'which of the two' classrooms leads the pupils towards more explorative behaviour?

Both psychologists regard maturation and the environment provided for the child as being very important for cognitive development. Although they differ in the emphasis they lay on

certain specific factors of development, both postulate that each
individual has his own rate of development, but for each individual
the sequence of the stages of development does not vary although
insufficient mastery of, or faulty adjustment in one stage may
interfere with later development - an issue which receives
greater attention in Erick Erickson's theory of personality
(Erickson, 1950).

The development of intelligence, according to Piaget,
involves the growth of actions (operations) which may materialise
overtly (through manipulation of objects) or covertly (through
the manipulation of ideas). These actions or operations develop
through sensory and motor activities first and are accelerated
by social intercourse and language. The background information
on which the operations are based is elaborated and enhanced by
organisation of the experiences encountered in the external
world by a process known as assimilation. This process   of
assimilation is complimented by the process of accommodation
which means that the child adjusts to what the environment offers.
This is the essential factor which makes it possible for the
individual to adapt to the world around him and consequently
leads to further growth in thought processes.

Piaget has meticulously detailed five stages in the
development of the child's thought, but for the purposes of this
survey, only the highlights, which have a direct bearing on
learning, will be mentioned in conjunction with those of Bruner.
For the child to mature in Piagetian assimilation and

accommodation, the acquisition of language is a vital ingredient because through the media of language the child is enabled to expand, enrich and further organise and reorganise the experiences transmitted to him by the environment. This organisation of experimental information helps the intellectual development of the child and is also greatly encouraged by play, exploration, experimentation facets of life which the child is profusely endowed with as evidenced by children's incessant curiosity and questioning. The language of the child is a carrier of his conception of events and serves to communicate those events, to others. In socialised speech, therefore, the speaker engages in a reciprocal interaction (communication) with his listener through organised information, criticism, requests, commands, threats, questions and answers. The significance of this is that the child's horizons of the environment are widened, and in turn his conception of a wider variety of experiences is internalised.

Bruner concurs with Piaget with regard to the vital role which language plays in the intellectual and social development of the child. First, language is used as a symbolic representation of objects present (seen and touched aand events experienced) and later it is used to symbolise concepts and objects not present (abstraction). Thus the theories of Piaget and Bruner have very important implications for the teacher who is seeking to facilitate meaningful learning for the child. Bruner points out that language and reason will only develop

through exposure to the environment of a culture and that the
cultivation by the teacher, of the symbolic expression, of
increasing complexity, is the crucial factor in the cognitive
development of children.

Both Piaget and Bruner supply incisive and far-reaching
insights into the education of children. They bring out the
vital difference between learning that is integral to the growth
of the young and learning that is only verbal drill and repeated
mechanical performances. "True" learning as they see it, _starts
from early childhood_ and is best accomplished through the
child's own 'active doing'. Similarly, ideas are best
conceptualised from the 'doing'. The nature of this learning is
often sequential, but necessarily cummulative in that at each
stage of development, motor sensory, physical, and mental stages
- a foundation is formed on which further structures of growth
will be built in subsequent development as the child progresses
in growth. Piaget and Bruner, however, do not altogether dismiss
the role of mechanical drill and verbalisation, but they make the
essential qualification that it should be linked with the
development of certain learning primary tools related to the
cognition of ideas. In this connection, they emphasise that
the learning of numbers and letters of the alphabet should be in
terms which will enable children to internalise the wider concepts
of numbers in life and the usefulness of alphabet in language. If
learning is taught by way of cramming, evidence shows (Bruner,
1964; Piaget, 1954) that it is soon forgotten, and if not

forgotten, it is in any case unmeaningful and therefore useless unless it is accompanied by adequate conceptualisation.

Genuine understanding and conceptualisation that are integral to the individual child are essential for 'true' and meaningful learning and should have bases established in the child early in life because what a child constructs in his mind during the early stages of development forms his basic model of the world onto which further knowledge and experience is assimilated. Thus attention is drawn to the importance of the child's activities and his ability (and the teacher's facilitation of this ability) to organise these activities and the knowledge accruing from them into a meaningful and socially acceptable model of the world in relation to the opportunities presented by the environment. Hence the need for a varied environment (both physically and emotionally) in which adults and other children enrich the child's environment and help him to organise his experiences meaningfully. A warning is, however, sounded for teachers, not to defeat their efforts in varying and enriching the environment for their pupils by proferring excessive care and becoming over-protective to the pupil, since this leads to dependence on the part of the pupil.

Although activity forms the best basis for the development of thought and the conceptualisation of ideas, both Piaget and Bruner stress that development can only be judged to have been established through the directive function of speech which enables words and configurations of sentences to symbolise action and to be used as signals to indicate purpose. In this aspect,

again the importance of the role that the teacher can play in facilitating learning is underlined. The teacher's attention in answering questions, in conversation, and in guiding his pupils towards solutions is of vital importance. At the same time the teacher should refrain from involving himself in every activity of the child and should ideally allow the pupils as much freedom as is structurally possible within the framework of his classroom to carry out their self-initiated activities and give them the opportunity to talk as they play and learn, because this helps them to internalise their actions and enhances the development of thought.

Bruner postulates that each stage in the development of the child has a typical style of viewing the world. The onus of the teacher, therefore, is to present each subject in an approach that is germane to the child's style of viewing activities. This has the significance of helping the transfer of principles and attitude that assist the child to generalise what he learns in the classroom to activities outside the classroom and apply his generalisations to real life situations. Bruner (1964) maintains that if the right method of teaching is used, then, any subject can be taught effectively in an intellectually honest form to any child at any stage of development. Piaget refutes this but his refutation does not alter their joint belief that the intellectual development of the child responds to environmental influences and challenges, but manageable tasks are an asset to the development of the child. The teacher (and the parent)

should, in recognition of this, facilitate development by providing tasks and problems that stimulate the child into subsequent advances in successive stages. For instance, the teacher should direct his questions in such a way that they stimulate further questions from the child; by the same token he should refrain from reciprocating to the pupil with replies that "answer and silence" the pupil once and for all in order to eliminate the pupil's nagging questions. His replies should be tailored to encourage and stimulate further discussion aimed at the child to make his own discoveries. This, according to Bruner, creates a specially unique relationship between knowledge possessed and the possessor.

Bruner further observes that the process of individual discovery by the pupils, makes the material more memorable by the sheer fact that the knowledge so possessed is easily associated with allied material and is more thoroughly conceptualised. Besides, the child who has inculcated, early in life, the desire to learn by discovery will tend to find that he has been intrinsically motivated to learn and does not require external motivations from the teacher.

In summary of this section, it should be noted that Piaget and Bruner have made five major educational emphases. Firstly, learning proceeds through and in parallel to physical and mental maturation of the child; secondly, conceptualisation of ideas is best achieved when the pupil learns through his own efforts and actions; thirdly, language plays a vital role in

the pupil's conceptualisation of ideas. The fourth emphasis is that the role of the teacher is to be a facilitator of the process of learning for the pupil by creating the optimum conditions; and finally, that the quality of the environment plays an essential role in helping the child to realise his intellectual potential.

These are some of the most important ideas on which the stage theories of development and education are based. The limited scope of this study, however, does not allow us to look into all of them. In an empirical test, we shall limit ourselves to making contrasts between the Traditional and Progressive Classrooms on the points that are most relevant to our hypothetical predictions.

Evidently, Piaget and Bruner were not writing for the Progressive Classroom but for an 'improved' system of teaching bases on empirical knowledge of the pupil's development and his optimum learning conditions. But teachers and other proponents of the Progressive Classroom claim that the Progressive Classroom embodies more than the theoretical postulations of Bruner and Piaget.

In conclusion, this brief survey seems to indicate that the Progressive Classroom is not a revolution in education as has been claimed elsewhere; more appropriately, it appears to have emerged as a culmination of an "evolutional development" over the ages in which various educationists have been heralding it by suggesting what school should be and what it should offer to

the pupil. Their suggestions and amendments to the traditional method of education seem to have been based on knowledge about the duty of the parent and the teacher with regards to socialising the youth into society and available knowledge about child development and learning.

Judging from a review of the literature on researches in Traditional and Progressive Classrooms, it is clearly evident that the Progressive Classroom has been the 'challenger' of the Traditional Classroom. Consequently, it is in the area of the merits and demerits of the Progressive Classroom that most research has been concentrated. There has been little need felt by researchers to 'justify' the Traditional Classroom or rather to show that it has more merits in the learning process than the Progressive Classroom. The assumption seems to have been that the Traditional Classroom is justified by the many years it has been used to produce leaders, scientists and teachers over many successive generations in the history of many countries. It has, therefore, been the 'duty' of the proponents of the Progressive Classroom, adherents of the Traditional Classroom and many independent researchers to generate research to ascertain whether the superiority claimed by exponents of the Progressive Classroom has validity. We shall, therefore, be looking into the variety of current arguments favouring the adoption of the Progressive Classroom.

CHAPTER III

THE PROGRESSIVE CLASSROOM

The Democratic Aspect in the Progressive Schools:

There are those, among the supporters of the Progressive Classroom, who explain that what the Progressive Classroom has done and is continuing to do is to 'democratise' teacher-pupil relationships so that both the teacher and the pupil have ample freedom to operate, and especially if the pupil has an opportunity to learn and develop without undue pressure from the teacher. Among them are Bernard Guerney and Merrian May-Linda (1972).

In order to understand how the Progressive Classroom is democratising teacher-pupil relationships, the two authors suggest that it is necessary to contextualise school within society with regard to power, organisational goals and objectives as dictated by the 'establishment'. They submit that within the set-up of the Traditional Classroom, those holding institutional power (teachers, headmasters, and educational officers...) are not sufficiently responsive to, or sufficiently knowledgeable about the felt-needs and wishes of those whom they govern and administer (pupils), with the result that they have always been responsible for developmental decay on the part of the pupil and sometimes actual physical revolt. Guerney and Mary-Linda submit that communication arteries in the Traditional Classroom have become restrained and meaningful feedback has tended to be replaced

by sycophancy and development of in-group and out-group attitudes where pupils see their teachers as enemies who bully them into cramming unnecessary material. This, generally, is what both authors offer as an explanation for what they submit is the failure of the Traditional Classroom to bring into fruition its enormous potential to enhance the intellectual, social and emotional well-being of the pupils.

Returning to the context of the school in the society, they explain that the tendency has always been for the schools to be run by the policies promulgated by 'school boards' and 'boards of governors' who wield total authority for decision-making in matters relating to education in their respective educational institutions. What they consider to be the biggest educational mistake here is the fact that those whose lives are most affected by the decisions made are least involved, with the result that most of the decisions have been made tangentially to the actual needs of the pupil. In their condemnation of the Traditional Classroom, they submit that the traditional concept prevents the classroom, and ultimately the school, from achieving their full potential. As such, they explain, schools will continue to be islands of power struggle where boards wield the ultimate power to hire, fire and transfer teachers as well as admit and dismiss students. Within this set-up, most teachers are forced to pay less attention to their primary duty - that of facilitating education. They concentrate more on tactics to win the favours of the headmaster and the board of governors as a means of

attaining the next rung on the hierarchical organisation.
Consequently, the pupils are shoved through the conventional
pipeline of routines and examinations throughout their school life,
only to be awarded or denied the reputable certificate, depending
on performances assessed on a yardstick that is not commensurate
with their actual potential. The Progressive Classroom, they
claim, gives the teacher sufficient leeway within which he can
become a friend of the pupil, depending on his objectives.

They express the view that democratic skills are practised
in the Progressive Classroom in elementary schools, and should be
encouraged in higher grades with the eventual aim of producing
citizens who are appropriately educated. What the Progressive
Classroom is doing, they insist, is to emphasise that people should
be allowed the right to make their independent decisions. Their
right to do so is as important as the right to vote, to marry and
live their own lives separate from their parents. Current child-
development theories emphasise that unless a child is taught and
encouraged to develop independent thought and decision-making
right from an early age, he will, on the average be poor at
decision-making. In teenage days and probably throughout his life
he will be a character prone to influence, who is largely field-
dependent. Again, this criticism features very prominently in
Erickson's theory of personality (1950).

Why Democracy in the Classroom?

It is opportune to mention that democracy, as applied to the
classroom and certainly as used by Guerney and Mary-Linda, has a

slant. It is not synonymous to the grandiose political slogan
that goes with capitalism and socialism. The slant is towards a
micro-cosmic sense wherein decision-making processes affecting
an individual, be he a child or an adult, require that the
individual is consulted or rather made to give a personal opinion
even if this bears pressure on the decision made. In this micro-
cosmic sense, an example is offered in the family where democratic
decisions can be effected between husband and wife, between
siblings, and between parents and children. Conversely, an
autocratic system can, and does exist where a single individual
in the family, usually the father, makes all the decisions and
all the other members of the family have to adhere to his dictates.
In the latter case power is shared 'hierarchically' between the
individual members of the family, with the wife as the second in
command - and down the line to the last siblings, the amount of
power ascribed being proportionate to the respective ages of the
children. The semblance to governmental, institutional
organisations, and in particular the Traditional Classroom is
obvious.

