CHAPTER IX

SUMMARY AND CONCLUSIONS
The main thrust of the thesis has been to examine the contribution of higher educational institutions in balancing the twin requirements of equality and excellence. Specifically, the focus has been on student perceptions and on the actual policies, programmes and strategies of two institutions of engineering and technology, located in Madras, to pursue equality and institutional excellence. Studies on the issues of equality and excellence in different cultural contexts may throw some light on the present study. Initial attempts to look at equality and excellence in education were made by Gardner (1966) who discusses the issue of excellence, and, at the same time, whether it is possible for American society to be equal. Gardner brings to the fore the strengths and weaknesses of the American educational system and is mainly concerned with the social context in which excellence may survive or be smothered. According to Gardner, if a society cannot rise to the pursuit of excellence, the consequences will be felt in everything it undertakes.

Fetterman (1988) proposed a qualitatively different perspective on excellence and equality in U.S.A. in terms of the gifted and talented children. Some of the observations of this study are that excellence and equal educational opportunities need not be mutually exclusive goals. Moreover, the peer reinforcement and teacher-student relationships are instrumental in promoting high standards and quality. Valverde (1988b) examines the element of producing a positive climate conducive to learning in minority populated schools and outlines what the principals can do to establish a school environment that incorporates a true multi-cultural atmosphere: a multi-cultural climate that reflects student body and their communities. According to Valverde, if the culture of the school is different from the culture of the home, the student begins to make judgements about the worthiness of both. If schools were accepted, then family culture became an embarrassment. This forced choice in very difficult situations for a considerable number of weaker section students makes them live in two different worlds and creates self-doubt and low self-esteem.

Guri (1986) examined the underlying philosophy of Everyman's Open University, Israel, in the light of equality-quality relationships, as they are reflected in (i) admission policy, (ii) design and development of study materials, (iii) the teaching and learning
system. According to Guri, the case of Everyman's University (EU) portrays the possibility of combining two dialectical equality and excellence values at a university level institution. The free access policy and the flexible instructional system open up the gates of higher education for many who, for a variety of reasons, have no ready access to traditional universities, and/or prefer to study in a distance teaching system. The study system in EU combines both the values of equality and quality. Its flexibility addresses the heterogeneous needs and characteristics of the study population providing many means of assistance. But, at the same time, the students are required to prove themselves of high learning standards.

Seneca and Taussing (1987) carried out a study examining the goals of access and quality at State universities of U.S.A. They attempted to set out why these goals may conflict and discussed the policy variables available to university officials that affect access and educational quality. Access was defined on the basis of student family incomes relative to the low-income threshold for the state. The researchers found that access is negatively affected both by the tuition level and by the educational quality of the university and positively affected by the financial aid. It was also found that, in another model, the educational quality of the university is negatively affected by the measures of access. Thus, some of the issues these studies have addressed are also addressed by the present study.

The present study describes the social background of students in order to understand any disabling or enabling factors of home background or social class in gaining access to IIT and CEG. It also portrays the academic profile of the students to reflect on the nature of institutional selectivity. It examined the perceptions of students on various dimensions of institutional excellence and teacher excellence as well as on the measures of equality and equal treatment. Finally, the study tries to put the perceptions of students on equality and excellence in a context which throws light on the attempts of institutions to achieve equality and excellence.

**INSTITUTIONAL PROFILE**

Indian Institute of Technology (IIT)-Madras is one of the six new generation institutes of national importance in higher technical education under the control of the
Central Government. On the other hand, College of Engineering, Guindy (CEG) is a state level college of reputation under the Government of Tamil Nadu and considered as one of the important second rung institutions in engineering and technology education in the country, next only to IITs and IISc. Both IIT and CEG follow the semester system and offer eight-semester under-graduate, three semester post-graduate and doctoral courses in several disciplines and specialisations of engineering and technology. The establishment of these institutions at the national and state levels had a special purpose, i.e., to shape them as institutions with special focus and a pre-eminent role in the development of quality higher technical education. Therefore, both IIT and CEG represent a major initiative and political will to achieve excellence in engineering and technology in India.

The first and foremost strategy to achieve excellence in these institutions is their admission policy. IIT admits students purely on the basis of the all India Joint Entrance Examination (JEE). Even the best institutions abroad treat JEE as a fool proof system with high standards of academic excellence. The strength of this system is that only three percent of the total applicants would be selected for admission. For promoting equality, however, the weaker section students have been prescribed a cut-off level of marks which is approximately two-thirds of the cut-off value of marks prescribed for general category students. The reservation of seats is 22.5 percent as per the national policy.

