

(A) OBSERVATIONS :

The following findings give an interesting reading:-

1. There is no significant difference in boys and girls on classroom climate score.
2. The mean score of classroom climate is 133.
3. There is no significant difference between boys and girls on the JIM Score.
4. It is interesting to note that the English Medium students academic motivation is 97.87 compared to Gujarati Medium students which is significantly higher.
5. The English medium students show higher origin scores 82.77 then Gujarati medium students score (78.66).
6. The mean score of high level schools on the component of productivity 45.49 is significantly higher than the low level schools (42.24). Whereas in other components there is no significant difference.

The academic motivation, of the high level schools (98.32) is significantly higher then the low level schools (93.71).

7. The high level schools are higher on
 - (a) Internal Control.
 - (b) Goal Setting

- (c) Instructional activity
 - (d) Reality Perception
 - (e) Self confidence.
8. All the components of JIM are correlated highly with classroom climate components.
 9. All the components of classroom climate are highly correlated with the components of origin climate except the component of goal supposition in origin Pawn tool.
 10. The profiles of a classroom is given.

It can be concluded that pupils of higher standard performed better than pupils of lower standard in both Academic and Non-Academic Achievements.

The Graph No. 9 showed the mean scores of all variables according to sex, management, medium and standard.

Classroom Profiles (Climatograph)

A comparative study of classroom climate and its components; and the various factors affecting the climate of the class can be shown by means of a graphical representation of the mean scores of the variables in the present study through classroom profiles.

Each of the variables of the study, namely, Pupils' Motivation, Academic and Non-Academic Achievements have been analysed in relation to classroom climate of all the classes. When a study of an individual calssroom is done the mean scores of these variables that are obtained could be depicted graphically as done in Graph No.10 (A), (B), (C), (D) which reveals interesting picture of climate prevailing in four classrooms. The average mean scores of all the variables are also plotted with each classroom profile. Class A- the mean scores of classroom climate, Authenticity, Legitimacy, Productivity, Academic Motivation, Academic Achievement are not only higher than other classrooms B, C, D, but are also higher than the average mean scores of 41 classes for all variables. A question arises here: why is the climate score of Class B lower ? Can anything be wrong with the management or teachers or pupils or medium of instruction of that classroom ?

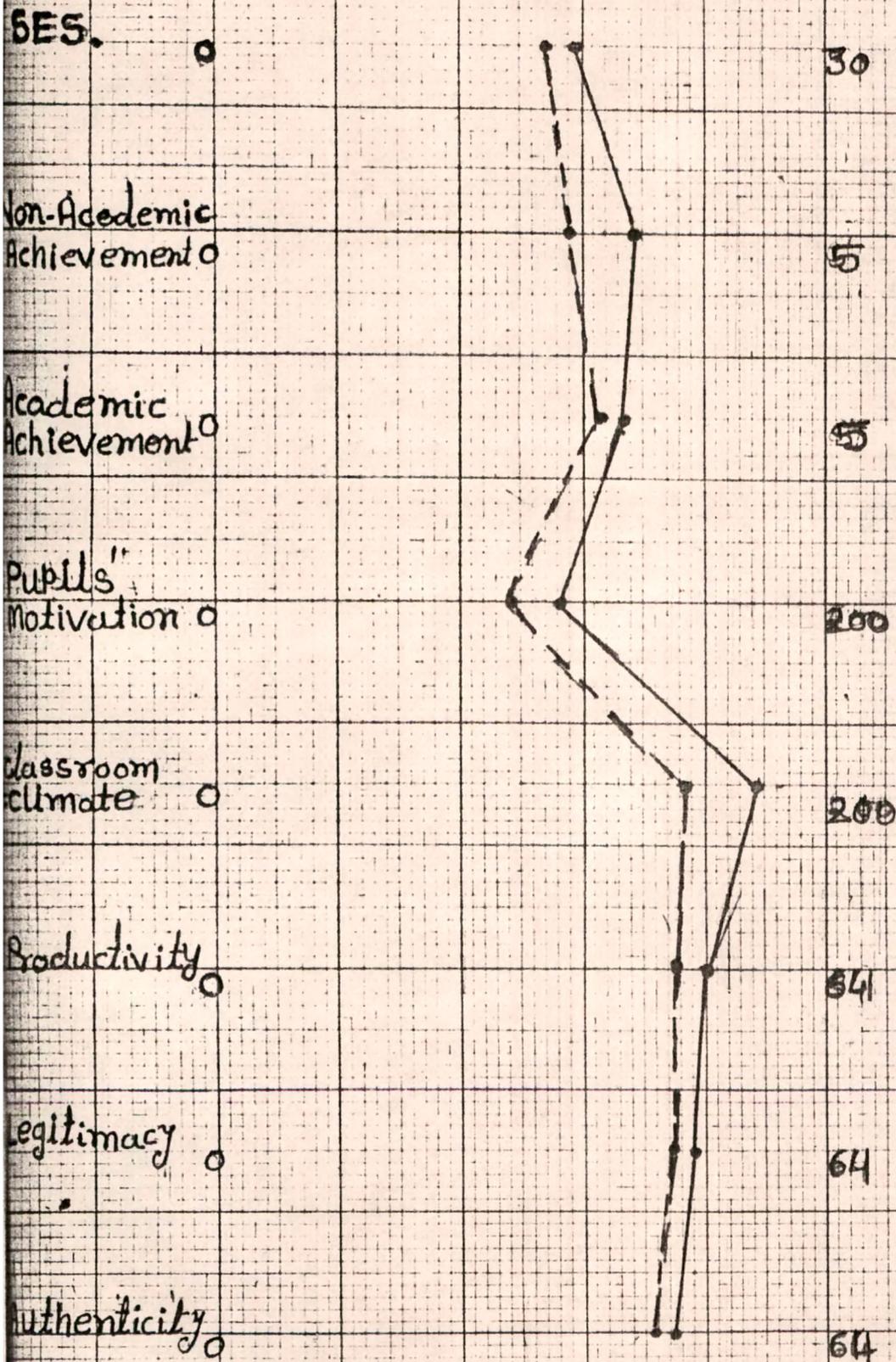
The pupils of classroom A have higher classroom climate score and high Academic Motivation. The Teachers of this classroom have definitely made the pupils feel alive, challenged and involved in the activities which shows that the students are satisfied with the learning activities in the class.