The Democratic Tools Taught in the Progressive Classroom

In their survey of the Progressive Classroom, Guerney and
Mary-Linda detail the following two points as the tools used to
democratise the teacher-pupil relationships: the first point is
respect for the individual which aims at the inculcation of
individual thought. The teacher instructs the pupils to treasure
other people and to value their separate individualities. The two

authors argue that it is only through this concept that self-centredness can be discouraged and tolerance for other people's opinions instilled. The second point is where the pupils learn to reconcile individuality to co-existence, and are made to understand that individual supremacy does not necessarily have to override a sense of public responsibility. This notion leads to the realisation that cooperative efforts in which appropriate compromise rather than force is used is the more efficacious method to settle conflicts (which are inevitable in human interaction) and to usher in harmonious co-existence.

These concepts are apparently borrowed from theories of group-dynamics which state that harmonious co-existence is hampered if people in any group or society engage in an all-out effort to climb the rungs of hierarchy despite the implied adverse consequences to others in the group. In the ensuing competitive process, potential collective energy (for the common good) is squandered in destructive tricks and sabotage from which some people gain disproportionately at the expense of others. In realisation of this, the teacher in the Progressive Classroom gives guidance to his pupils to develop a symbiotic relationship between their group (class) and the individual with the hope that this will lead the children to grow up with the idea that while the group at large (the classroom here being enalogous to society) caters for the individual, the individual in turn must be concerned with the welfare of the group.

Free Communication:

This aspect is treated in detail by Wight (1970) who explains that the value of free communication both vertical (i.e. teacher-pupil) and horizontal (pupil-pupil) is inestimable. After a detailed discussion of previous researches, he states that in most Traditional Classrooms, too much of the responsibility for educational process is retained by the teacher who determines the goals, decides and presents the content to be learned and tests for recall and understanding. He decries insistence on teacher authority and exhalts the Progressive Classroom for introducing 'participative education', which he explains as involvement, breadth of understanding, the application of what is learned to real-life problems, self-confidence, self-esteem, ability to work with others, understanding of goals and direction, and self-motivated continued learning. The relevance of the latter point emphasises that when the motivation and desire to learn comes from the pupil, then it is germane and integral to his behaviour and the teacher has no need to 'plug and push' material down the throat of the pupil. This apparently seems to be an appropriate way of substantiating the age-long motivational proverb - "You can lead a horse to the water, but you cannot make him drink" - in this case the 'horse' is assumed to be willing to drink and the teacher has a singular problem - that of providing the water or rather indicating where it can be found.

The Progressive Classroom and the problem of classroom discipline:

Regarding actual behaviour in the classroom, it is contended

that the acts performed by the pupils are actually invited by the teacher; as such, the methods and materials he uses must demonstrate respect for each individual child. The prudent teacher is not condescending and involves the child fully in planning his own work and accepts the child's language and level of communication while simultaneously making the necessary corrections. On the other hand, the teacher typified by the Traditional Classroom tends to use inappropriate material, some of them from 'standard textbooks' which are unsuitable to the personal needs of the child. In addition he tends to treat the pupil as an object, a cog in the wheels of classroom machinery. The result is that the classroom becomes impossible to manage; inattention, fighting, note-writing, walking around the classroom, pretentious sharpening of pencils and day-dreaming, are prevalent. These disruptive acts, otherwise referred to by the traditional teacher as misdemeanour, the literature points out, are all messages from the pupils to the teacher that something has gone wrong, that is, they have not been adequately and appropriately engaged.

The traditional method for dealing with such misdemeanours is to resort to flogging, expelling the child from the classroom or making the child do some manual work in the school compound. Such a reaction presupposes that the child's action was a contravention of order and a rebellion against the teacher's authority. Those in favour of the Progressive Classroom say that the teacher should stop feeling defensive and accept that these

behaviours are indicative of a mismanaged classroom, or at least a classroom in which rapport and respect have not been established between the teacher and his pupils. This does not mean that the teacher should condone or encourage inappropriate behaviour, nor does it mean that he should refrain from setting appropriate limits with his pupils; but it does mean that the teacher should first find out what he may be doing to stimulate it, before labelling the child as naughty or misbehaved- and in any case, when persistent misbehaviour has been noted, it should not be immediately interpreted as rebellion against authority, but ought to be seen as maladjustment requiring therapeutic attention. With regard to the separate personalities of the pupils, it is suggested that the one realisation that the teacher ought to hold steadfastly is the fact that each pupil brings to the classroom his own life-style and his own personal style of learning. Thus the teacher plays a massive role in causing some behaviours to be strongly expressed and others to be suppressed, and should, on the weight of this realisation handle the children conscientiously.

The behaviour of the teacher in the Traditional Classroom, he insists, tends to antagonise the pupils and makes them feel that the school is a tortuous place. An example is given of the teacher in the Traditional Classroom who takes a personalistic view and ascribes ulterior and devious motives to pupils who do not assiduously adhere to his edicts. This teacher exclaims such authoritative and threatening sentiments as "I can't let

him get away with that... He can't do that to me...", and "What an impudent boy!" In this kind of situation, the pupil needs acceptance. The boy's mistakes should be corrected humanely. Such sentiments indicate that the teacher has already taken sides as an enemy of the child. Proponents of the Progressive Classroom seriously suggest that rather than get into this kind of pique, the teacher should first and foremost investigate the problems which cause the pupils to behave in the way they do, and then try to help the pupils in the manner of a conscientious parent. In this way, mutual respect and rapport between the teacher and his pupils can be achieved and the possibility of dissent among the pupils reduced. Not so, the kind of teacher who antagonises his pupils by overriding their emotions causes a debilitating effect on the children by making the learning process undesirable on their part. Apparently, this notion is fully backed by psychological theories developed on the basis of empirical researches. For instance, Piaget's theory of learning (1968) states that reason and learning are not independent faculties. Piaget has also found close parallel between feeling and development of intellectual functions.

Kaplan (1971) submits that one of the biggest challenges that the teacher has to face is the diversity of pupil temperament. What makes one child in the classroom anxious may not be stressful to another child at all. For example, if a child lives in an atmosphere which does not emphasise scholastic achievement, failure in school for him is an extension of the usual state of

affairs and does not present any psychological conflict that may cause anxiety, as may be in the case of the child who comes from an atmosphere where scholastic success is highly valued. The former pupil becomes more sensitively attuned to the development of social skills of getting along in the school. Further, Kaplan says that anxiety, when exhibited, is most likely to be the result of upsetting incidents in the surrounding social scene. Simultaneously, pupils tend to become anxious when threatened with rejection. It is due to these reasons that the proponents of the Progressive Classroom emphatically state that all the children in the classroom should not be treated as if an aggregate of their feelings could be calculated. They suggest that individualised attention best meets the needs of the pupils because it allows the teacher the opportunity to deal separately with problems of individual children rather than dealing with the whole classroom as an undifferentiated lump.

Acceptance by the teacher signifies acceptance by parents and the adult world at large, and can be an extremely useful tool for the teacher in moulding the behaviour of his pupils. It is possible for the teacher to lessen anxiety in a child by authentic efforts to provide an atmosphere of acceptance and reduce the upset the child feels as he lives his life in the classroom. By the same principle, the teacher can enable the child to achieve scholastic progress, not because he feels that such success is inherently good for him, but because the progress he makes permits him to gain the social acceptance he wants.

Those behind the progressive innovation in the classroom suggest that the teacher cannot reinforce the child in this way unless he knows what is pleasurable and what is stressful for him. For intance, if the teacher knows what delights a particular child, he can set assignments and tell him that he must finish the assignment before he moves to that activity. In other words, insight into a pupil's personality helps the teacher to decide what reinforcement methods to use for different pupils. This knowledge, it is claimed, is easier to acquire on the part of the teacher in the Progressive Classroom than in the Traditional Classroom.

If, after gaining this knowledge of the child as an individual, the teacher keeps in mind the fact that he is dealing with the child's learning environment as well, then he is in a position to behave in ways that will permit the child to perform at his highest level of achievement. Consequently, he increases his chances of being effective.

Helena, Stevenson and Webb (1961) and Combs (1959) apparently support Kaplan although their main concern is not the Progressive Classroom as such but the question, "Who is the good teacher?"   Their summation of what goes to make a "good teacher" seems to concur with the supporters of the Progressive Classroom. They constantly make the accusation that apart from antagonising the child against authority, the Traditional Classroom also makes it very difficult for him to willingly obey rules. In antagonising him, the system also makes him feel the teacher is

out to destroy him, that the school is a place of defeat, failure and humiliation; and that the whole school system is organised to prove to him that he is unimportant. In response he resorts to a psychological defence possibly through a variety of defence mechanisms.

In other words, the pupil assumes an attitude of self-defence and resentment. By the same token, he finds ways to assert himself for the discontent and resentment he feels by rebellion and general disobedience. A warning is offered that if this behaviour is not rectified early, it might generalise and crystalise into juvenile delinquency, and therefore, lead into a criminal career, since this kind of character hardly ever makes a success of school and is bound to become a 'diehard' anti-authority.

They assume a philosophically utilitarian tone and imply that lack of conviction and commitment leads to a laissez-faire situation on the part of the teacher whereby he carries out routine functions while waiting for his pay-packet and in the meantime applies for more lucrative jobs. In conclusion, Helena, Stevenson and Webb (1961) insist that when the teacher sees boredom as a cardinal sin of teaching, he will find ways to make life in the classroom as exciting and as relevant as possible.

Herman et.al (1969) also suggests that the trend now is for teachers in the Progressive Classrooms to be more inclined to use punishment less, and are more disposed to act 'constructively'

- usually by adjusting the environment in some way or other in the treatment of child behaviour. They also depend on talking, moralising and rebuking the pupils. This is in accordance with the premise of the Progressive Classroom, that psychological methods and techniques are more effective in both behaviour-modification and in making the material learned integral to the knowledge repertoire of the children.

These same principles have been dealt with in greater detail by B.F. Skinner in his Technology of Teaching (1968). Skinner emphasises that teaching should be regarded, in a horticultural metaphor, to be synonymous with cultivating the growing child by training, guiding and directing his mental growth through intellectual exercise. Skinner also stresses that while the teacher plays the dominant role in the transmission of knowledge and skills to the pupil, the pupil should not be turned into a mere receiver of instruction, for the pupil also plays an active role in his reactions to the teacher in the teaching-learning process.

B.F. Skinner is, however, better known for the emphasis he places on the role played by reinforcement in learning. He believes that teaching is simply the arrangement of contingencies of reinforcement in order to expedite learning, and that the arrangement of these contingencies revolves around the giving of either a reward or punishment.

With regard to the giving of reward and punishment, the Traditional Classroom is depicted as having an inclination towards

the inculcation of intrinsic interest in the pupil - for the various subjects that he has to learn. It is also aimed at giving the student a less oppressive atmosphere in which his genetic endowment can develop and mature as he makes more contacts with the world around him. In other words, the traditional teacher operates on the belief that students will not pay attention or do their homework unless they are worried about the consequences in terms of punishment. But the progressive teacher pays attention to maximising success and minimising failure for every one of his pupils by using programmed material and teaching machines in order to allow each pupil to proceed at his own pace. Indeed, Skinner suggests, that a school system that cannot induce students to learn except by threatening them must be regarded as a failure.

Skinner insists that in teaching emphasis should be placed on positive reinforcement in order to motivate the student to learn diligently, with eagerness and to develop curiosity and interest in the material at hand. Skinner joins Holt (1968) in condemning the 'reform' that led to the transition from corporal punishment to punishment by way of scolding, sarcasm, incarceration, withdrawal of privileges, forced labour and ostracism, in that through the use of these various aversive stimuli, the teacher is still forcing the students to learn. Further, Skinner argues that the traditional pattern of aversive control in education is derived from ethical control in society in which behaviour is actually suppressed. As an example, he

points out that we do not teach industriousness by punishing
idleness, or bravery by punishing indifference. Similarly, we
do not teach a student to learn quickly by punishing him when he
learns slowly, or to recall when he forgets. The essential point
here is that the individual will do what is acceptable in order
to avoid aversive stimuli. This is the negative approach to
education, that is deplored by the Progressive Classroom.