In CEG, the admission is on the basis of a combined merit in the academic performance at the school leaving examination (APSLE) and the score in the Tamil Nadu Professional Colleges Entrance Examination (TNPCEE), in the ratio 2:1. However, in CEG, the admission policy provides for 69 percent of reservations for various castes which are treated as the socially disadvantaged groups irrespective of their levels of performance in the APSLE or TNPCEE. This is as per the regional policy of reservations.

IIT, over the years, built institutional mechanisms to monitor the academic progress of students at the classroom and departmental levels through the systems of Faculty Adviser and Class Committee respectively. It places emphasis on attendance and takes action against the defaulters. The systems of assessment in IIT are flexible as well
as rigid. Flexibility is allowed in so far as providing options for different types of evaluation and it is rigid in the sense that those who do not perform well are served with notices. If a student cannot make up the required grade points even after giving three notices, he/she may be removed from the rolls of the institute. If a student has problems in grasping the subject, IIT arranges special remedial or contact classes and also summer term programme. The Counselling Unit of IIT takes care of both general as well as academic problems, if any, of the students.

CEG, on the other hand, do not have any arrangement matching the Faculty Adviser and Class Committee systems of IIT, to monitor the student progress. The assessment of student performance is only through periodical tests. Other forms of assessment such as term papers and seminars which engage students in a discussion and dialogue are not practiced in CEG. However, the system in CEG allows enough flexibility in the choice of courses. It also enables, though limitedly, the faculty to update the course contents and trends in different branches. CEG also offers the remedial/extra classes and summer term programme in selective departments. There is no arrangement, however, to provide counselling to students for their academic as well as general problems.

While IIT has a well equipped laboratory infrastructure to provide practical training in diverse areas, CEG has limited facilities which are not as specialised and modern as those in IIT. The workshop facilities in IIT resemble the actual shop-floor of the industry and are modelled on the lines of German pattern. Though CEG also had an MOU with Germany in order to modernise its laboratories and workshops, it did not take off for long and hence the practical training facilities are still largely obsolete and out-dated. Library book and journal collection in IIT is also huge as compared to that of CEG.

Further, more than 90 percent of teachers in IIT have doctoral degrees and most of them have obtained these degrees from foreign universities or institutions or have received them from IITs or IISc. In CEG, on the other hand, less than 50 percent of the teachers have doctoral degrees and most of them are from the State/University level institutions or from the IITs. Only a few have completed their Ph.Ds from abroad. Even in terms of their professional skills, number of publications, number of foreign
visits and training, etc. IIT teachers are rated at the top in India and are comparable to other reputed institutions abroad.

However, the academic output of students in both IIT and CEG is of the same order. For instance, about 90-95 percent of the students pass out successfully from both the institutes every year. While 60-70 percent of the successful IIT graduates are placed in jobs on completion of the course, only 50-60 percent of the CEG graduates are selected for various jobs. However, the percentage of those selected from branches like civil, mining, production and industrial engineering is found to be less than 40 percent or sometimes even less than 10 percent.

Reservations in admissions form the core of the institutional strategies to promote equality in both IIT and CEG. CEG has the highest percentage (69 percent) of reservations in admissions even in the whole of the country. Besides this, the weaker section students who could make it in the open competition are offered seats in the general category. Thus, the actual proportion of reserved caste students is too high in CEG. On the other hand, though IIT provides 22.5 percent of reservations to SC/ST students, the actual number of students admitted from these categories is too small, because minimum marks are prescribed in JEE beyond which IIT do not admit students. As a result, at present, only around 6 percent of reserved category seats are filled up leaving many unfilled. However, IIT takes many measures to retain and support the reserved caste students as compared to CEG. Remedial classes, summer term classes and financial supports are three other important institutional strategies to bring the scheduled caste/tribe students to the level of general students in terms of their academic achievement.

STUDENT PROFILE

So far as the social background of the students is concerned, their parental educational levels, occupational patterns and monthly family income indicate that IIT is more exclusive. It is accessible to social groups occupying the relatively higher and middle positions in the stratification system. Further, judged by the national per capita income of all the students, except a few, come from families which have a per capita income much higher than the national average of Rs.2,250 in 1993-94 (based on 1980-81
prices) and this reinforces the finding that higher technical institutions are socially selective.