Classroom Profile - class
[climatograph.]

No. 10

AA

237a.

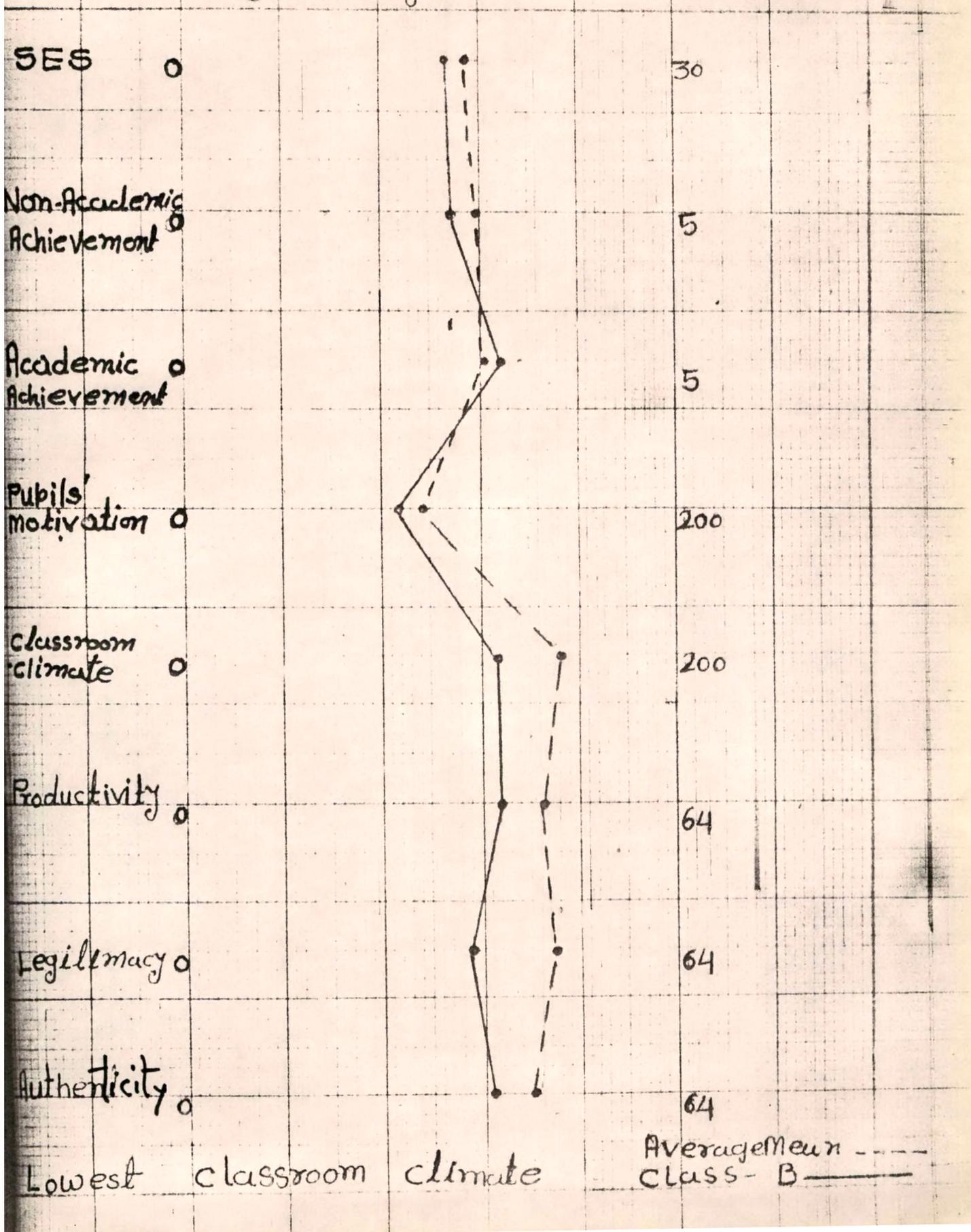


Highest classroom climate