In the Traditional Classroom, time is structured and pupils
are hurriedly moved from one lesson to another 'in order to save
time - which is money', explains Herbert Kohl (1968), who
supports the Progressive Classroom. This, he writes, has nothing
to do with the quantity that must be learned and ignores the
pupils' needs. These actions, Kohl explains, represent the
teacher's fear of loss of control and is nothing but a weapon
used to weaken the solidarity of the children that too many
teachers dread. The teacher's fears hardly surface, except in
extreme cases of teacher-pupil confrontation because they are
confounded with the authority ascribed and guaranteed to the
teacher by the school administration - which authority the teacher
is only too ready to resort to when a confrontation reaches a
stalemate. The invocation of this authority leads to reprimands
and punishments for the pupils and as a last resort expulsion
from school. These actions, contrary to the attitudes of the
traditional teacher, do not forestall the possibility of future
confrontations but only help to convince the pupils that school
is a place where you 'tread softly' and do what you are told for

fear of being punished.

The teacher in the Traditional Classroom, Kohl maintains, hardly gets to know the pupils and naturally resorts to the routine and structure guaranteed him by the administration. The class is assigned to seats, the time is planned down to the minute, subject follows subject to the exclusion of human variation and interaction.

Also throughout the literature of the Progressive Classroom, teacher after teacher and researcher after researcher reiterate that the attitudinal characteristics of the teacher are important. Kohl sums this up succinctly as he explains how he has 'eliminated' the discipline problem by accepting it. He explains that he has never solved the problem of discipline because he no longer believes that it needs solution; children will disagree with each other and with the teacher; children will be irrational and so will the teacher. An atmosphere must exist, therefore, he emphasises, where conflict, disagreement and irrationality are accepted as temporary occurrences.

From the foregoing literature on the Traditional and the Progressive Classrooms, we note that the controversy between the adherents of the two classrooms centres on the claims by the exponents of the Progressive Classroom. In summary, these claims advocate that the Progressive Classroom is a better institution than the Traditional Classroom for effecting the teaching-learning process and for accelerating the development of independent creative thinking on the part of the pupils.

After various researches on the teacher-pupil relationship and pupil-sociometry in the classroom and the individual performance of pupils bases on elements of <u>Teacher Dominance</u> and <u>Child Restraint</u>, Oeser concludes that many of the traditional methods used in the classrooms are faulty because they rely on an inadequate understanding of social structure and function. He also asserts from the results of his researches that the pressures exerted by the teacher on the pupils often induce anxiety and a desire to escape from knowledge. Additionally, the punishments given by teacher to pupils do not necessarily drive the pupils to the goals desired by 'education' but often deflects them to quite different goals.

Other researchers have obtained results that support Oeser in suggesting that in the classroom, emphasis should be transferred from the subject to the growing child, and that the teaching of each subject should be looked upon not as an end in itself but as a means towards the complete development of the pupils.

A variety of psychological tests also support the assertion that it is unrealistic to treat a class of school children as an undifferentiated mass because there are wide differences in ability. All these assertions suggest that it is prudent for educationists to carry out more researches in order to better understand the actual differences between the Traditional Classroom and the Progressive Classroom. It was with this need in mind that the present study was carried out.

In a very scholarly but down-to-earth style, Nathaniel Cantor

in The Teaching-Learning Process makes observation that any sensitive person who observes the usual type of elementary or high school class would be able to note that there is a certain uneasy tension in the classroom, which is disturbing. He would notice a kind of pulling and tugging, a contest of wills between the pupils and teacher - which event obstructs the very purpose for the existence of the classroom - learning. It was these observations that Florence Greehoe (1952) tested in an extended study and concluded that a person's relation to the group and his status in it are the most important factors in his psychological and social security.

In Teaching: A Psychological Analysis, Fleming (1968) recounts socio-psychological tests which have been carried out in relation to teacher dominance and authoritativeness of the teacher vis-a-vis teacher acceptance and integrative behaviour in the classroom and concludes that "evidence confirms other finds as to the effectiveness of an attitude which can be described as democratic. Pupils prefer teachers who treat them in a friendly fashion. Teachers who permit initiative and co-operativeness evoke more satisfactory reactions from their pupils."

Marie Hughes (1968) reports several investigative researches on the assessment and evaluation of the teaching process which is described as a "form of interpersonal influence aiming at changing behaviour potential of another person." By applying a system commonly referred to as the 'Provo Code' in investigations on the learning process, a number of researchers conclude that there

is a wide repertoire of behaviour and utterances available to the teacher and his pupils. More significantly the researchers found that the small range of behaviour and utterances traditionally used by teachers is indicative of a classroom programme that is authoritative. They also noticed that the teacher-pupil relationship on utterances in the classroom is also affected by the nature of the subject in question. The narrowest repertoire occurred during the reading and arithmetic periods. More student-participation occurred when the teachers used an open structure of classroom instruction by accepting and clarifying pupils' responses. Hughes advocates further research for instance to find out patterns of teaching behaviour which

(a) help a pupil in developing confidence and independence.

(b) help a pupil to become more involved in content or subject matter.

(c) help a pupil in his development of responsible self-discipline.

(d) foster creativity.

(e) help the student to develop his entire range of intellectual and emotional capacities.

It is not possible to investigate all these areas in a study of the scope intended for this thesis, but we shall be looking at some of these aspects of teacher-pupil relationships. In another study, Edna Shapiro (1970) underlines the need to research further into teacher-pupil interaction. It is basically the teacher, she concludes, who introduces the children to the world

of thought through the kinds of rules and rituals with which she surrounds the thinking process, the kinds of content she introduces, accepts and rejects from the children; the kinds of approaches to problem solution she encourages and sustains; the speed with which she closes down inquiry; the respect she shows for their fumbling and their confusion are all factors that go to influence the pupils' image of the world and create expectations of their potency as thinkers and learners. We shall be comparing the frequency of some of these factors in the Traditional and the Progressive Classroom.

In The Changing Classroom, Carol Gordell (1973) presents an edited wide ranging authorogy of works by actual teachers and educational theorists who have experimented with the open classroom. The general conclusions from their experimental classrooms is that the creation of a democratised atmosphere in the classroom may create problems initially, but it should lead to fewer disciplinary problems, greater motivation and a higher need for achievement. They also conclude that the open classroom gives a better opportunity than the Traditional Classroom for a personalised approach to each pupil's peculiar capabilities and problems. The teachers and experimental theorists mentioned above did not have any "control" situations for their classrooms other than general comparison with what has, over the years, been happening and is happening in the Traditional Classroom.

In <u>Psychology for the Classroom</u> Johanna Turner (1977) relates
several studies which were aimed at "teasing out the complex
interactive variables that together form a class." Although the
studies did not specifically compare the Traditional Classroom
and the Progressive Classroom they did research into areas that
are very relevant to our present study. Some of these studies
attempted to characterise 'effective' teaching by linking teacher
characteristics with pupil achievement: comparing teacher
personality to pupil behaviour and by measuring 'social-emotional'
climate of the classroom by analysing the behaviour of the
teacher. In general the studies found that teachers with a
positive emotional climate spoke to more pupils, made specific
statements of praise to pupils who had been co-operative. They
made general statements when they wished to control unruly
behaviour, in contrast to teachers with negative climates who
concentrated on fewer pupils, took little notice of slower pupils
and both rewarded less and punished individuals for misbehaviour.

Of more interest to us, however, in this study are those
researches which looked at teacher-talk, pupil-talk and the
relationship between the teacher and the pupil in the classroom.
Stubbs.(1976), for instance, considered the function of teacher-
talk in detail and concluded that teachers were mainly concerned
with controlling the class by continually explaining, correcting,
evaluating, editing and summarising.

After surveying a large number of researches and literature
on the evolution of the Progressive Classroom, Leslie Hart (1969)

came out with a generalised strong indictment, reported in Elementary School Organisation (1961) that: efforts to meet the individual needs of children are frequently hampered by types of school organisation that literally block the use of appropriate and efficient ways of dealing with the individual child. He emphasises that it is a discredit to us and a disservice to children to say that we believe in each child's working at the level of his own potential - and at the same time subject him to a common course of study, a comparative marking system, a predetermined structure within which to work, and general goals that may or may not be applicable to him. Assertions of this nature, however, require to be tested empirically, hence the need for research of the nature we have attempted in the present study. In the following chapter, we deal with the procedures and methods used to test these claims through an empirical investigation.

The Hypothesis

From what we have dealt with so far, we find that the exponents of the Progressive Classroom have consistently advocated it on the grounds that it differs from the Traditional Classroom in several 'desirable' ways; the major difference being that the Traditional Classroom is teacher-nurturant in that it emphasises the subordination of the pupil to the teacher while the Progressive Classroom emphasises the creative nature of the child and asserts that the teacher is at best an educational agent - to help and guide the child to realise his potential and to utilise it. The foregoing literature forms sufficient basis for the derivation

of several hypotheses. As mentioned earlier on, if the merit claimed for the Progressive Classroom in the literature is empirical, it should be demonstrable and therefore a comparison between representative samples of the two types of classrooms ought to reveal significant differences in favour of the Progressive Classroom. The contention in this study therefore is: <u>An empirical investigation with statistical measures for teacher effectiveness in terms of teacher-pupil interaction in the classroom will produce results that validate the following hypothetic predictions</u>:

1.   The teacher in the Traditional Classroom will dominate classroom conversation more than the teacher in the Progressive Classroom.

2.   The teacher in the Progressive Classroom will be more accepting of pupil's emotion and ideas than the teacher in the Traditional Classroom; and the pupils will be less rejecting of the teacher in the Progressive Classroom than of the teacher in the Traditional Classroom.

3.   The teacher in the Traditional Classroom will use orders, directives and lectures more than the teacher in the Progressive Classroom.

4.   There will be more rapport between the teacher and his pupils in the Progressive Classroom than in the Traditional Classroom; and the pupils in the Progressive Classroom will show more initiative and inventiveness than the pupils in the Traditional Classroom.

CHAPTER IV

RESEARCH DESIGN AND METHODOLOGY

The method of investigation used in this study is the 'Flanders Interaction Analysis Categories' - hereafter referred to as 'FIAC'. The 'FIAC' is one of several classroom interaction analyses used to code spontaneous verbal communication, arrange the data into a useful display, and then analyse the data in order to study patterns of communication in the interactive procedure between the communicator and the recipient. In particular, the 'FIAC' is suitably adapted for analysing patterns of communication of teaching-learning procedures. It provides an objective method of quantifying educational concepts which refer to spontaneous behaviour in the classroom which until the analyses were developed could only be studied deductively. It is for its analytic qualities on interactive procedures, qualities that are not found in other tests, that the 'FIAC' was chosen for the investigation.

The 'FIAC' was developed and validated over a period of five years between 1955 and 1960 by Flanders. It was developed as a research tool for understanding teaching behaviour with a view to bridging the gap between the teacher's intentions and his actions in the classroom - after realising that some teacher behaviour can and does have effects that are not intended on the pupils. As Flanders points out, one of its chief benefits is that it has a built-in safeguard (analysable data whose effects

can be fed back to the teacher) which can be used to help the teacher shift his actions towards the direction of more effective teaching. This method of investigation assumes that classroom interaction (as indeed any interaction) is wholly made up of acts which are embedded in the chain of events that occur between any two individuals or within a group. The analysis breaks down and arranges the patterns of teaching behaviour into recognisable and teachable skills. According to Amidon (1963) the 'FIAC' so far is the most exhaustive method of investigation for researches of this type which involve communications of an interactive nature.

The 'FIAC's is more or less a utilitarian observation schedule. The original research that culminated in it was motivated by a desire for teacher effectiveness. It presents to the researcher a yardstick against which teacher-pupil behaviour in the classroom can be pitted against pertinent trends that create an amenable atmosphere for the pupil to learn and enjoy the learning process. An atmosphere where teachers and pupils experience thoughtful shared inquiry. The urgency for the creation of such an atmosphere becomes evident as we realise that pupils learn and improve better when their own ideas are taken into consideration and where the situation provides an opportunity for them to show initiative.

At the time of initiating the 'FIAC' Flanders took into consideration several factors, all cognisant of the fact that teachers have increasingly become moulders of pupil personality.

Most teacher-influence is effected by the spoken word. The teacher orders, requests, and nuances go a long way in getting the pattern of thinking, and in substantially shaping the pupil's attitudes. Thus the participation allowed a pupil in the classroom greatly influences his growth of independence and self-direction.

The 'FIAC' differs from the traditional 'before and after' tests of pupil growth and development in school in that rather than just indicate that the experimental group has gained (or not gained) it analyses elements of teacher-pupil interaction in the classroom to pinpoint whether interactions in a particular class are amenable to the achievement of major aim of the class - 'education'. This is done by skilfully scrutinising the verbalisations of the teacher and his pupils. The 'FIAC' also takes verbal behaviour of any individual to be an adequate sample of his total behaviour, and concerns itself with verbal behaviour because it can be observed more objectively and validly than non-verbal behaviour. This method scrutinises the impact and the influence of teacher behaviour on the pupil to screen out those acts of the teacher which lead to more effective teaching, and does so by finding out:

1. The proportion of teacher talk in the classroom vis-a-vis pupil talk. The underlying notion here is that it is the pupil who needs more exercise in expressing himself and the teacher ought to minimise his talk and restrict it to guiding pupils' ideas.