Further, the socio-economic status of more students in IIT is higher as compared to those in CEG. A majority of students in CEG are from families with medium socio-economic status. Again, more students with lower socio-economic status are in CEG than in IIT. The socio-economic status in terms of caste also supports the view that the distribution of educational opportunities has been unequal among the socially advantaged and disadvantaged groups.

The correlational analysis of the indicators of social background of the students reveals an inter-play of more than one factor. It shows that the education of students is influenced by a multiplicity of social background factors acting independently and also together in the access and retention of the students in the prestigious professional courses in the best institutions of the country.

Thus, IITs are engaged in producing what may be called a class of 'potential elite', and that this elite itself is being recruited from the highest strata of the society. Therefore, IITs seem to make a limited contribution to social mobility (Rajagopalan and Singh, 1968). Further, that the educational system is closely fitted with the process of status retention whereby upper strata have been able to retain control over occupations carrying the greatest rewards and esteem (Jayaram, 1977). Thus, the process of producing the potential elite of the institutions of higher professional education has hardly changed over the years. Had it not been for the policy of reservations, the students from weaker sections would not have even made it to these institutions, especially to IITs. It may also be noted that even after a decade of their establishment, IITs did not have even a single student from SC/ST categories (King, 1970). However, the policy of reservations was being implemented since 1973 in the IITs, as a result of which at least a few are able to study in these institutions.

So far as the academic profile of the students is concerned, these institutions are also highly selective in choosing students. Moreover, the urbanisation of students from one level of education to another increases or that the students migrate to towns and cities for high school and intermediate education. This mobility is mainly because of the availability of facilities in cities and towns for the preparation to the entrance
examinations. It is also noted that the number of attempts to qualify the entrance examinations is one of the important aspects to describe the intense competition and immense desire to secure a seat in these elite institutions. The preparatory coaching thus becomes an essential prerequisite to write the entrance examinations. For instance, two-thirds of the respondents have undertaken preparatory coaching, a majority of them are from IIT as compared to CEG. This is not only because IIT is more prestigious and the economic returns from its degree are higher. It is also because IIT does not give any weightage to school leaving examination. As mentioned earlier, in CEG, the marks in the school leaving examination is given more weightage.

The academic performance at the examination last attended prior to joining B.Tech course indicates that a majority of the students had very high percentages, even more than 85 percent. Those who have secured below 60 percent of marks are negligible (3.5 percent). Therefore, division of academic performance of students in their school leaving examination into high, medium and low in the context of IIT and CEG may be seen in a relative sense. It is also noted that even the slightest differences found in the academic performances of students in different branches of study reveals that the school leaving examination has only a limited or no influence in their placement in the most sought after or not so sought after branches of study. However, the academic performance of a study is influenced by the level of parental education. For instance, a majority of those who had high academic performance also had high parental educational level and this is particularly true in the case of IIT.

Engineering was the first choice for almost all the students, except for a few who wanted to join medicine instead. The institution in which they are currently studying was the first choice for a large proportion of students. Those who stated it was not their first choice preferred other IITs or IIT system in general. Again, the order of preferences of branches are found to be computer science, electrical and electronics, electronics and communications, chemical engineering, etc. These branches are the most sought after due to their demand in the Indian and international job market. Except computer science, all other branches have been the most sought after even in the sixties and seventies. However, with the onset of computer science in the eighties, the demand for jobs shifted to this emerging specialisation. It may, however, be noted that there has not
been any difference in the order of least preferred branches, namely, civil engineering, textile technology, naval architecture, mining, etc. since 1960s.

**PERCEPTIONS OF INSTITUTIONAL EXCELLENCE**

A majority of students stated that the admissions on the basis of considerations other than merit is an injustice to individuals who are meritorious from non-reserved castes and also on grounds of maintaining excellence or standards in the institutions. The first of these arguments state that the less meritorious among the reserved castes are chosen in preference to the more meritorious among the non-reserved castes. One significant finding of the study is that almost one-third each in IIT and CEG from reserved castes have also expressed their desire to make merit as the only basis for admission in their institute. However, one-third of the non-reserved caste students along with a majority of reserved caste students argued that other considerations should be given preference. According to them, socio-economic background and socially disadvantaged groups should be given special focus.