and highest pupils' motivation.

Average Mean
class A

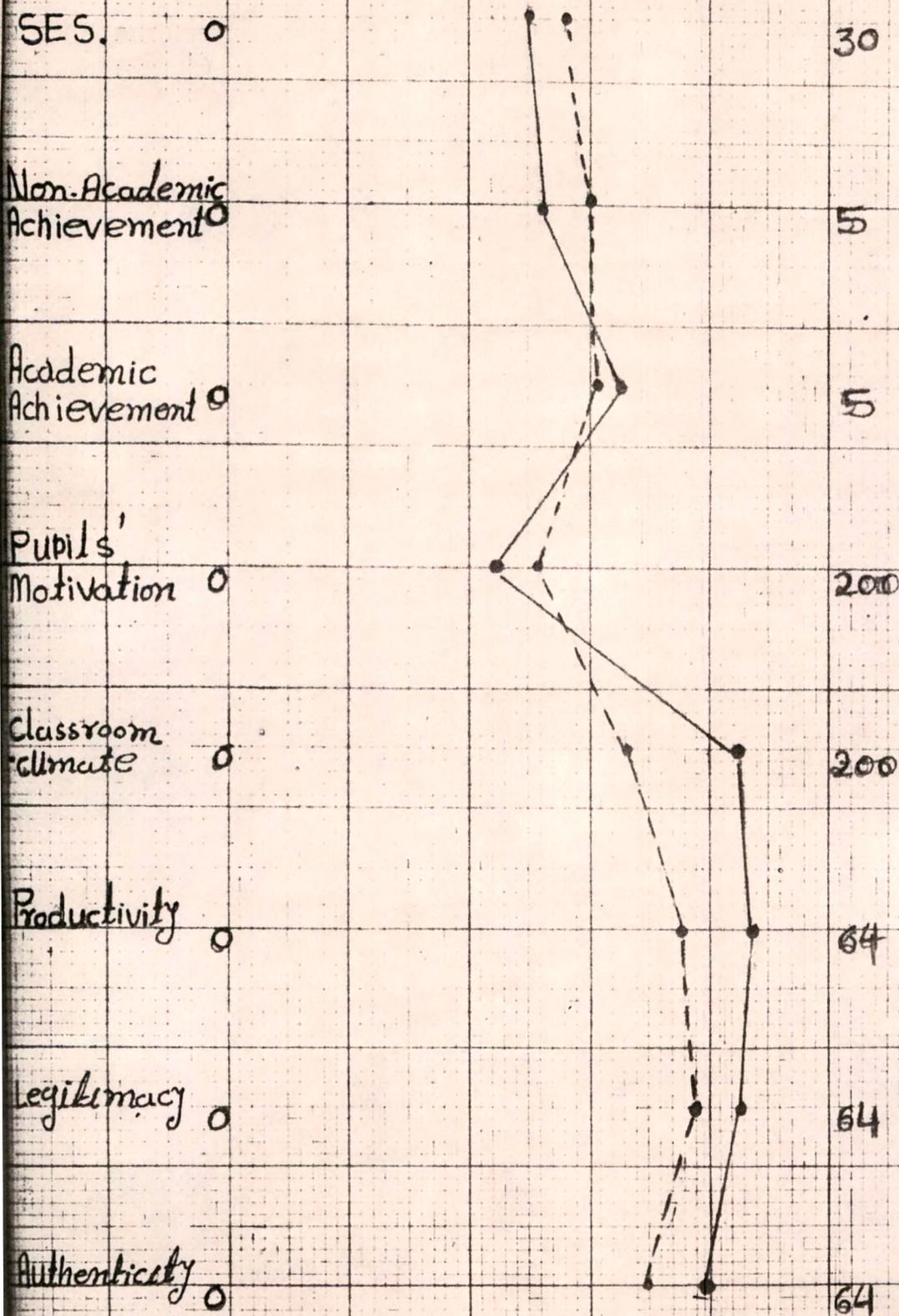
Classroom Profile - Class-B, No.10 (climatograph.)