2. The extent to which the teacher accepts the feelings and

emotions of the pupils. The implication here is that the more the pupils are made to feel that their feelings are not only normal but important, the more they are likely to become accepting of themselves, of other people, as well as become responsible and confident of their behaviour in day-to-day life. Erick Erickson (1970) and Carl Rogers (1969) deal with this extensively.

3. The amount of authority the teacher exerts on the pupils. As mentioned earlier on, excessive authority on the part of the teacher is to be avoided, because it breeds fear and stultifies pupils' creativity.

4. The extent to which the pupils reject teacher influence. Again the essential point here is that the more the teacher is authoritative and less accepting to pupils' suggestions, the more difficult it is to accomplish rapport between the teacher and the pupil.

For the analysis to be intelligible and meaningful, systematic answers have to be provided to the following essential questions:

(a) How often does the teacher ask questions and how often does he lecture?

(b) What kinds of questions does the teacher ask? That is, are they always questions related to content of subject matter, and does he ask supplementary questions to follow up insufficient or unclear answers from the pupils?

(c) What happens to the ideas expressed by pupils - does the teacher repress them, ignore them or encourage them?

(d) To what extent and under what conditions are pupils encouraged to initiate activity in the classroom?

The answers to these questions altogether make it possible to analyse the data, and get results that are indicative of the quality of talk, (hence quality of the teaching-learning process involved) in the classroom.

The 'FIAC' has three sections: the first section classifies all teacher statements as either direct or indirect, because this kind of classification gives central attention to the amount of freedom the teacher grants to the pupils. In any given situation, the teacher (whether he is consciously aware of it or not) has a choice. He can be direct and thereby minimise the freedom of the pupil to respond.

In order to make total interaction in the classroom comprehensible and meaningful, the 'FIAC' also provides for the categorisation of pupil talk; this forms the second part of the 'FIAC'. A third section namely 'silence and confusion' accounts for any classroom behaviour that is not categorisable as either teacher talk, or pupil talk. These three sections are mutually exclusive, but taken together, they are totally inclusive of, and exhaust, all probable verbalisation in the classroom. These sections are arranged into a ten-category matrix, which governs all coding of classroom interaction. The 'FIAC', and the ten-category matrix are shown on the following two pages.

FLANDERS' INTERACTION ANALYSIS CATEGORIES* (FIAC)   Table 1

Teacher Talk	Indirect Influence	Response	1. **Accepts feelings**: Accepts and clarifies an attitude or feeling tone of a pupil in a non-threatening manner. Feelings may be negative or positive. Predicting and recalling feelings are included.
			2. **Praises or encourages**: Praises or encourages pupil action or behaviour. Jokes that release tension, but not at the expense of another individual: nodding head or saying "Umhm" or "go on" are included.
			3. **Accepts or uses ideas of pupils**: Clarifying, building or developing ideas suggested by a pupil. Teacher extensions of pupil ideas are included but as the teacher brings more of his own ideas into play, shift to category five.
		Initiation	4. **Asks questions**: Asking a question about content or procedure, based on teacher ideas, with the intent that a pupil will answer.
	Direct Influence		5. **Lecturing**: Giving facts or opinions about content of procedures: expressing his own ideas: giving his own explanation, or citing an authority other than a pupil.
			6. **Giving directions**: Directions, commands, or orders to which a pupil is expected to comply.
			7. **Criticising or justifying authority**: Statements intended to change pupil behaviour from non-acceptable to acceptable pattern: bawling someone out: stating why the teacher is doing what he is doing: extreme self-reference.
Pupil Talk	Initiation Response		8. **Pupil-talk - response.** Talk by pupils in response to the teacher. Teacher initiates the contact or solicits pupil statement or structures the situation. Freedom to express own ideas is limited.
			9. **Pupil-talk - initiations**: Talk by pupils which they initiate. Expressing own ideas, initiating a new topic, freedom to develop opinions and a line of thought like asking thoughtful questions, going beyond the existing structure.
			10. **Silence or confusion**: Pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.

*There is no scale implied by these numbers. Each number is classificatory; it designates a particular kind of communication event. To write these numbers down during observation is to enumerate, not to judge a position on a scale.

FLANDERS' TEN CATEGORY MATRIX   Table 2

Code No. for school ...._____

Type of school, P for Progressive and
T for Traditional ...._____

Class ...._____

Subject ...._____

Coding time, from.... to....duration_____

Category	1	2	3	4	5	6	7	8	9	10	Row Totals
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
Column Totals											Matrix Totals

After proper coding the matrix indicates:

i) The entire nature of classroom interaction; that is, teacher-talk, pupil-talk, and silence and confusion,

ii) and also retains original sequence of events.

Before giving more details about the 'FIAC', it is pertinen to mention in passing its primary influences. As already mentioned, it was evolved consciously as a research method into the type of teaching behaviour which would help to improve teaching-learning interactions.

Flanders was admittedly influenced by Cantor's intuitive concern (1953) over teachers' arbitrary use of authority in the Traditional Classroom, and the tendency of the teacher to consider independence (of the so-called 'wayward' pupils) as an evil to b punished as well as the teacher's insistence on the pupil to depend on the teacher (the obedient pupil) and to conform to outside pressures. Flanders points out that evidence collated from several researches have vindicated Cantor's opinions. These researches conclude that experiences which inhabit the individual's freedom to be, and to express his deeper self, reduce his ability to be creative. Creativity is not learned from restraint. It is a product of the lowering or removal of barriers. It is a matter of being different, of daring to change, of venturing forth. He emphasises that conformity and creativity are essentially antithetical - what produces one tends to destroy the other.

Previous research in classroom behaviour by Flanders et al (1951) has also led to the conclusion that as teaching becomes less and less effective, it involves fewer unique patterns,

becomes more rigid, and more repetitive. This situation leads
to pupil boredom which in its own turn creates a whole host of
problems for the teacher - mainly 'unruliness' on the part of
the pupils and other discipline problems. On the other hand,
with teaching that is becoming more effective, the repertoire of
behaviour patterns expands, variations in sequence, progression
and frequency of interchange are numerous and the entire process
is described as being more flexible and more creative. This leads
Flanders to explain that knowledge and skills acquired through
participation as when the teacher does not talk too much 'down
the throats' of his pupils, respects their opinions and feelings
and encourages them to bring up matters of interest to themselves,
are personal and become internalised (by the pupils) since they
incorporate elements of self-directed discovery.

Flanders finally explains that the 'FIAC', other observation
schedules and tests which have enabled teachers and researchers
to arrive at the present knowledge about teaching may not be
foolproof. But if the present knowledge of teaching effectiveness
is to be improved, the solution lies in establishing an
educational procedure akin to the Progressive Classroom. This
will safeguard against institutionalising misconceptions by
producing pupils (teachers of subsequent generations) who, rather
than complacently settle for the established methods when they
begin to teach, will fruitfully criticise, analyse and implement
current knowledge in an effort geared towards self-development.
Such a procedure, Flanders concludes, can give schools the
ability to produce youthful citizens with the kind of cool

judgement and independent thinking that social unrest demands.

The major factor to be investigated in this research as has been indicated in previous pages was intended to find out, through empirical test, if indeed there is a significant difference between the Traditional Classroom and the Progressive Classroom as claimed by the adherents of the latter. The research design, therefore, had to be devised to measure the current situations existing in representative samples of both classrooms, and the data tabulated in a manner that facilitated empirical testing.

The measurements were taken on two groups of classrooms - five representing the Traditional Classroom and five representing the Progressive Classroom. The classrooms within each group were sampled from different schools but all were of grade 6 level and each was composed of about 30 students; half being males and half females.

The measurements were made on each of the 10 classrooms in turn on all the 10 variables, namely: Teacher-Talk (TT); Pupil-Talk (PT); Silence and Confusion (SC); Teacher Response Ratio (TRR); Teacher Question Ratio (TQR); Instantaneous Teacher Response Ratio (TRR 89); Instantaneous Teacher Question Ratio (TQR 89); Pupil Initiation Ratio (PIR); Content Cross Ratio (CCR); the Steady State Ratio (SSR); and Pupil Steady State Ratio (PSSR). The data was tabulated in the form shown in Table 3 on the following page.

Table 3

VARIABLE	Traditional Classrooms				Progressive Classrooms			
TT	-	-	-	-	-	-	-	-
PT	-	-	-	-	-	-	-	-
SC	-	-	-	-	-	-	-	-
TRR	-	-	-	-	-	-	-	-
TQR	-	-	-	-	-	-	-	-
TRR 89	-	-	-	-	-	-	-	-
TQR 89	-	-	-	-	-	-	-	-
PIR	-	-	-	-	-	-	-	-
CCR	-	-	-	-	-	-	-	-
SSR	-	-	-	-	-	-	-	-
PSSR	-	-	-	-	-	-	-	-
X	-	-	-	-	-	-	-	-

It should be noted that the first three variables in the table are simply a breakdown of all possible behaviour into the three classes. For example, TT represents all the amount of teacher talk exhibited in the classroom irrespective of the qualitative nature of this talk. The remaining seven variables are a breakdown of TT and PT into their qualitative nature.

Procedure

The study was carried out in   five months from February

to June 1974, in Farnham (Surrey County, England). Farnham was

chosen because of the large number of schools practising either

of the two systems of education (Progressive and Traditional)

existing alongside each other in a relatively small area within

a middle-class residential zone.

Elimination of Bias

In any social science study there are several factors which

can contaminate and confound the data collected and therefore

reflect in the analysis as biased results. The efforts carried

out in this investigation to eliminate such bias are outlined

below:

The Choice of Schools:

In this study, awareness was maintained of the fact that the

ease with which pupils respond to teachers (and, indeed, to their

parents and other adults) and the degree of freedom that they

feel in expressing their own opinions and ideas in initiating

classroom communication is largely affected by the pupils'

respective socio-economic classes. Social psychological studies,

(Bruner 1971, and Newson 1965) suggest that parents in low socio-

economic classes are more authoritative and dictatorial to their

children than parents in higher socio-economic classes. The

former often express the opinion that it is an act of misdemeanour

for a child to speak freely in the presence of adults. A child

brought up by such parents, therefore, is bound to feel inhibited

to express himself freely and initiate communication in the classroom. In contrast, parents in high socio-economic classes tend to permit their children to express themselves freely and encourage them to develop their own independent ideas. Consequently their offspring find it easier to initiate communication in the classroom. This bias was eliminated by choosing schools that are all within the same socio-economic zone. Evidence to this fact is contained in Moser and Scott (1961).

The town of Farnham falls into class two in a classification that ranks as follows:

Class 1 — Professional occupations

Class 2 — Intermediate occupations

Class 3 — Skilled occupations

Class 4 — Partly skilled occupations

Class 5 — Unskilled occupations

During a preliminary survey, visits were paid to a large number of schools and a short-list of the schools to be investigated was drawn up. The final list of schools investigated was finally established with the assistance of two prominent teachers in the area; Mr I. French, the headmaster of Farnham College, and Mr. James Sandham, a teacher in the same college as well as Mr. Gordon Burrows, a lecturer at the Farnham Centre for International Briefing. The schools were pared as shown below:-*

Bourne County Primary School

St. Peter's Primary School, Wrecclesham

Pilgrims' Way County Primary School
Hale County Primary School
Barfield Preparatory School

Waverley Abbey Primary School
St. Andrew's Primary School
Folly Hill Primary School

---

*This pairing was further substantiated by teachers' descriptions of their schools as well as of other schools in the area.

The visits to the schools were made with prior arrangement with the head of the school and the teacher of the class involved. The teachers were all requested not to make special preparation for the visit since what was needed was the observation of a class in normal session.

According to all observable appearances, the teachers had complied, with the exception of one - the teacher of the class in Pilgrims' Way Primary School who had been an Education Officer in Tanzania. Upon my entry into the classroom all the pupils stood up and chanted in chorus, "Habari Mister Ndumbu." The teacher had evidently taken pains to teach the pupils the Kiswahili greeting. In several schools the teachers had not told the pupils that they would have a visitor in the class until the morning of the day of the visit.

Before the coding started in each class, time was allowed for the class to get embroiled in its style of interaction so that what was observed and recorded would be normal activity in the classroom rather than behaviour. That is, exhibiting such behaviour as whispering to one another and casting glances to the 'stranger' at the back of the classroom, rather than concentrating on classroom work. Previous researchers suggest that the two types of classes adjust differently to strangers, with the Progressive Classroom adjusting faster than the Traditional Classroom. No appreciable difference was observed in this investigation. All the classes adjusted within a period ranging from fifteen to twenty minutes. Within this period, they had

all settled down to work at hand and were paying attention to the teacher.