Here, some pertinent questions which are often unanswered are: whether institutions of higher education should be exclusively for the more meritorious students so that the country can have a well-trained manpower suitable to its needs? Whether reservations should be used to bridge the gap in the educational development of weaker sections and provide them with an opportunity to get exposed to the best institutions? Whether the reserved and non-reserved be treated as two competing groups and apply the principle of ‘merit only’ to each of these categories separately?

In addition to these dilemma as to what should be the admission policy of these elite professional institutions, it is found that a considerable percentage of students in CEG stressed the need for allotting seats to those who excel in sports and cultural activities, whereas none stated so in IIT. According to these students, if we want to build a good image of the institution, we have to encourage those who are good at sports and cultural activities.

The academic programme in IIT is perceived to cater to bright students only and that, in CEG, it is viewed as meant for both bright as well as average students. Some have even stated that it caters only to the average students. Academic ability of students
in IIT is perceived as excellent and that in CEG as good. The courses offered and the quality of classroom instruction are viewed as excellent and good in IIT respectively and good and fair in CEG respectively. The physical facilities such as laboratory and library facilities are stated to be excellent in IIT and as either good or fair in CEG. The opportunities for creative activities are also excellent in IIT, they are good in CEG.

The data reject the view that, in the present day context, it is not the mastery but the certification of having mastered is important. In other words, the content of the course is perceived as more important than simply acquiring a degree. The curriculum is also stated to be often updated keeping in view the latest additions to the body of knowledge which makes learning interesting.

The academic achievement of teachers is viewed as either excellent or good in IIT and good or fair in CEG. Teachers are also found to be an important motivating or guiding factor for achieving overall institutional excellence. The classroom in IIT is more interactive and dialogical as compared to that of CEG. In the case of CEG, a teacher may not provide scope for discussion in the classroom everyday because of two reasons: (i) the pressure of syllabus and (ii) the lack of insistence on the part of the students. Further, those who do not interact with the teachers outside the classroom are more in IIT than in CEG. As mentioned earlier, the main reason for this is either shyness of students or that they do not have any problems. Moreover, the system of student evaluation of teachers' performance appears to enable the student to make a contribution to the educational process. It also breaks down the earlier idea of an educational institution in which the students were participants in a one-sided/unilinear relationship with the faculty.

So far as the perceptions regarding the indicators of institutional excellence are concerned, they positively influence each other to contribute to achieving higher standards. For instance, the academic reputation and intellectual environment are found to be influenced positively by the academic ability of students, courses offered, quality of classroom instruction, assessment procedures, laboratory and library facilities and opportunities for creative activities and vice-versa. However, certain differences are observed between IIT and CEG in terms of these relationships. Firstly, the academic reputation of IIT is negatively correlated with the assessment procedures. This shows
that the assessment procedures are perceived not in line with the general academic reputation of the institution. This may be because a majority of students are unable to keep pace with the course work as well as the periodical tests, seminars and term papers. The series of examinations also tend to subdue the exploration and talent of the students.

Yet another difference between IIT and CEG is that the intellectual environment in IIT is found to be correlated positively to the courses offered, while it is not the case in CEG. A major attribute of courses offered in IIT is the variety of courses and options for a student which make him/her interested in the courses, thus contributing to the overall performance of students.

PERCEPTIONS OF INSTITUTIONAL EQUALITY

Two very important contending issues of relevance may be sorted out from the views on reservations in the higher educational institutions: the issue of efficiency and elitism and the issue of social and cultural backwardness. It is argued that reservations will result in inefficiency if the less intelligent and less meritorious from the communities which come under reserved category get an edge over their more intelligent and more efficient counterparts from the socially and educationally advanced communities.

However, the advocates of reservations mainly stated that they are necessary, because at least a few from the socially disadvantaged sections can study in professional institutions. The reservations are also viewed as a solution to the age-old social deprivation of the disadvantaged groups, and that, except reservations, there is no other alternative to uplift the poor. The reservations are also seen as essential to bridge the gap and narrow down the disparities between reserved and non-reserved castes. Thus, these arguments in favour of reservations may explain why any lowering of standards has to be accepted only as a price to be paid for uplifting the hitherto oppressed castes and classes.

Remedial classes and summer programme have many problems. Most important of them is the duration itself along with the vastness of the syllabi and teacher non-availability and ineffectiveness. The recipients of financial assistance are more in CEG than in IIT and almost all of them receive scholarships, fee waiver and book loans. More or less, there is a general acceptance among all, irrespective of their caste or class.
background, of this measure. Rather, many students stated that the weaker section students should be helped materially in order to help them overcome their inability to afford costly education instead of providing reservations in admissions, which they felt, is a hinderance to the promotion of excellence and merit.