237(b)



Classroom Profile - Class-C No.10 (climatograph)

no 23700

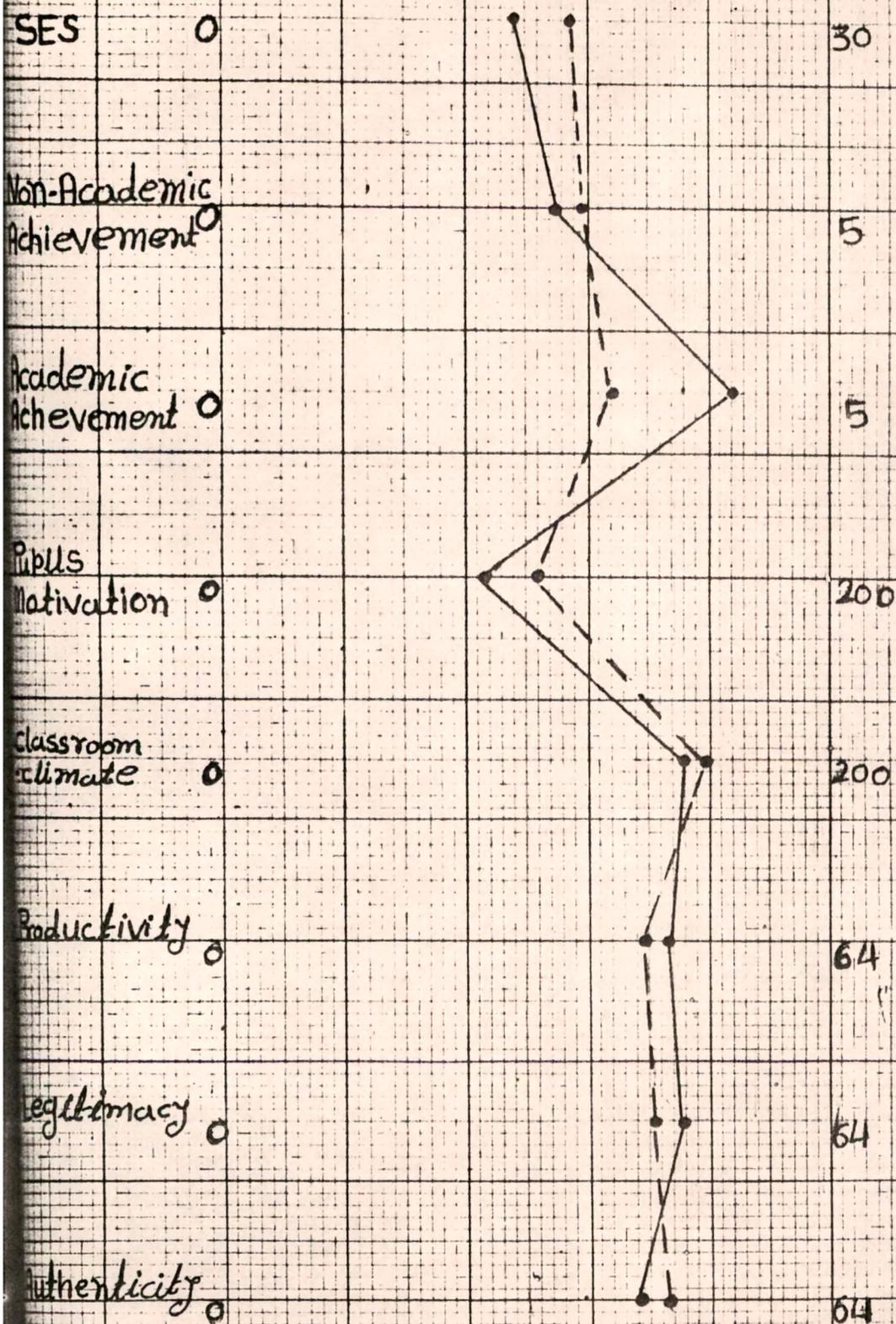


lowest Pupils' motivation

Average mean
class c

Classroom Profile - class. D. ^{NO. 10} (climatology)

237(d)



Highest Academic Achievement Average Mean
class D

Class B- The mean scores of all the variables of B classroom are lower than the average score of all the variables. Why is it so ? What can be done to raise the level of all variables in this class ? This profile leaves these questions to be answered.