Age of Pupils:

The age (and therefore maturity) of the pupils can, and does affect the amount and quality of contribution that he makes in the classroom, where the pupils in one class are of different ages. In England, however, all children compulsorily (by law) enter school at the age of five. Determination of the age of children investigated was, therefore, not a problem. The classes investigated were those of ten-year olds. The age of ten was chosen because by that age the pupils will have had enough time to get used to school routine as well as become attuned to one another and to teacher-behaviour.

Sex Differences:

Sex differences are normally a variable in studies involved in determining aspects of social interaction, in particular where adolescents are involved. In this particular study, however, the subjects were under age - a factor which ordinarily minimises the influence of sex differences on classroom interaction. In addition the sex-ratios were counter-balanced across the two groups of classrooms. As a result no differential effects would be expected between the two groups.

The Subject Being Taught:

The subject being taught also has some importance. The teacher who is teaching mathematics or any other relatively structured subject may have to do more lecturing than giving the

pupils' questions that will draw out their thoughts, the latter
being more amenable to subjects of a more social nature. The
visits in this investigation were arranged so that the coding was
done during an English language lesson, a Geography lesson, a
Nature Study lesson, Mathematics lesson and a History lesson in
the various paired schools, thus the subject being taught was
eliminated as a variable in the data collected in that the data
was collected during the teaching of a variety of subjects. In
any case, the effect of the subject being taught as a variable
on the data would be reflected in either a high or low score on
the different aspects of classroom interaction examined.

Data Collection:

For the observations coded in this study, the investigator
entered the classroom in the company of the teacher and some of
the pupils just before the lesson started, and only left again
in the company of the teacher and some pupils after the end of
the lesson. The investigator sat at a position that commanded
the view of the majority of the pupils - normally at the back of
the classroom. Every effort was made not to disrupt the class,
such as in avoidance of expressing overtly emotions of approval
or disapproval about the conduct of the classes which were
composed of girls and boys in average ratio of one to one. There
were, on the average, two or three more female than male teachers
in each of the schools.

Four observations were made for each class and subject. The
interval between the two observations in each class was an average

of two days depending on the timetable of a particular class and
all the observations were done during the morning sessions
(between 9 a.m. and 12.30 a.m.) when, it is believed, most pupils
and teachers would be most alert. These precautions, the
investigator believes, made the atmosphere in all the classrooms
most alike at the time of investigation.

Although the investigator had made several trial observations
and codings, it was possible for him to make errors during the
coding for this study. This could have been checked by video-
recording the coding sessions. Lack of recording facilities and
expertise, however, made this impossible but the investigator
feels that any other investigator would have made the same
tabulations, under the circumstances.

The procedure for observing and coding as set out by the
'FIAC's is to sit in the best position to see and hear clearly the
participants (usually at the back of the class) and decide which
category (one to ten) best represents the communication events
just completed, write the category down while simultaneously
assessing the continuing communication. To get valid data,
according to the standards set in previous investigations, coding
continues at the rate of 20 tallies per minute, with the tempo
kept as steady as possible. Coding proceeds in pairs as indicated
on the next page. The first number of a pair designates a row,
while the second number designates the column. A single pair
denotes a complete unit of communication, i.e. either 'teacher-
pupil', and the transition from one pair to another indicates the

flow of communication, for instance, the teacher asks a question
(coded as 4 in the matrix) and a pupil answers (coded as 8). The
pupil's response in turn becomes a stimulus for the teacher to
ask another question (or for another pupil to interject), and
the flow of communication, coding from left to right thus becomes:

Teacher	Pupil	Teacher/Pupil
(4)	(8)	(4/8)

For purposes of illustration let us take an hypothetical
coding of the following sequence of cells: 9, 6, 10, 7, 2, 2, 3,
8, 9, 9, 1, 3, 3. Before entry into the matrix, these codes will
be arranged in pairs as shown below:

```
                              10
                                9)  1st pair
              2nd pair    (    6
                                6)  3rd pair
              4th pair    (   10
                                7)  5th pair
                                2)
              6th pair    (    2
                                2)  7th pair
                                3)
                              8
                              9
                              9
                              1
                              3
                              3
                             10
```

Notice that a 10 has been added at the beginning and at the
end of the code numbers. This is done because of the assumption
that each coding begins and ends with silence; additionally, this
procedure makes the total of each column equal to the total of

each row. Each pair of numbers overlaps with the previous pair,
and each code is used twice. After the codes have all been
marked off in pairs as above, they are then entered in the matrix
cells. The particular cell in which a pair is tabulated is
determined by taking the first code of the pair to indicate the
row and the second code to indicate the column. Thus the first
pair, above, 10-9, will be entered in the cell at the intersection
of row 10 and column 9. This also makes it possible to check the
tabulations for accuracy. There should always be one tally less
in the matrix than there were codes in the original observation.
In this case we have 17 numbers, and the total number of tallies
in the matrix is 16. Given any number of code observations N,
there should always be (N-1) tallies in the matrix. This
hypothetical coding is shown as a matrix entry Table 4.

FLANDERS' TEN CATEGORY MATRIX   Table 4

Code No. for school ....•_____

Type of school, P for Progressive and
T for Traditional ....•_____

Class ...._____

Subject .... _____

Coding time, from.... to....duration _____

Category	1	2	3	4	5	6	7	8	9	10	Row Totals
1			1								1
2		1	1								2
3			1					1		1	3
4											0
5											0
6											1
7		1									1
8									1	1	2
9	1					1			1		3
10							1	1	1		3
Column Totals	1	2	3	0	0	1	1	2	3	3	16
%											

Matrix Totals

Data Analysis:

The statistic test used in the analysis of the data is the Wilcoxon Matched-pairs signed-ranks-test (Blalock, 1960; Siegel, 1956). As its name implies, this test is designed to measure the significance of the difference between the scores of matched-pairs. The Wilcoxon matched-pairs signed-ranks-test is principally used in situations with an interval-scale level of measurement (such as the ratio of the 'FIAC')and is best suited for the analysis in this report because it does not presume a normal population, and has a high power efficiency (95 per cent for both small and large samples).

The teacher-pupil question-answer and pupil-teacher question-answer is the simplest form of verbal interaction possible in the classroom, and as we can see, it involves four cells, 4-8, 8-4, 8-8, 4-4. To enter this in the matrix we begin by shading cell 4-8, move directly to the 8-4 cell, then to indicate the movement draw an arrow connecting these two cells, the movement of the third pair takes us back to the 4-8 cell, so we draw an arrow in the reverse direction, parallel to the first arrow. The movement of the fourth pair, 8-8, is shown by a third arrow. Next we draw an arrow to the 4-8 cell to indicate the movement of the fifth pair. Finally we draw another arrow to the 4-4 cell, and another to cell 4-8, to represent the movement of the sixth and seventh pairs. Thus a full clockwise movement is completed as shown in Table 5.

FLANDERS' TEN CATEGORY MATRIX   Table !

Code No. for school ...._____

Type of school, P for Progressive and
T for Traditional ...._____

Class ...._____

Subject ...._____

Coding time, from.... to....duration _____

Category	Teacher							Pupil		Sil-ence	Row Totals
	1	2	3	4	5	6	7	8	9	10	
1											
2											
3			+++++ +++++ +++++						+++++ +++++ +++++		
4				@@@@@ @@@@ @@@@@				@@@@@ @@@@ @@@@@			
5											
6											
7											
8				@@@@@ @@@@@ @@@@@				@@@@@ @@@@ @@@@@			
9			+++++ +++++ +++++						+++++ +++++ +++++		
10											
Column Totals											
%											Matrix Totals

KEY:

| @@@@ @@@@ | Inner Movement | +++++ +++++ | Outer Movement |

The matrix makes available for decoding a large spectrum of data at once. It operates on the basis that given any category system designed for classifying events at a constant rate, in sequence, it is possible to increase the amount of information by considering a pair of events as the unit of observation to be tabulated rather than a single event. The 'FIAC' has ten categories and the use of a pair of events as the unit of observation is very appropriate. A single pair forms a primary unit of information and the combination of two or more pairs forms a secondary unit of information. This procedure is based on a statistical law of mathematics - that with ten categories, given any code symbol which can be combined with any other plus itself, the sum total of combination available is 100. Given N categories, there are N^2 pairs, but sums within each category can be added up to find out the matrix total. Accordingly, when pairs are chosen as the units to be tabulated, there are $N^2 + N + 1$ units of primary information. With ten categories, there are 111 primary units of information.

Using a pair, therefore, in the 'FIAC' makes the various combinations of the 111 units phenomenal. Combining the code symbols into pairs, Flanders explains, more than squares the number of primary units and the amount of secondary information exceeds what is easily comprehensible and, for that matter, what is psychologically useful. No classroom interaction can be completely repeated or recreated. But validity for the 'FIAC' depends not on actual recreation of the interaction, but on

whether what was coded did in actual fact exist. It is the tiny bits of behaviour in the classroom that constitute teaching. When all the codings have been tabulated into pairs and entered in the matrix, then evaluative ratios can be calculated and the final results analysed. The various ratios, their evaluation meanings and the methods in which they are calculated are:

1.   Teacher Response Ratio (TRR)

The Teacher Response Ratio gives an index corresponding to the teacher's tendency to respond to the ideas and feelings of the pupils. This ratio is designed such that the index is a percentage figure, never higher than one hundred and never less than zero. The index is calculated by adding category frequencies one, two and three, multiplying by hundred and dividing by the sum of category frequencies one, two, three, six and seven, that is:

$$\frac{1 + 2 + 3 \times 100}{1 + 2 + 3 + 6 + 7}$$

2.   Teacher Question Ratio (TQR)

The Teacher Question Ratio is an index corresponding to the teacher's tendency to use questions when guiding the more content oriented part of the classroom discussion. It is calculated by multiplying category four frequency by a hundred and dividing by the sum of categories four and five. Thus:

$$\frac{4 \times 100}{4 + 5} \; ; \text{ the higher}$$

the score the better the teacher's performance in handling content.

3. **Pupil Initiation Ratio (PIR)**

The Pupil Initiation Ratio indicates the proportion of pupil-talk that constitutes an act of initiation in the classroom. The formula for the calculation of this ratio is to multiply category nine frequency by a hundred and to divide by the sum of all pupil-talk; thus:

$$\frac{9 \times 100}{8 + 9}$$

A low 'PIR' in particular is indicative of pupil boredom and eventual restlessness.

4. **Instantaneous Teacher Response Ratio (TRR 89)**

The Instantaneous Teacher Response Ratio corresponds to the tendency of the teacher to praise or to integrate pupil ideas and feelings into the class discussion immediately the pupils stop talking. The figure for this ratio is arrived at by adding cell frequencies in rows eight and nine, columns one, two, and three, multiplying by one hundred, and dividing by the total tallies in the cells of rows eight and nine, columns one, two, three, six and seven. Thus:

$$\text{TRR } 89 = \frac{\text{rows } 8 + 9 + \text{columns } 1 + 2 + 3 \times 100}{\text{rows } 8 + 9 + \text{columns } 1 + 2 + 3 + 6 + 9}$$

5. **Instantaneous Teacher Question Ratio (TQR 89)**

The Instantaneous Teacher Question Ratio indicates the tendency of the teacher to respond to pupil-talk with questions.

6.   The emphasis laid on the content of the subject matter is

indicated by the Content Cross Ratio (CCR). It is calculated by

finding out the percentage of all tallies that lie within the

columns and rows of categories four and five; a total of 38 cells

altogether as shown in Table 6.

FLANDERS' TEN CATEGORY MATRIX

Table 6

Code No. for school .... _____

Type of school, P for Progressive and
T for Traditional .... _____

Class .... _____

Subject .... _____

Coding time, from.... to.... duration _____

Category	1	2	3	4	5	6	7	8	9	10	Row Totals
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
Column Totals											
%											

The 'Content Cross' (marked in +++) forms the basis of the 'CCR', tallies
in this area represent teacher statements primarily consisting of
lecture, statements of opinion, ideas and teacher questions about the
information and content that he has presented.

Area A (marked in @@@) indicates the teacher's use of extended
indirect influence on the pupils. Area B (marked in ***) indicates the
teacher's emphasis on criticism, giving lengthy explanations.

A high 'CCR' denotes that the main focus of the discussion was on subject matter, that the teacher took a very active role in discussion and attention to motivation and discipline was at a minimum.

7. The Steady State Ratio (SSR)

The Steady State Ratio indicates sustained expression in the same category, it is worked out by calculating the percentage of all tallies that lie within the ten steady state cells, as shown in Table 7.