Various factors have an influence on the formation of peer groups in the institutions. In IIT, the peer groups are formed mainly on the basis of universal considerations such as similar branch of study and family background (social class), except that the peer groups are formed on one parochial consideration, i.e., caste. On the other hand, in CEG, the peer groups are formed by two parochial considerations, namely, same state and religion, and by one universal consideration of similar college/school background. It is also noted that, in terms of the 'Peer Group Formation Index', students in IIT are members of either out-groups or cosmopolitan groups, those in CEG are members of either cosmopolitan groups or in-groups. Thus, while the national character of IIT is reinforced, CEG reinforces regional/local orientation.

Do the teachers discriminate between students of reserved and non-reserved castes? Though the percentage of those who opined that their teachers discriminate is very small, the personal experiences of some of the reserved caste students indicate that discrimination takes place in one form or another. The common allegation of reserved caste students is that the teachers view them as academically inferior and that they give more marks to the non-reserved caste students. However, some non-reserved caste students, particularly in CEG, stated that their teachers give more marks to the reserved caste students.

The reserved caste students have mainly academic problems, viz., coping with academic pressure and inferiority complex that they are poor in studies. They also have social problems such as social isolation or the apprehension that the non-reserved caste students treat them as inferior. The non-reserved caste students also face academic problems. But their academic problems are different from those of reserved castes in the sense that they are mainly due to the stiff academic competition in a class of equals, inferiority complex due to bad performance and also due to the inadequate supply of study materials. The social problems of non-reserved castes are also different in that they stem from their antagonism towards reservation policy and its beneficiaries. This
happens when one of their classmate/batchmate carry away some of the best placements such as SAIL, BHEL, etc. in the back-log recruitment in spite of their poor grades and academic performance. Further, women students in the institutes mainly face social problems such as lack of interaction with boys, feeling of insecurity due to eve-teasing (only in CEG) and the restrictions of movement by the hostel administration.

These problems have given stress/strain among many students. While students in IIT have undergone stress/strain due to academic reasons, viz., heavy academic programme and their grades/marks, those in CEG have mainly undergone stress/strain due to non-academic reasons such as indifferent attitude of teachers as well as fellow students, discrimination by teachers, living away from parents and inadequate financial support. On the whole, the stress/strain experienced is high or medium IIT and low or medium in CEG.

EXCELLENCE AND EQUALITY: A TYPOLOGY

The study also attempted to provide a contextual explanation of perceptions of equality and excellence in terms of a four-fold typology. The resultant types of institutions perceived are:

i) Excellent Institution : High Excellence-High Equality
iii) Fair Institution : Low Excellence-High Equality
iv) Poor Institution : Low Excellence-Low Equality.

While more students of IIT characterised their institution as either excellent or good, those in CEG viewed their institution as fair or poor. In other words, IIT is primarily seen as an institution with high excellence and CEG as an institution with low excellence. However, equality is viewed as more or less similar in both IIT and CEG. This is because, though IIT has a small number of reserved caste students, it seeks to retain them by offering a number of special measures such as remedial or summer term classes, financial assistance and counselling services along with a weaker section unit which constantly monitors the academic progress of these students. The reason for this is that
the large divergences between the reserved and the non-reserved castes in the APSLE require a special focus and measures. Another factor is the high drop-out among the students from the SC/STs in IIT as a result of the academic factors.

For instance, the SC/ST drop-out rate in IIT-Bombay has been 39.5 percent on an average (Kirpal, et al, 1984). Further, the number of years taken by these students to complete their B.Tech has been much higher. On the other hand, though CEG has highest percentage of reservations which facilitate access to a large number of reserved caste students, it does not take many measures to facilitate their academic progress or attend to their socio-cultural problems. In CEG, the measures may not be required because the differences in the entry level performances are not too different or wide and also because the drop-out problem is negligible or none.

MERIT AND SOCIAL CONTEXT: THEORETICAL PERSPECTIVES

The proponents of functionalist and neo-Marxist perspectives in sociology of education have been debating since the 1960s whether social class or meritocratic factors have been most important in explaining educational attainment in institutions of higher education. Although functionalists do not deny that class background is related to educational background, they assume that universalistic selection processes offer disadvantaged persons an opportunity to be upwardly mobile.