Class C- It represents a classroom with low pupils' Academic Motivation level. In this class, classroom climate score and its Authenticity, Legitimacy and Productivity levels is higher than average mean scores of the A,L,P and classroom climate scores are very near to average scores. Its Pupils' Motivation level is lower than the average mean score. What can be done ?

In this way, classroom profiles are very useful for diagnostic and remedial purpose for each school.

Discussion of results of the above findings lead to the following observations that classroom climate is highly conceptually related.

DISCUSSION OF RESULTS :

It would be worthwhile to discuss a few issues arising out of the results of this study. Such issues need a thorough discussion, e.g., questions have been raised by many as regards the relationship of classroom climate and pupils' academic motivation. Moreover,

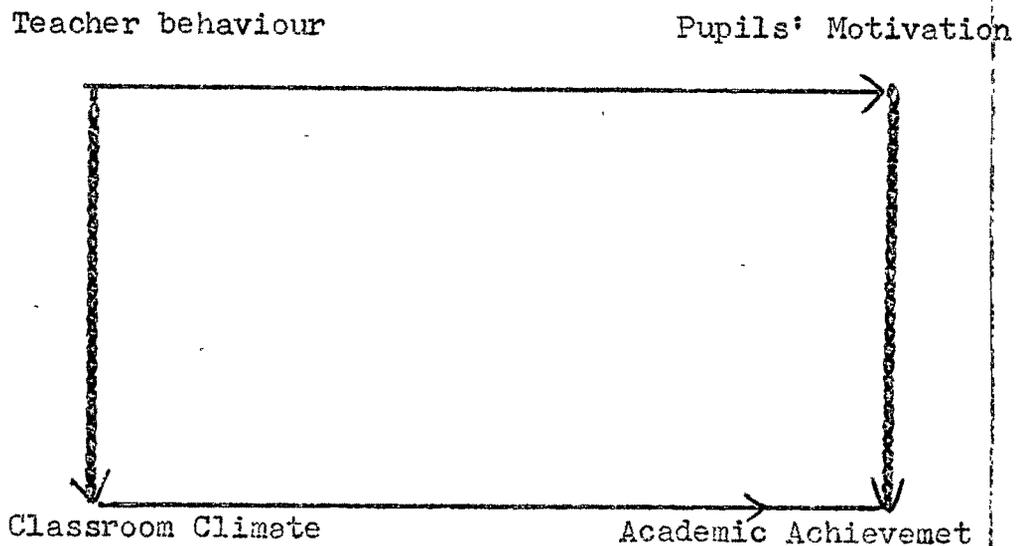
there are contradictory research findings about some components.

Motivation is the first requisite for learning. The teachers first task is to motivate children to do good work, find interest and enjoyment in their activities and take pride in their accomplishments. But motivating students is not an easy task. The teacher is a counsellor and not a mere teacher of languages or science. He must be deeply concerned about the students.

The present study reveals that classroom climate is positively related to pupils' Motivation. This means that the pupils who are highly academically motivated got high score on classroom climate. Conceptually also, academic motivation is the cause and classroom climate is the effect. If pupils are motivated towards academic study they will generate conducive classroom climate. It is also true that classroom climate may effect academic motivation of the pupils. The prime factor is teacher behaviour in the calssroom which affects pupils' Motivation and which generat~~e~~s classroom climate. The further study should find out the predictive value of interaction affect of pupils' Motivation and classroom climate.

The mean score of pupils' academic motivation in Frymier study is 120 whereas in Gujarat, it moves between 86 to 98 which is much less.

It is observed from the study that Authenticity, Legitimacy and Productivity show internal relationship at a significant level. Moreover, each component of climate Authenticity, Legitimacy and Productivity show positive relation with Pupils' Motivation at a significant level. It means the classroom climate and A or L or P as separate component has a positive relation with pupils' academic motivation. If the motivation is high then pupils show greater achievement in study. The sequence can be conceptualized like this.



As regards the flow of A,L,P, it seems if Legitimacy is high, Authenticity is also high, if Productivity is high, Authenticity is also high. This positive relationship shows that there are common components in A,L,P or if one component (A or L or P) is affected positively then the other components have a tendency to get positive effect. This throws a further hypothesis for future research to construct a tool to measure each component separately and to experiment to produce high Authenticity in a classroom to study the effects on Legitimacy and Productivity.