FLANDERS' TEN CATEGORY MATRIX Table 7

Code No. for school .... _____

Type of school, P for Progressive and
T for Traditional .... _____

Class .... _____

Subject .... _____

Coding time, from.... to.... duration _____

Category	1	2	3	4	5	6	7	8	9	10	Row Totals
1	@@@@ @@@@										
2		@@@@ @@@@									
3			@@@@ @@@@								
4				@@@@ @@@@							
5					@@@@ @@@@						
6						@@@@ @@@@					
7							@@@@ @@@@				
8								@@@@ @@@@			
9									@@@@ @@@@		
10										@@@@ @@@@	
Column Totals											Matrix Totals
%											

The Steady-State Cells, ten altogether, form the basis of the 'SSR'
and the 'PSSR'. These are the only cells in the entire matrix which
indicate continuous talk in one category, all the other cells are
transitional (in addition to the other things that they indicate)
representing movements from one category to another.

The higher the ratio, the less rapid the interchange between the teacher and the pupils. But a more sensitive index for the rapidity of teacher-pupil interchange when pupil-talk is average or above average, is the Pupil Steady State Ratio.

8. Pupil Steady State Ratio (PSSR)

The 'PSSR' is calculated by adding all the frequencies in the (8 - 8), (9 - 9) cells, multiplying by a hundred and dividing by all pupil-talk tallies, thus:

$$PSSR = \frac{(8 - 8) + (9 - 9) \times 100}{8 + 9}$$

These ratios, in addition to percentage of teacher-talk, pupil-talk, and silence and confusion enable the researcher to arrive at an objective understanding and description of the situation setting of the classroom.

CHAPTER V

RESULTS

The raw scores on each of the variables obtained by the Progressive and Traditional schools on corresponding areas of study are shown in Table 8 (i) and Table 8 (ii) on page 91.

The mean raw scores obtained on each variable in each type of school for all the 11 variables are also shown in the same table. A distinction has been made between Table 8 (i) and 8 (ii) in that Table 8 (i) indicates the score of each of the first three variables, (Teacher-talk, Pupil-talk and Silence and Confusion) as a percentage of the entire verbal interaction in each of the two types of classrooms, whereas the remaining eight variables are separate ratios calculated independently.

Examination of Table 8 shows that generally the mean scores on the various variables tested appear to be uniformly high. If the 11 variables of the Flanders Interaction Analysis Categories (FIAC) are, however, examined separately, significant differences emerge. A statistical analysis of the data using the Wilcoxon Matched-pairs signed-ranks-test for all the variables at the 0.05 level of significance revealed the differences between the two classrooms as shown on Table 9 on page 92 and 93.

With regards to the first variable, Teacher-talk, one would, according to Flanders, expect an average of 67 per cent in the typical classroom. But the results obtained indicate 61.6 per

cent for the Traditional Classroom as compared to 59.75 per cent for the Progressive Classroom. These results indicate that there was more Teacher-talk in the Traditional Classroom than in the Progressive Classroom. The statistical analysis of the data found a significant difference between the two types of classroom in the amount of Teacher-talk ($Z = 3.40$).

The second variable, Pupil-talk, was higher for the Progressive Classroom (29%) than for the Traditional Classroom (28.2%). This is found to be a significant difference with a Z score of -3.65 when analysed through the Wilcoxon Test.

The third variable, Silence and Confusion is higher by 1.5 per cent for the Progressive Classroom. Statistical analysis of this data using the Wilcoxon test, however, indicates that there was no significant difference between the two classrooms on this variable ($Z = -1.81$).

The Teacher Response Ratio which indicates the teacher's willingness or tendency to respond to pupils when they raise ideas or express feelings that he has not specifically solicited was higher in the Progressive Classroom (49.0 per cent) than in the Traditional Classroom (36.5 per cent). Thus the teacher in the Progressive Classroom was more responsive to communication from his pupils ($Z = -3.65$).

The Teacher Question Ratio is an indicator of the teacher's tendency to be direct through the use of questions when communicating with his pupils. The results of this study indicate a score of 31 per cent for both classrooms thus showing no

difference between the two classrooms on this variable. (Z= 0.45).

The Instantaneous Teacher Response Ratio and the Instantaneous Teacher Question Ratio are both finer measurements for the Teacher Response Ratio and the Teacher Question Ratio respectively. The results for the two variables expectedly follow in the same direction as the Teacher Response Ratio and the Teacher Question Ratio. A statistical comparison between the Traditional and the Progressive Classrooms on the Instantaneous Teacher Response Ratio gives a Z score of -3.15, thus indicating a significantly higher ratio for the Progressive Classroom. On the other hand, the Instantaneous Teacher Question Ratio gives a Z score of 0.68 indicating no significant difference between the two classrooms.

The Pupil Initiation Ratio indicates the proportion of pupil-talk that comprises an act of initiation. As expected a brief inspection of the results shows a higher level of initiation for the Progressive Classroom (48.5 per cent) than for the Traditional Classroom (45.5 per cent). Further analysis of the data through the Wilcoxon Test indicates a Z score of -3.15 thus showing a significant difference in favour of the Progressive Classroom.

Finally, the Content Cross Ratio which also refers to the tendency of the teacher to dominate class activity and his insistence on content (drill) shows a score of 56.25 per cent for the Traditional Classroom in comparison to 38.75 per cent for the Progressive Classroom. Further analysis of the data using the Wilcoxon Test showed a significant difference between the two classrooms, thus indicating that the Traditional Classroom teacher

dominated classroom activity more than his counterpart in the Progressive Classroom.

In summary of the findings, statistical comparisons between the two types of classrooms using the Wilcoxon Test indicates significant differences in favour of the Progressive Classroom, as hypothesized, on eight of the eleven variables; namely Teacher Talk, Pupil Talk, Teacher Response Ratio, Instantaneous Teacher Response Ratio, Pupil Initiation Ratio, Content Cross Ratio, Steady State Ratio and the Pupil Steady State Ratio. There was no significant difference in Silence and Confusion, Teacher Question Ratio and the Instantaneous Teacher Question Ratio.

Table 8 Part (i)

VARIABLE	TRADITIONAL CLASSES					PROGRESSIVE CLASSES				
	BOURNE COUNTY Geography	PILGRIM'S WAY English	HALE COUNTY Nature Study	BARFIELD History	X	ST.PETER'S Geography	WAVERLEY ABBEY English	ST.ANDREW'S Nature Study	FOLLY HILL History	X
TT	60	62	61	63	61.5	64	53	63	59	59.75
PT	25	35	33	21	28.5	22	33	24	36	20.7
SC	15	3	6	16	10.0	14	14	13	5	11.5

Table 8 Part (ii)

TRR	41	47	65	34	46.75	51	51	38	56	49.0
TQR	49	33	19	23	31.0	29	39	26	30	31.0
TRR 89	67	75	85	63	72.75	79	79	64	70	73.0
TQR 89	48	59	69	51	56.75	67	67	71	51	64.0
PIR	36	41	74	31	45.5	33	32	51	38	38.5
CCR	69	68	42	46	56.25	61	60	49	65	58.7
SSR	55	56	34	52	49.25	57	55	63	49	56.0
PSSR	39	49	76	43	51.75	56	54	31	63	51.0

X = Average

Table 9

VARIABLE (SYMBOL)	PAIR No.	GROUP A	GROUP B	DIFFERENCE	RANK OF DIFFERENCE	T SCORE	Z SCORE	
TT Teacher Talk	1	60	64	- 4	2.5			
	2	62	53	+ 9	4.0	- 3.5	- 3.40	REJECT
	3	61	63	- 2	1.0			Ho
	4	63	59	+ 4	2.5			
PT Pupil Talk	1	25	22	+ 3	2.0			
	2	35	33	+ 2	1.0	- 4.0	- 3.65	REJECT
	3	33	24	+11	3.0			Ho
	4	21	36	-15	4.0			
SC Silence and Confusion	1	15	14	+ 1	1.0			
	2	3	14	-11	3.0	0.0	- 1.81	ACCEPT
	3	6	13	- 7	2.0			Ho
	4	16	5	+10	4.0			
TRR Teacher Response Ratio	1	41	52	-11	2.0			
	2	47	51	- 4	1.0	- 4.0	- 3.65	REJECT
	3	65	38	+27	4.0			Ho
	4	34	56	-22	3.0			
TQR Teacher Question Ratio	1	49	58	- 9	4.0			
	2	33	29	+ 4	3.0	+ 3.0	- 0.45	ACCEPT
	3	19	26	- 7	1.5			Ho
	4	23	30	- 7	1.5			
TRR 89 Instantaneous Teacher Response Ratio	1	67	60	+17	3.0			
	2	75	79	- 4	2.0	- 3.0	- 3.15	REJECT
	3	85	64	+21	4.0			Ho
	4	63	73	-10	1.0			

Table 9

VARIABLE (SYMBOL)	PAIR No.	GROUP A	GROUP B	DIFFERENCE	RANK OF DIFFERENCE	T SCORE	Z SCORE	
TT	1	60	64	- 4	2.5			
Teacher	2	62	53	+ 9	4.0	- 3.5	- 3.40	REJECT
Talk	3	61	63	- 2	1.0			Ho
	4	63	59	+ 4	2.5			
PT	1	25	22	+ 3	2.0			
Pupil	2	35	33	+ 2	1.0	- 4.0	- 3.65	REJECT
Talk	3	33	24	+11	3.0			Ho
	4	21	36	-15	4.0			
SC	1	15	14	+ 1	1.0			
Silence and	2	3	14	-11	3.0	0.0	- 1.81	ACCEPT
Confusion	3	6	13	- 7	2.0			Ho
	4	16	5	+10	4.0			
TRR	1	41	52	-11	2.0			
Teacher Response	2	47	51	- 4	1.0	- 4.0	- 3.65	REJECT
Ratio	3	65	38	+27	4.0			Ho
	4	34	56	-22	3.0			
TQR	1	49	58	- 9	4.0			
Teacher Question	2	33	29	+ 4	3.0	+ 3.0	- 0.45	ACCEPT
Ratio	3	19	26	- 7	1.5			Ho
	4	23	30	- 7	1.5			
TRR 89	1	67	60	+17	3.0			
Instantaneous	2	75	79	- 4	2.0	- 3.0	- 3.15	REJECT
Teacher Response	3	85	64	+21	4.0			Ho
Ratio	4	63	73	-10	1.0			

(Table 9 continued) - 93 -

VARIABLE (SYMBOL)	PAIR No.	GROUP A	GROUP B	DIFFERENCE	RANK OF DIFFERENCE	T SCORE	Z SCORE	
TQR 89	1	48	42	+ 6	2.5			
Instantaneous	2	59	67	- 8	4.0			
Teacher Question	3	69	71	- 3	1.0	+ 2.5	0.65	ACCEPT
Ratio	4	51	57	- 6	2.5			Ho
PIR	1	36	42	- 6	1.0			
Pupil	2	41	33	+ 8	3.0	- 3.0	-3.15	REJECT
Initiation Ratio	3	74	51	+23	4.0			Ho
	4	31	38	- 7	2.0			
CCR	1	69	50	+19	3.0			
Content	2	68	61	+ 9	2.0			
Cross Ratio	3	42	49	+ 7	1.0	- 4.0	-3.65	REJECT
	4	46	65	-29	4.0			Ho
SSR	1	55	53	+ 2	2.0			
Steady	2	56	57	- 1	1.0			
State Ratio	3	34	63	+29	4.0	+ 2.0	-0.90	REJECT
	4	52	49	- 4	3.0			Ho
PSSR	1	39	59	-20	2.5			
Pupil Steady	2	49	56	- 7	1.0			
State Ratio	3	76	31	+41	4.0	+ 4.0	-0.45	REJECT
	4	43	63	-20	2.5			Ho

A three-tier system of data handling such as was applied in the current study, can be disconcerting and cumbersome. But the range of issues dealt with does require that the composite data should be reduced to some common denominator through which significances can be measured with a single statistic. The Flanders' Ten Category Matrix is in itself an almagamation of statistics including linear numbers, percentages and ratios. It is a little known method, perhaps not as rigorous as other better known and more frequently used methods. But as a measure of a complex a set of normal social behaviour acts as was incolved in this study, it is definitely the most efficient method.

A re-analysis of the data through additional instruments gave similar results to those achieved through the Wilcoxon Sign-Rank Test.

Three typographical errors slipped into page 91. With regards to the X figures for the PT, PIR and CCR which should be 29.9; 48.5 and 38.75 respectively. As the original calculations however were done with the correct figures the rest of the data analysis remains unaltered and the discussions unaffected. On page 88 and 89, the following corrections have also been similarly made as follows:

TT (Traditional Classroom)	46.75
PIR (Progressive Classroom)	38.0
CCR (Traditional Classroom)	56.25

A query could be raised about the - sign for the TT score on page 92, table 9 which should be a +, but the Z score of 3.40 leading to rejection of the full hypothesis remains the same according to the Wilcoxon tests, irrespective of the sign.

Page 95, line 21, should read "The findings, therefore, do not support the hypothetical deduction that the teacher in the Traditional Classroom would engage in more talk (direct lecturers and authoritative outbursts) than the teacher in the Progressive Classroom.