According to Parsons, the more difficult positions that demand considerable responsibility required a system of rewards to motivate individuals to take them. In his view, stratification was both necessary and agreeable. Stratification was necessary to provide rewards for people who would take on the additional responsibility tied to difficult positions and stratification was desirable because it allowed the social system to function smoothly. Seen from this Parsonian Vantage point, the argument of certain sections of students that the admission should be given to those who are capable and meritorious and that the most difficult positions of engineering and technology should be occupied by the most able individuals in the stratification system.

In the same vein, Davis and Moore (1945) state that the reason why structured inequality is necessary lies in society's need to distribute individuals to vital positions. They argue that there are some jobs that require individuals to possess special talents or
do develop special skills. These jobs may also require that the individuals filling the position work with utmost care. Therefore, Davis and Moore contend that societies have developed a system of rewards whereby those jobs requiring the greatest preparation and responsibility are rewarded more highly than are other jobs. This argument may explain why institutions such as IIT and CEG are selective and why merit should be preferred in relation to other considerations. This also explains the apprehension of non-reserved caste students that the quality of the institutions will be affected if meritorious students are not selected, who, in turn, are going to occupy the socially important positions which require skills as well as efficiency.

Tawney (1964) also advances the meritocratic principle and denies inequality of educational opportunity as an issue. According to him, schooling is open to all, one's achievement of higher education or absence of it could be portrayed as a result not of birth and background, but of his own efforts, ability and talents.

However, Tumin (1953) is very critical about the explanation of Parsons and Davis and Moore. He argued that it was impossible to measure the functional importance of any position in the society objectively. According to him, to judge that engineers in a factory are functionally more important to the factory than the unskilled workmen involves a notion regarding the indispensability of the unskilled workmen. In other words, Tumin is of the opinion that every position in the production process is inter-dependent and functionally important.

On the other hand, those who hold a neo-Marxist perspective, see the relationship between ability and educational attainment as indicative of a socially legitimate means of excluding people by social class. For instance, Bourdieu argued that the educational system serves merely to reproduce the distribution of cultural capital. Those who can receive what the school has to give are those who already are endowed with the requisite cultural capital. To quote Bourdieu,

By giving individuals educational aspirations strictly tailored to their position in the social hierarchy, and by operating a selection procedure which, although apparently formally equitable endorses real inequalities, schools help both to perpetuate and legitimise inequalities… Apart from enabling the elite to justify being what it is, the ideology of giftedness, the corner-stone of the whole educational and social system helps to enclosing the under-privileged classes in the roles which society has given them… which are only a result of an inferior social status,… (1974: 42).
Further, Bourdieu and Passeron (1977) say that an educational system is more capable of concealing its social function of legitimising class differences behind its technical function of producing qualifications. According to them,

A system of education consistent with the norms of technocratic ideology can, at least as successfully as traditional system, confer on the academic scarcity which produces or decrees by means of the diploma a social scarcity relatively independent of the skills demanded by the post to which diploma gives legitimate access (1977: 165).

It is this alone which explains why different positions are occupied by different people with unequal power, remuneration and importance. Bourdieu's position upholds the policy of reservations in the Indian educational system which gives unequal treatment to those who are born unequals.

Halsey, Heath and Ridge (1980), however, reject the cultural capital thesis of Bourdieu as applicable to higher education. According to them, cultural capital influences selection for secondary school, but thereafter its importance is minimal (1980:200). To quote them,

The boy from a privileged school or from a privileged social background had a much higher chance than his unprivileged contemporary of gaining a place at university. These inequalities, however, were very largely a consequence of earlier decisions in the educational process (1980: 193).

Bowles and Gintis (1977) question the role of 'merit' in education along with the function of the open admission process. According to them, the hallmark of meritocratic perspective is its reduction of a complex web of social relationships in production to a few rules of technological efficiency. They emphasise that,

... the meritocratic orientation of higher education, far from serving 'economic rationality', is actually a facade that facilitates the stratification of the labour force. Open admissions threaten this legitimation mechanism by rendering school success a less important factor in the opportunity to obtain higher education (1977: 107).

Thus, the neo-Marxist perspective suggests that education should be viewed as reproducing inequality by legitimating the allocation of individuals to economic positions on the basis of objective merit.

It may be true that merit in higher education cannot be completely ignored either in principle or in practice, as the relevance of higher education demands efficiency on
its part. This is rendered impossible even otherwise by the fact that the number of applicants with requisite merit far exceed the number of seats which can be offered. The fundamental question here is: whether 'merit' itself is influenced by certain academic or socio-economic factors as well as non-economic factors.