In the present study, boys score higher in classroom climate, pupils' motivation and academic achievement than girls. This may be due to social conditions of girls who have to work at home and whose education is viewed as of secondary importance. A further study could find the real causes of this stu

The pupils of Gujarati medium schools show high score in all variables than the pupils of English medium schools. This findings break the myth that English medium schools are always superior. Sending children to English medium schools have become a fashion or a fad in the present complex society. Many parents are not able to provide good and healthy environment to communicate fluently in English. Some of the parents

are also not able to guide and even help their children so it becomes difficult for the children to adjust themselves in the class. They are always in tension during the class hours. Some students always try to escape from the situation in which they have to communicate in English. They are not able to express their views well in English. So they find themselves aloof from the interaction process going in the class.

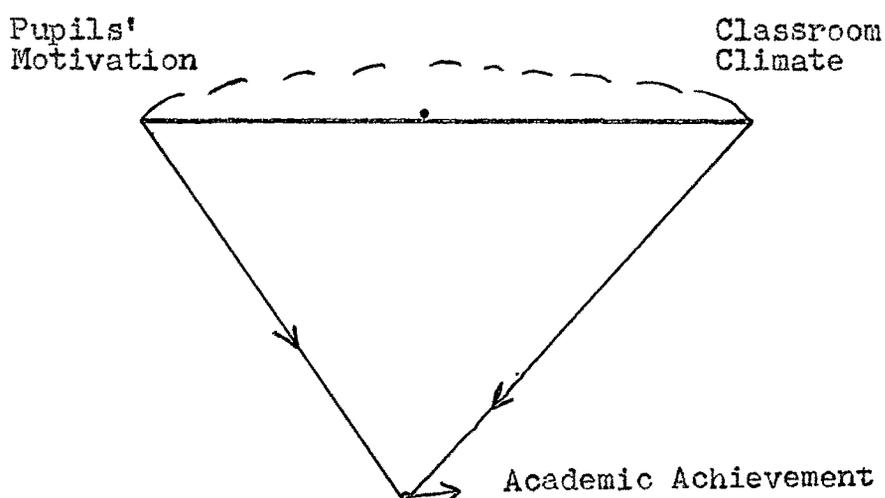
The aim of this study is to find out the relationship of Non-Academic Achievement with achievement motivation and classroom climate. It is observed that academic motivation has no significant relation with Non-Academic Achievement. But those students who are having high score on Non-Academic Achievement show higher score of classroom climate whereas average group of Non-Academic Achievement have average score of classroom climate which is at a significant level.

One of the reasons could be that pupils tend to have greater interaction in Non-Academic Activities and therefore they obtained high classroom climate score.

It seems that Non-Academic Achievement has no definite predictable relationship with Authenticity or Legitimacy or Productivity.

The ultimate concern of the society is towards academic achievement. The present study reveals that

pupils academic motivation has positive relation with their academic achievement and classroom climate has also positive relation with their academic achievement. The relationship can be depicted in a diagram as follows :



If pupils' academic motivation can be developed then the classroom climate score will be high which will lead to higher academic achievement of pupils.

The present researcher thinks of one hypothesis for further study. The teacher behaviour affects pupils' academic motivation, classroom climate and academic achievement. An attempt should be made to study this phenomenon.

The classroom profiles (Climatograph) in the present study, will help the school to study each classroom in details, to diagnose the defects and to remedy the situation.

There are other variables also which represent pupils' development (such as anxiety, classroom trust, classroom adjustment, classroom independency also). A further investigation can be done on the effect of classroom climate on pupils' psychic world.

The present study reveals that pupils' academic achievement could be improved if more supportive classroom climate can be generated and if pupils' academic motivation is high.

(B) EDUCATIONAL IMPLICATIONS AND SUGGESTIONS :

The present study gives some observations and findings which require to be studied from the point of view of their educational implications.

(a) Classification of Pupils-

The schools must adopt some definite criteria for class formation. The classes should be formed on the basis of some definite criteria, preferably pupils' academic motivation. Herbert Thelen (Teachability Grouping) has after his research studies clearly emphasized this point. The classes may be formed on the basis of high, average and low academic motivation level of the pupils. This classification is not water tight. In other words, low JIM pupil does not remain low for ever. They could be admitted to other classes after they score

more on motivation. Moreover, challenging programmes should be given to high group and moderate programmes could be given to average group, whereas slow programmes could be given to low group. In other words, such a classification will facilitate the teachers to give task to each pupil according to his ability.