CHAPTER VI

DISCUSSION

This study set out to ascertain through empirical data whether, as claimed by its adherents, the Progressive Classroom is superior to the Traditional Classroom in terms of teacher-pupil interaction. Most of the studies in this area have been speculative with little or no supportive data. The purpose of this study, therefore, was to provide some empirical data in an attempt to test the claims of the proponents of the Progressive Classroom through the Flanders Interaction Analysis Categories (FIAC). All the ten matrixes of the 'FIAC' were utilised in making a comparison between representative samples of the two classrooms.

The research design for this study was based on the argument that if the superiority claimed for the Progressive Classroom was emperically demonstrable, then a comparison of representative samples of the two classrooms with regards to teacher-pupil interaction should reveal significant differences in favour of the Progressive Classroom. This led to the formulation of the four hypothetical predictions that were tested. In summary these were : that the teacher in the Progressive Classroom would engage in less direct lectures and authoritative outbursts than his counterpart in the Traditional Classroom; the teacher in the Progressive Classroom would be empathetic and flexible in his

dealings with his pupils; that he would also be more inclined to clarify and extend his pupils' ideas than the teacher in the Traditional Classroom and that the pupils in the Traditional Classroom would be inclined to resist the teacher's influence than the pupils in the Progressive Classroom.

In order to test the first hypothesis using 'FIAC' it was reasoned that monopolising talking time in any discussion, be it in an atmosphere of formal instruction or in normal daily conversation, is one way to dominate, to demonstrate authority, impart personal ideas and express one's will. According to Flanders, the teacher's authority and maturity gives him the power to initiate communication. It was expected that the teacher in the Traditional Classroom would tend to dominate classroom talk than the Progressive Classroom teacher, and the converse would be true for pupil talk.

The results showed that teachers in the Traditional Classroom significantly dominated the talk in their classrooms more than the teachers in the Progressive Classrooms. Conversely, the pupils in the Progressive Classrooms had a significantly greater share of classroom talk than the pupils in the Traditional Classroom. These findings, therefore, support the hypothetical prediction that the teacher in the Traditional Classroom would engage in less talk (direct lectures and authoritative outbursts) than the teacher in the Progressive Classroom as seen in the results on page 92.

Another way of testing the first hypothesis is to consider the findings on variable 'SC', indicating the amount of Silence

and Confusion in each classroom, which shows no significant
difference between the Traditional Classroom and the Progressive
Classroom. This means that there is as much silence and confusion
in the Progressive Classroom as there is in the Traditional
Classroom.

This finding is not consistent with our expectation. It was
expected that there would be more silence and confusion in the
Traditional Classroom as an indication of the pupils' resistance
to the influence of the teacher. There may be several reasons
for this lack of differences. A most likely explanation for this
finding is that although the 'SC' in both classrooms is the same,
the two 'SCs' are different in nature and causation. The 'SC' in
the Traditional Classroom may have been the result of unwillingness
on the part of the pupils to be influenced by the teacher by
participating more in the classroom talk as well as boredom with
the teacher's lectures . The 'SC' in the Progressive Classroom
was probably the direct result of the teacher's permissiveness
and the encouragement he gave to the pupils to express their ideas.
This could have created a big temptation for the pupils to talk
out of turn without risking the teacher's wrath or indignation.
The reverberative nature of the progressive mentioned earlier
would tend to support this, but further research in identifying
silence and confusion and their causes would have to be done before
offering this explanation emphatically.

The Teacher Response Ratio as mentioned earlier is an
index originally constructed with the awareness that a teacher

can react to the ideas and feelings of pupils or ignore and suppress them.

In terms of the hypothesis formulated above, this variable is an indirect measure of the amount of empathy and flexibility in dealing with pupils. It was expected that the teacher in the Progressive Classroom would score higher on this variable than the teacher in the Traditional Classroom. The results show that the teacher in the Progressive Classroom is significantly more responsive to his pupils' ideas and emotions than the teacher in the Traditional Classroom.

It will be recalled that the Teacher Question Ratio is the index for showing the teacher's use of questions to guide the more content oriented parts of the classroom discussion. The use of questions rather than directives is more effective because the pupils' reasoning is involved and the pupils become active participants in the teaching-learning process. The teacher uses questions to solicit pupil-reactions to ideas which he considers important or to check on their understanding. According to our third hypothetical prediction, it was expected that the teacher in the Progressive Classroom would clarify and extend his pupils' ideas than his counterpart in the Traditional Classroom.

The results of the present investigation reveal no significant difference between the Traditional and the Progressive Classrooms thus suggesting that teachers in both classrooms are equally effective in provoking pupils' thoughts.

The Instantaneous Teacher Question Ratio is also a measure

of the teacher's tendency to respond to pupil talk with questions based on his own ideas compared to his tendency to respond to pupil talk with questions based on the pupils' ideas, in which case the teacher would resort to lecturing. This variable is, therefore, a further indirect measure of the third hypothetical prediction.

The results of the Wilcoxon Test indicated that the teacher in the Traditional Classroom was not significantly less likely to move on to a new question based on his ideas in classroom interaction than the teacher in the Progressive Classroom. In other words, the teacher in the Progressive Classroom is not more inclined to guide his pupils through questions than the teacher in the Traditional Classroom. The results obtained through the 'TQR' are consistent with the results obtained through the 'TQR 89'. This, therefore, further supports the validity of the measuring instrument used in this study.

The Instantaneous Teacher Response Ratio (TRR 89) uses the concepts of 'immediacy of reward' in reinforcing behaviour. It indicates the teacher's tendency to praise or integrate pupils' ideas and feelings into the class discussion, immediately the pupils stop talking. A failure to do so gives the adverse effect of alienating the pupils from the learning process, and may perpetuate a sense of purposelessness and futility in the classroom.

In terms of the hypothesis advanced, the 'TRR 89' is a further measure of the empathy the teacher expresses to his

pupils. The results of this analysis revealed a significantly greater 'TRR' 89' in favour of the Progressive Classroom. Thus the teacher in the Progressive Classroom reacted to the ideas and feelings of pupils or else gave encouragement or praise in contrast with directions or criticism.

The Pupil Initiation Ratio (PIR), it will be recalled, is the proportion of pupil-talk that is an act of initiation rather than response. Its calculation is based on our expectation of reciprocal relationships between teacher statements and pupil statements, that is the more the teacher takes the initiative the more likely the pupils are to respond. The more the teacher responds, the more likely it is that the pupils will make statements which show initiative.

According to the fourth hypothetical prediction, this mutual reciprocity of teacher-pupil statements establishes rapport in the classroom - with the teacher more accepting of the pupils and the pupils less likely to reject the teacher's influence. The results showed a significant difference between the Traditional Classroom and the Progressive Classroom over this variable, in accordance with predictions that the pupils in the Progressive Classroom would take greater initiative and be less likely to reject the teacher's influence than the pupils in the Traditional Classroom.

The 'CCR', it will be recalled, indicates the emphasis laid upon the content of the subject in the classroom. It is a further measure of the extent to which pupils reject the teacher's

influence. The results show a significantly high 'CCR' in favour of the Progressive Classroom. The importance of the 'CCR' is not so much the fact that the teacher and the pupils are more content-conscious as the factors which lead them to, or make it possible for them to be so. According to the interpretation advanced in this thesis, a high 'CCR' as in the case of the Progressive schools here, suggests that the main focus of the discussion was on subject matter (implying that elements of interruption and digression are minimal) and that the teacher took an active part in the discussion - asking questions and responding to the pupils in a manner that steered the discussion towards content. In other words, the pupils were attentive to the subject at hand, and that the attentiveness probably arose out of the interest aroused in the pupils by the content of the subject matter and the teacher's presentation of the material.

Further, the difference suggests that the teacher in the Progressive Classrooms probably had less difficulty with motivation and discipline. The higher motivation and the absence of discipline problems in turn suggest that the pupils paid greater attention to the subject matter and were less likely to become bored and, therefore, restless.

The same tendency of showing great interest in the subject and little inclination to resist the influence of the teacher in the Progressive Classroom is also shown by Steady State Ratio (SRR) and the Pupil Steady State Ratio (PSSR), both of which provided results consistent with the hypothesis advanced.

The results could also mean that the content of the material presented to the pupils was so variable that it stimulated greater interest in them. This, however, is unlikely to have been uniform in all the classes examined - to produce the positive 'CCR', 'SSR' and 'PSSR' by coincidence.

All except one of the hypothetical predictions advanced at the beginning of this study were supported by the results obtained. A supplementary test through the variable 'SC' to measure the degree of the pupils' resistance to the teacher, however, did not give positive results in favour of the Progressive Classroom as expected. This was possibly a result of the 'SCs' in the two classrooms being different in nature and causation.

The hypothetical prediction that was not supported by the results, tested through variables 'TQR' and 'TQR 89), indicated that contrary to expectations, the teachers in the Progressive classrooms were not more inclined to guide their pupils through questions than the teachers in the Traditional Classrooms. This seems to indicate that teachers in both types of classrooms may be equally effective in imparting knowledge as required by the syllabi. This is logical in that whatever method of instruction used, teacher-effectiveness is normally measured by the number of his pupils who pass examinations. This was outside the scope of the present study, but it is an important area for further research.

We shall now discuss briefly certain factors observed by the present investigator which though not measured by the 'FIAC' are

relevant to a study of this nature.

One major difference between the Traditional-class-teachers and the Progressive-class-teachers appeared in their use of syllabi. The Traditional-class-teachers tended to prefer a standard text which they followed from lesson to lesson. The Progressive-class-teachers on the other hand preferred to use Nuffield texts as a basis for their lessons. None of them said they were following the Nuffield courses strictly from one lesson to the next. This would signify greater flexibility and creativity.

Another difference between the two types of classes is in the pupils' inclination to work. Apart from the homework assigned by the teachers, the pupils in the Traditional classes gave to the teachers less academic work outside school hours. The teachers in the Progressive classes put less emphasis on compulsory home-work, instead they asked their pupils to formulate their own 'research projects' either singly or in groups and to consult them on how to accomplish the projects. The most popular projects were: building models of castles, cathedrals and other national monuments that the pupils were familiar with; making maps of their local areas, making baskets and 'sewing' toys from stuffed cloth.

Most teachers in the Progressive classes emphasised that this type of class demanded more effort, exertion, patience and prior planning on the part of the teacher and often meant that the teacher had to work outside the official school hours. They

were, however, prepared to operate this type of class in spite of the low pay (in comparison to other professions) because it offered a better climate for the development of the pupils' intellect and personalities, and this was the duty they owed their local society as teacher. The enthusiastic manner in which they explained why they had opted for the more strenuous Progressive class when they could easily have settled for the Traditional class with its well defined procedures, gave the impression that teachers who favour the Traditional class may have character traits that are not consistent with the teaching methods used in the Progressive class. This is obviously a subject worthy of research in future.

Research of this nature will help in showing the effect of different teacher personalities on the pupils. Some teachers, possibly because of their personalities, are more capable than others. They are more skilful than others in stimulating their pupils' ideas, and they present their material in ways that pupils find interesting and lucid. In other words, they are more talented as teachers than their colleagues. According to B.F. Skinner (1968) tradition has brought about what he refers to as the 'idol of the good teacher' which is an assumption that what a good teacher can do any teacher can do. It would appear that the teacher personality that draws out more attention from the student will motivate better and make learning more efficient.

More research in this area will assist in ascertaining the effect of different teacher-personalities on the pupils. Furthermore research of this nature may eventually reveal that

different teacher-personalities perform better in one type of classroom than in another, or teach more efficiently with one teaching method than with another. A discovery of this nature can go a long way in proving the efficiency of teaching in our schools. Currently, what seems to be of paramount importance in any teaching-learning situation is the recognition that the bevaviour of the teacher and the behaviour of the pupil are complimentary in the learning process.

Another area that requires research arises out of what Skinner has referred to as the 'idol of the good student' which arises out of the assumption that what a good student can do any student can. But because of superior ability or exposure to fortunate early environment some students can learn effectively without being taught. This means that pupil-experience can affect the teaching-learning process in much the same way as teacher-personality is an important factor in the learning process.

In their research, Bennett et al., (1976) categorised pupils into eight personality characters based on variations of introversion, extroversion, timidity, motivation, anxiety, stability, and degree of conformity and found that there is a complex network of interaction effects between pupil personality, behaviour and teaching style. For instance, they discovered that in formal (Traditional) classrooms all pupils of personality types characterised by high motivation and conformity tended to tackle their work without help from others whereas anxious and

non-conformist pupils looked for help from their peers. In the informal (Progressive) classrooms, this tendency was reversed. This suggests that there is need to study further the pupils' personalities in the classroom, for in doing so, we would be able to know more about what helps a child get the most out of school and what teaching style and nature of classroom is best suited for which child.