The Weberian perspective provides a more comprehensive framework. For instance, Weber defined 'class situations' in terms of their typical probability for (1) producing goods, (2) gaining a position in life, and (3) finding inner satisfactions. The most important distinction - that between the 'property class' and 'commercial class' - relates in the first case to property differences, as such and, in the second case, it is the marketability of goods and services that primarily determines class situations. In this context, it may be seen that Weber takes non-economic factors also in explaining the vertical social status differentiation. Thus, the factors that include or exclude certain sections of society in gaining access to elite institutions depend on one's own life chances or the class position which includes both economic as well as non-economic social factors.

Further, the writings of neo-Weberians like Collins (1975) elaborate these aspects and include the organisational context to understand the patterns of social relationships. According to Collins, for instance, the social structure of a school consists of the patterns of social relationships occurring between those defined as members of the schools, that is, principally, teachers and students. Seen in this context, the organisational emphasis on the goals of equality and excellence is a reflection of the subjective meanings of the members, viz., students, teachers and administrators, in the social construction of their organisation. Thus, this may provide explanation to the perception of students of the academic reputation in their institution. For instance, while IIT students have decisively viewed their institution as of excellent academic reputation, whereas a majority of those in CEG termed the academic reputation of their institution as good. It may also explain why only a few students in IIT have termed the institutional excellence as low and only few in CEG as high.

Moreover, according to Weberian perspective, consensus and conflict co-exist within a school organisation. While consensus encourages the smooth functioning of the organisations, conflict constitutes a part of the competition for scarce resources (King,
1983). Thus, this explains why conflict or consensus for excellence and equality is a healthy and desirable phenomena for transforming society like ours, where certain groups are ahead and others lag behind. It also provides us a framework for understanding how some institutions balance the twin demands of excellence and equality.

**CONCLUDING REMARKS**

The study brings to the fore the dilemma: should only the brightest, the most capable, the most privileged be admitted? or should the student body comprise of a cross section of larger society? It also highlights the point that the admission policies and academic programme set the tone of an institution, especially as they stress excellence/elitism or equality/universal access.

The study confirms that the social background of students in institutions of higher education is important as they prepare students to occupy the roles of elites. However, the differences are apparent in the way these potential elites have been inducted by different types of institutions. For instance, it is found that IIT is socially exclusive and CEG is more representative.

However, within the social background, the education of the parents is important in so far as it influences the academic performance in the school leaving examination (APSLE) and subsequent access to these institutions. Particularly in the case of IIT, a majority of those who had higher APSLE also had high parental educational level. Therefore, the education of parents is an important aspect in order to facilitate more students from socially disadvantaged groups which are under-represented in these institutions. This has very important implications for a developing nation like ours. The recent proposals to make education a basic human right by including it in the fundamental rights of the constitution and to spend 6 percent of the GNP on education are crucial in order to make higher education more representative and accessible.

It may also be noted that if the social background of the students is entirely different from the general social composition of the institutions as in the case of weaker section students, particularly in IIT, the student faces a critical situation. For instance, if the handicaps of their social background and the insufficient educational preparation prior to joining the institution as also the persistent 30-40 percent divergence
in the JEE/TNPCEE/APSLE are continued even in the institution, the student faces problems in coping with the highly demanding academic pressure and also the overall institutional climate. This leads to either the unsuccessful completion of the course or the continuance of the students beyond eight semesters and up to twelve semesters. In a few cases, students leave without completion of the course even after twelve semesters.

Nonetheless, the politics of equality is gaining more and more adherents and questions the excellence and elitistic premises of the higher educational institutions. This aspect has become a controversy in the early seventies as a result of which the IITs are forced to provide reservations for the first time since 1972-73. However, the controversy intensified in the early eighties with the Annual Report (1983) of the Director, IIT-Madras. For instance, the Report mentions,

They (Members of Parliamentary Committee on Scheduled Castes) are concerned that most of the SC/ST students are unable to cope with their studies in IITs and some felt that our standards are too high. Some members of the Committee have gone so far as to say what we need is an Indian standard and not an international standard of instruction.

Further, elaborating the fundamental question of politics in equality-excellence dilemma, the Report says,

Whether we need or need not be aware of the latest developments in technology, it is necessary to debate the fundamental question whether just because a group of people cannot cope with a certain level of education, they should have the veto power to deny such an education to the rest; whether social justice should imply that there shall be criterion and also while the socially deprived have special privileges, the talented have no rights of their own.