(b) School Testing Programmes:-

Since the dawn of freedom, education is being considered as a social enterprise. The concept of education for life and education through life has been accepted by all. This calls for the development of cognitive affective and also constive aspects of the personality of the pupils through wide and varied types of learning activities and intermitant evaluation programmes, depending upon the demands of the individual pupil and society. This is the main reason why educational administrators of today have given a serious thought to vitalize school programme in more than one way.

Testing programme in schools has its unique importance which cannot be neglected, as many other programmes of school depend upon it. The traditional testing programme, existing today in our schools is losing ground, because it lays stress only on the cognitive aspects of the pupils in various school subjects. The main reason put forward for ...246...

this, is the lack of tools to measure objectively, different aspects of this domain.

The present study opens up a new directions for measurement. It proves that the level of classroom climate and the level of its components: Authenticity, Legitimacy and Productivity level of pupils' academic motivation of the pupils could be measured objectively and quantitatively.

Schools should now include the measurement of all these aspects in their testing programme. Mere performance in the subject matter cannot be the whole purpose of education. Such measurement will lead to the diagnosis of the situation and it will help the administrators to remedy the situation.

(c) Classroom Teaching :-

Classroom teaching is the pivotal programme of the educational institutions. Life in classroom is the product of interaction between the teacher and the taught. Flanders, Buch, Prayag Mehta, Desai and many other researchers have proved that pupils' personality is affected to a greater extent by the teachers' behaviour in the classroom. Through the process of interaction, the young child acquires many necessary social skills and attitudes within the classroom.

The teacher is the director of all the actions and the object of all attention. The tone of the class reflects the kind of the behaviour the teacher exhibits in the classroom.

The present study suggests that the teaching in the classroom and the image of the teacher require to be changed.

In the present day of democracy the teacher should be a friend, philosopher and guide to the pupils. The teacher should first "reach" his pupils and then should try to 'teach' them.

The classroom atmosphere varies from day to day. Different climates can be seen within the same class with different teachers. Often we see the class gets ready for the lesson eagerly, begins working without much loss of time, if the teacher is accepted as one in the group. If they do not like the teacher, pupils work jointly to kill the time and prolong work, and disturb the atmosphere. Climate of the class has a deep impact on the pupils' growth. When a learning climate is there in the class, the pupils are really "growing". All classes within a learning climate will not have uniform influences on pupils, as in each class, pupils are of varied interests and abilities. Also in each class a parti-

cular factors (Authenticity, Legitimacy and Productivity) gain more emphasis than others.

(d) Activities in the Classroom:-

In this era of education the function of the teacher is of vital importance. No-days, education does not mean, teaching pupils what they do not know it means teaching them to change in the right direction, and so, the teacher has to understand his newer role in the classroom. He is the real leader in the classroom and he is expected to lead his pupils in the right direction- the direction of progress. Successful dealing with the class requires efficient use of different activities.

The present study reveals that there are classes with different level of Authenticity, Legitimacy and Productivity, and pupils with positive motivation towards study and negative motivation towards study. All these pupils cannot be treated with the same type of activities. It is very likely that what may be useful to one; may not be helpful to the other and would not give good results. Therefore, there should be effective programme for the pupils in the classroom.

Moreover, the approach of the pupils towards different activities would differ according to their need, hence, pupils' placement in various test such as classroom climate scale, pupils' academic motivation scale should be determining criteria for the selection of the types of activities for the pupils.

(e) Socially Useful Productive Work :-

In the classroom climate scale we find three components of classroom climate- (1) Authenticity-concern for the work, involvement of the pupils in the work, (2) Legitimacy-purposefulness and satisfaction of the pupils for the work, (3) Productivity-pupil goal attainment. While every class contains these components it may exhibit these three in varying proportions.

The report of the Review committee of the Curriculum of Ten year School strongly recommended socially useful productive work and social services in the school curriculum. Two aspects of this recommendation- (1) socially useful productive work is given the status of a special subject, and (2) there should not be "education plus work" but "education in and through work". Wherever the teaching of a subject can be coordinated with any production work, one should attempt it.250.....

After all, "close coordination of senses and also the reciprocal influence between brain activity" is a sound pedagogical principle for the present times.

The present society is getting so complex that vocation and education cannot be separated for. In fact, productive processes will provide the learners real experiences of life. The practical and productive work will help the students in discovering the meaning for themselves. The only danger to be safeguarded under the introduction of socially useful productive work is that education is remain general upto the secondary educational state and not vocational. So the question is of making the present education work-oriented.