CHAPTER VII

THE PROGRESSIVE CLASSROOM AND KENYA

The superiority of the Progressive Classroom over the Traditional Classroom as regards academic performance has not been conclusively shown. But most of the researches into these two types of classrooms tend to indicate that the Progressive Classroom elicits more of the pupils' potential in creativity and encourages greater independence of personality. Foremost among these studies are those of Anderson, (1939); Lippit and White (1943). These studies have shown that the teacher who uses more social skills of communication in the class involving, accepting, clarifying, making use of the ideas and feelings of the pupils, stimulates more verbal participation of the pupils. These verbalisations of the pupils provide the teacher with an insight into the pupils' perception of the situation at hand; perceptions which may be correct or wrong, but all the same, useful because they help the teacher to decide the direction in which to steer subsequent questions and conversation.

When these communicative skills are used, the pupils show more spontaneity and initiative, voluntary contributions and contribution to problem-solving. On the other hand, the teacher who assumes that teaching involves 'feeding' the children with information (following a rigid syllabus) encourages more dependence. When dependence is high the pupils are more easily distracted from school work, and show more rejection of the teachers' domination. This in turn means that the teacher has to give more

orders and direction and that the progress of the pupils in classwork depends much upon persistent and continuous teacher-supervision rather than on the pupils' intrinsic motivation and interest.

Regarding the effect of teacher authoritative behaviour on pupil response, Flanders (1951) carried out a research in which pupils were exposed to contrasting teacher-behaviour, and the results showed that commanding, abrasive and dominative behaviour on the part of the teacher is consistently disliked by pupils; reduces their ability to remember the material learned and produces disruptive anxiety as indicated by galvanic skin response and changes in heartbeat rates. Obversely, the teachers who use the social skills of communication, involving acceptance of the pupils' ideas and emotions, and are integrative in their contact with the pupils, elicit the opposite trends. His findings confirmed the results of the earliest systematic studies of spontaneous pupil and teacher behaviour by Anderson, (1939).

As early as 1939, Anderson had found that domination and rigidity on the part of the teacher stimulates similar behaviour from the pupils, while integrative, conciliatory, and flexible behaviour on the part of the teacher also leads to the same behaviour among the pupils. Further evidence to this effect is found in Bandura's studies on the theory of imitative and proprioceptive learning (Bandura, 1969, 1970) as well as Lippit and White's research on leadership, covering authoritarian, democratic and laissez-faire leadership. Also, in summarising

their collation of the results of several large-scale researches on classroom behaviour, Amidon and Flanders (1963) report that all types of pupils learn more while working under the more indirect pupil-oriented behaviour of the teacher of the Progressive Classroom than under the domineering, direct and threatening behaviour of the Traditional Classroom. In reply to critics of the Progressive Classroom, who advocate that teachers should not be lax in their relationship with pupils, that teachers should "get tough", tell pupils what to do, and demand high standards, Amidon and Flanders state that overwhelming evidence from a large number of indepth studies shows that higher standards can be achieved not by telling pupils what to do in some sort of "get tough" policy but by asking questions and then using student ideas, perceptions, and reactions to build toward greater self-direction, student responsibility and understanding. They add that if, however, getting tough means helping pupils to face the consequences of their own ideas and opinions then the more indirect teachers (of the Progressive Classrooms) are much tougher.

From this evidence, it would appear that the superiority of the Progressive Classroom over the Traditional Classroom in inculcating confidence in pupils and in bringing pupils' potential and creativity into fruition, is almost, if not totally, irrefutable. The success of the Progressive Classroom in certain areas of Britain is attributable to several factors; foremost among these being the autonomy the heads of the schools are allowed by the Education Office, and the higher number of teachers

whose personalities tend to incline them towards a more permissive policy of teacher-pupil relationship.

As desirable as it may be in the minds of educationists and psychologists the Progressive Classroom is, within all probabilities, bound to take several years before it can make an effective headway in developing countries like Kenya. Apart from the obvious problems of influencing parliamentary decisions to vote more money for education, especially primary education, there are the additional problems of finding sufficient expertise with the requisite dedication. Besides, there is the notable factor that Kenyan administrators, or all of us for that matter, relish and encourage the administrative "pecking order" along which the chain of authority and promotion runs - with the junior pupil at the bottom, it runs via class monitors, school prefects, teachers through the headmaster, the District Education Officer, and up the ladder to the national Director of Education.

Nonetheless, it does not mean that the Progressive Classroom cannot be introduced in Kenya, that the mode of instruction cannot be made more democratic in order to encourage more creativity and inventiveness in the pupils. Some of us may advocate that we should leave the inauguration of the Progressive Classroom to evolutional forces, that is to say, as more and more of us become aware of the psychological stifling dealt upon pupils by the authoritative dogma of the Traditional Classroom (which exhorts pupils to sit quietly and absorb the information that the teacher feeds into them, and grades pupils' personalities

according to their obedience, subservience and submissiveness to
the teacher be he right or wrong, we shall eventually become
convinced of the value of democratising the classroom and commit
ourselves to it.This laissez-faire proposal, however, is bound to
be rejected by those teachers, parents and educationists who feel
the need for a posterity that can squarely face the problems of
a world-shrinking due to advances in the technology of communication;
those who see the need for tolerant multi-racial co-existence,
those who are concerned about the depletion of natural resources,
and those who feel bothered by the creation of power blocks. These
are pertinent problems which need urgent consideration. They are
problems of the future that the children of tomorrow will have
to face and we who can foresee these problems today should prepare
the children accordingly by encouraging resilience, creativity
and inventiveness in the classroom - lest the problems prove too
traumatic for survival. As Alvin Tofler (1970, 1974) points out
in Future Shock and Learning for Tomorrow , the element of 'the
future' and what society can do to prepare itself and adapt
itself for that future should be introduced in our classrooms.
This is with particular reference to developing countries where
appropriate decision-making can accelerate development. In the
developing countries   like Kenya   a programme of democratising
schools, with the intention of ushering in the Progressive
Classroom, can be started at two levels:

1.   At the primary school level: Teacher training colleges
      could assume the onus of preparing Progressive Classroom
      teachers who would upon graduation inaugurate the system
      in the primary schools that they are posted to.

2.   At higher levels in the school, through the efforts of
     individual teachers: Here, however, we have to realise
     that democratic cooperation planning in the classroom
     is bound to be foreign to many pupils, teachers and
     administrators. Some students will undoubtedly feel
     threatened when they are called upon to make decisions
     on account of the fact that they have always had to rely
     on the teacher to decide for them and tell them what to
     do. Similarly, some teachers will be hesitant to try a
     more permissive democratic approach in the classroom
     which robs them of their punitive authority.

Thinking along these lines of pupils' conditioned dependence

on the teacher, one can get an insight into the reason why, even

at university level, many students prefer handouts from the

lecturers to independent research and reading. Due to this

conditioned dependence over the years, the students have come to

believe that what the teacher says and gives is sufficient and

definitive. The explorative desire has been blunted. Courses

and teacher conferences (preferably during school holidays) can

be very useful in encouraging teachers to rectify this situation.

But, assuming that we have found a group of teachers who are

willing to try the methods of the Progressive Classroom within

the framework of the traditional school? The painstaking efforts

of Kohl (1968) and his 36 children, the work of A.S. Neill (1960),

Holt (1968), as well as the efforts of many others, show that it

is possible. One thing, however, that is stark clear from the

literature of individual efforts in this aspect, is that the

teacher has to regard his work as a mission, rather as a vocation

and not just a job which he has to do in exchange for a pay packet.

The following is a paraphrase of a remarkable example offered by Kemp (1961).

One day, Miss Smith was firmly told (by the head of the school) that unless her primary four class could proceed quietly through the school corridors to the swimming pool, they would have to forfeit their swimming. The announcement shook her a little, but she decided to think of some course of action.

After due consideration, she decided that commands, praise and blame would fail in this problem just as they had failed before. It dawned on her that the solution would have to come through some change in the children's thinking and behaviour.

The next day she explained the situation to her class and invited their suggestions. The children seemed amazed - unable to understand. Then one boy volunteered, "Well, you could make us behave. You're the teacher". Another one said, "You could send those who didn't behave back to the room". "You could make rules," said still another, "and send any one who didn't keep them to the principal".

Miss Smith began to realise something of the effect that years of conditioning had had on the children. Then she said, "You seem to think that this is my problem. I think it's ours".

After a long silence one child said, "Each of us could take care of himself". "I do not think so", came the swift reply from another child, "some of us may be able to but a lot of us can't". Miss Smith took over for a while from there. "It seems that some of us think that we can take care of ourselves, and others think we can't. Each of us has had different experiences in taking care of himself. Some of us know that we are strong enough

to control ourselves, but others perhaps haven't tried or have
tried and found that we weren't strong enough. Suppose each of
us considers whether he is strong enough to take care of himself
as we go to the pool? You can only answer for yourself. You
alone know how you feel about it".

After a pause she asked, "Do you think you are strong enough
to control yourselves?" Several hands went up.

"As I see it", one pupil said, "those of us who can take
care of themselves won't need watching and you can watch the
others". Miss Smith had this rejoinder: "You are making it my
problem. I think it is our problem. We'll plan together, but
it is the problem of each of us and all of us together". Silence
followed. Then one boy said, "Why can't those of us who have had
experience and know that we can take care of ourselves help
others?" "How could we do it?" Someone asked. "Each of us could
walk beside someone who wasn't sure", the first boy replied.

Everybody in the class accepted the plan. After three
months, it became clear that the class was building a reputation
for responsiveness, responsibility and excellence of ideas.

I have given this practical example in considerable detail
because it indicates the pains the dedicated teacher will go
into to improve a class. Miss Smith succeeded because she
'opened up' her class for the pupils to participate in. She
abandoned the authoritative stance of the Traditional Classroom
of punishing whoever does not obey the teacher, and brought
herself to the level of the children. The children in turn

accepted the problem as communal and the solution as a collective responsibility. By the same token, the teacher who genuinely convinces the pupils that learning in the classroom and elsewhere is a personal as well as a collective responsibility is bound to get better results from the pupils' intrinsic contributions than the teacher who considers that for the children to learn, he has to push the subject down their throats authoritatively.

In other words, there is the vital need for the teachers to learn that 'opening up' a class to include democratic planning is more than knowing praise and blame to be techniques of motivation It is a way of life. Concomitantly, we have to learn that the democrative Progressive class cannot be created by decree and orders from the headquarters of the Ministry of Education. The school executive who is genuinely interested in the kind of class where the pupils' ideas and emotions are accepted and encouraged should have patience, understanding, as well as be inclined to avoid punitive action.

As Kemp (1961) explains: the rewards for him and his pupils are well worth the efforts involved for in classes where the climate is 'open' and democratic, children grow in critical thinking, self-control, and in sense of responsibility and the teachers become more understanding, less defensive and more relaxed. support for this kind of class also comes from Wolfson and Nash (1965), who explain that although we cannot predict the decisions that the pupils will face, we can provide a classroom atmosphere that encourages pupil participation, values the

individual, leads towards openness to experience, and encourages responsible decision-making.

Scarangello (1965) takes Wolfson and Nash further, and concludes by stressing the need to find the kind of teacher who is able to run a Progressive class effectively in order to stimulate the child to develop a critical but constructive outlook.

Indeed it is gratifying, for those in Kenya, who have an inclination towards the Progressive Classroom to notice that recommendations 4, 5, and 8, of the National Committee on Educational Objectives and Policies (1976) call for the introduction of teaching methods advocated by the adherents of the Progressive Classroom. In particular, the three recommendations suggest that general education should give emphasis to adaptability; secondly, that formal educational institutions should give increasing emphasis on the problem-solving teaching methods that have a bearing on the real life situation of the Kenyan environment; and thirdly, that education should aim at instilling in the students, positive attitudes towards cooperative efforts and mutual responsibility by encouraging the project approach to primary teaching in Kenya.

The Progressive Classroom is calling for a change of attitude towards education in that it emphasises the need to treat each pupil as an individual and to look for ways in which the diverse explorative and inventive talents of the different pupils can be brought into fruition. The Progressive Classroom, according to the evidence we have adduced so far, is less likely than the

Traditional Classroom to make a pupil who constantly scores low marks on academic tests feel that he is totally worthless, in that it will emphasise other areas of learning in which he has competence.

The report of "The National Committee on Educational Objectives and Policies" also complains that the formal education system, as we know it today in this country, has been seen by the pupil and the public as the best access route to the advancement of the individual, society and economy. The report further suggests that the present formal educational system is biased in that it is aimed at the production of a few individuals who are well equipped for placement in the formal sector of the economy without taking into account the changing social and economic realities of the country. The Progressive Classroom, insofar as it aims at the encouragement of adaptability and the development of talents of invention and exploration hitherto untapped by the Traditonal Classroom, seems to be one of the best ways through which we can begin solving these problems.

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