In spite of this, the politics of reservations has become firmly entrenched in the policies of the Tamil Nadu and other Indian states. Further, the identification of the backward classes is not done on purely socio-economic criteria. It is inextricably mixed with political considerations. After, dominant castes who have political power at the state and lower levels try to use reservations to retain their coveted status as well as many benefits that go along with them. The politics have even reached their peak when certain groups within the Scheduled Castes in Andhra Pradesh fought for a division of the 15 percent of reservations and finally succeeded in pressurising the government to accept their demand for proportional representation within the Scheduled Caste category.
This dimension leads to an important dilemma: does equality mean only proportional representation or does it mean positive discrimination in favour of the most depressed and disadvantaged? Seen in this context, the educational institutions may face a situation wherein more and more groups are going to ask for reservations.

Again, as mentioned earlier, even when students from reserved castes do manage to get admission, they are unable to cope with the academic pressure and do not complete the course on time. The Report of the Commissioner for SC/ST (1978-79) has observed that the performance of students from these Communities in various courses in medical colleges on relaxed standards against the reserved seats is not satisfactory. Even in the present study, it is found that the reserved caste students face mostly academic problems of coping with academic pressure and that the resultant stress/strain due to these factors is high.

Therefore, it is in this context, the opinion of about one-third each in IIT and CEG from reserved castes that their institution should admit students only on the basis of merit and that, particularly in IIT, the policy of reservations is perceived as influencing the institutional excellence. It is also noted that heavy academic pressure in these institutes often leads to the loss of self-confidence, self-doubt and self-esteem among the reserved caste students. However, it is not the case in CEG where there is not much divergence in the academic performance between the reserved and non-reserved castes. It is also due to the fact that the academic programme in CEG caters more to the average students as compared to IIT where it caters mainly to the bright students.

Moreover, those who put more stress on equality through reservations see a flow in the high academic standards of IIT. According to them, the faculty in these institutions, especially in IIT, tend to evaluate excellence by an international scale of performance. Achievement of excellence based on such norms may often conflict with meeting the needs of the Indian social reality. For instance, to produce an engineer who really fits into the technological scene in India, it may not be worthwhile to process him through an academic programme which matches the best in the world and which explains the large scale migration of these products to U.S.A. and other Western industrial centres. It may be noted that as per the Report of the IIT Review Committee (1986), on
an average, 20 percent of the IIT graduates go abroad for either higher education or employment.

Another aspect relates to teacher excellence. For example, a large proportion of those students who disagreed or are undecided on whether their teachers are highly motivated or whether the guidance from them is exceptionally good brings to the fore the role of teachers in the institutions of higher education. Generally the teachers with much acclaim have been those who have foreign doctoral degrees, who have a number of publications and have been participants in many national and international conferences, which help build up not only their own reputation, but also of the department or institute with which they are connected. However, some teachers who attract the students with their qualifications also disappoint them. It is because they are periodically absent from the campus for research and consultancy work. Thus, the research/consultancy and teaching that constitute teacher excellence have positive and negative dimensions which affect the pursuit of student excellence and equality.

The student evaluation of teachers is a very important contribution of certain higher technical institutions in making the teacher accountable for his/her acts of commission or omission. But, what needs to be stressed here is to see how the system works. It has an interesting implication for the teachers and teaching in higher education where this has not been introduced because of the reluctance of the teachers and the impact of politics in higher education. The political nexus between the teachers and students also act as a hindrance to the introduction of this system in the universities.

In sum, equality, therefore, is not just proportional representation, because overemphasis on proportional representation can affect institutional excellence as in the case of CEG. On the other hand, too much emphasis on excellence creates problems for the students. The institution has to balance the twin demands to ensure that the reserved caste students can compete with the non-reserved caste students. The individual student is, thus, hard put to bridge the gap and meet institutional excellence. This creates loss of self-confidence and inferiority complex - a dimension that needs further exploration. It may also be noted that institutional equality is promoted through individual equality.

Thus, this study attempts to highlight the tightrope walking of higher educational institutions to balance the factors responsible for enabling or disabling a student in
gaining equal access while simultaneously achieving academic excellence. This will continue to be an interesting area for future research because there are no straight answers in a society wherein dispossessed are in a majority. It provides no conclusive evidence. What this study does is to focus on a specific issue, namely equality versus excellence and on some of its dimensions.