Socially Useful Productive Work (SUPW) has been defined by Review Committee as "Purposive, meaningful, manual work, resulting in either goods or services which are useful to the community". It has also the object of relating education to productivity. The goals of education are: (1) making the child self-reliant, (2) teaching him to work in team (co-operation), (3) developing the spirit of inquiry and initiative.

There are school-based activities given by Review Committee on the curriculum. They are based on developing certain skills in the individual. ...251....

The skill that the child acquires can be for his individual benefit, betterment, development, or recreational at that juncture.

The merit of education through work is that it follows the natural instincts of man to translate thought into activity and activity into thought. This, therefore, suggests that classroom activities should be authentic, legitimate and productive. These types of activities help to create favourable classroom climate.

(f) Some School Problems :-

The school organizers need not be satisfied by arranging time-tables taking tests, declaring results and beginning another academic year. They must also try to study the students.

1. Who are high on pupils' Motivation but low in performance ?
2. Who are low on pupils' Motivation but high in performance ?

At present, are not our talents wasted in our classrooms and school system resulting in disappointment and frustration and culminating in the various manifestations of students' unrest like strikes, gheraos and stoning ? It is because the students' talents are

not located. Also because, the students do not get a fair opportunity to manifest and develop the talents. This, therefore, leads us to conclude that the classroom management must be participated.

SUGGESTIONS FOR FURTHER RESEARCH :-

Classroom climate is a vast field and a great source of inspiration for many researchers, and they can secure precious things for education and especially for future generation. The investigator feels that a number of researches can be undertaken with classroom ethos and its components, as the basis. Every aspect of classroom ethos that has been dealt with, in the present study, can become a topic for an elaborate work. The following are some suggested studies :

1. The classroom climate level of pupils has been found to be average in the present study. One can take up a study to find out the proportion of other factors that affect classroom ethos such as physical facility, subjects taught, activities of the classroom etc.
2. The pupils' academic motivation level is found to be related with classroom climate. A study can be taken up to see which compo-

nents of pupils' motivation lead to high classroom climate score and which components of JIM score lead to low classroom climate.

3. The SES level is found not related with classroom ethos and pupils' motivation. A study can be taken up to see which factors of the SES background lead to high classroom climate and high pupils' academic motivation and which factors of SES background lead to low classroom climate and low pupils' academic motivation.
4. It is found that girls and boys have different classroom climate level and pupils' motivation level. This inspires one to peep into the child rearing practices prevailing in the society. A study can be taken up separately for girls and boys to decide the factors affecting the level of classroom climate and level of pupils' academic motivation.
5. A study similar to the present one can be taken up, separately, for the pupils of grades VIII, IX and X in different districts at various schools stage.

6. Various scales for classroom climate and pupils' motivation towards schools could be planned and tried out on students for various levels—primary school students, secondary school students, and higher secondary school students, second
7. A study can be taken up to see the relationship between teacher dominance and the level of classroom climate .
8. Teacher dominance in the classroom can be studied in relation to pupils' academic motivation.
9. A study can be taken up to find out the relationship between classroom climate and value systems of pupils.
10. A few classroom experiments can be taken up to study the effect of teachers' verbal behaviour in the classroom on the classroom climate as such.
11. Many small scale controlled classroom experiments can be taken up to study the effect of verbal incentives, non-verbal discussion, etc. on the pupils' motivation level, on the classroom climate level, pupils' academic achievement level,

pupils' academic achievement level, etc.

12. Pupils of grade VII can be studied continuously for four years in relation to their level of pupils' academic motivation and to their level of classroom climate.
13. A study can be taken to find out how socially useful productive work helps in creating high classroom climate and high pupils' academic motivation. As the report of the Review Committee on the C Curriculum of Ten Year Schools strongly recommended socially useful productive work in schools, it is necessary for the researchers to find out the relationship of socially useful productive work and pupils' academic motivation and classroom climate at all the stages of primary school students, secondary school students, higher secondary school students, etc.

These are just illustrations and not the detailed outlines of the studies. One is free to reconstruct the problem or to design the research according to the requirement and one's own view point.

CONCLUSIONS :

The study leads us to the following conclusion. Classroom climate is an important phenomenon. It has positive relation with academic motivation and academic performance. Classroom climate components (A, L, P,) needs further investigation, modern times suggest that we have to pay attention to the classroom climate for shaping the destiny of the country.

Howsoever much we teach the content will not reach if it is given in a closed types of classroom climate. Therefore, classroom climate should be taken care of through proper teacher behaviour. Pupil motivation is affected by classroom climate. Pupil motivation is an important phenomenon affecting learning. The study tells us that classroom climate is a field that require greater exploration through research and experimentation.

X-X-X-X-X-X-X-X