CHAPTER V

SUMMARY, CONCLUSIONS AND IMPLICATIONS
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5.1 SUMMARY

Introduction:

Education in India has become a major enterprise reaching into almost every home. There is no denying the fact that we have made considerable quantitative progress in the field of education. Presently (1986-87), there are 6.9 lakhs of educational institutions of all types in India. The number of primary and middle schools is 6.75 lakhs and of secondary/higher secondary schools is 64,240. There are 6,112 colleges and nearly 175 universities. Similarly, the number of students presently is 11.4 crores. The number of teachers in the country is 37 lakhs. Educational expenditure of all types and at all levels has reached a figure of nearly 1014.38 crores during 1986-87.

This phenomenal expansion, in a single generation, has made education from a comparatively small industry into the largest local industry, the biggest employer and splendor. The number of children desirous to enter educational institutions have reached such a point that it is taxing to the breaking point the facilities of the educational institutions.

Along with other sectors of education, there has been an unending expansion of secondary education in the post-
independence period under the social, economic and political pressures. There were 64,240 secondary schools in 1986-87 (against about 4,000 in 1947) with an enrolment of about 15.5 lakhs in 1986-87 (against about 7 lakhs in 1947). During the 1950-87 period the total number of teachers increased from 93,000 to 11.99 lakhs. In 1950-51 the expenditure on the Secondary Education sector was 29.7 per cent of the total expenditure of education. By 1986-87 it was nearly doubled.

It is evident that since independence the nation has invested a large slice of its resources both physical and human in secondary education. Naturally it has a right to expect the efficient functioning of secondary schools. But there is widespread concern and anxiety about the deterioration and irrelevance of secondary education. There is an increasing demand to make secondary education relevant to the needs of the society. The policy of marginal changes, presently pursued, would not pay much dividends. The system has to be restructured by fundamental changes in priorities, contents, methodologies of teaching and learning systems of evaluation and management structures.

For improving the qualitative aspect of secondary education, there is one approach/strategy which is getting the attention of the educational planners and research workers and this approach is to penetrate deeply beneath the outer surface and aggregate dimensions of the educational
system so that its functioning may be analyzed thoroughly and thereby improve its performance.

In this respect one can learn some important lessons from the field of medicine in general and more particular from what a doctor does when he gives his patient an annual "check-up". The doctor cannot know everything about the patient, nor does he need to. He employs a series of critical indicators - heartbeat, blood pressure, urine analysis, blood-count etc., depending upon the particular case and from these he makes a diagnosis as to how well or poorly the patient's system is functioning. This analogy should not, of course, be pushed too far, but it is worth asking what sort of indicator the system of secondary education would need to give itself an annual check up.

Modern educational administrators are adopting the same strategy in the analysis of organizations and systems as the doctors adopt for analysing the human body. This approach is known as "System Analysis" approach. Such an approach has been found quite useful in the analysis of social systems. While critical indicators of the system and their functional processes may vary from context to context the strategy remains the same. By extension, this is also true of a system analysis applied to the secondary education system. It seeks to improve a whole series of relationships between its various levels and internal working parts on both
the input and the output sides. These relationships are now badly disturbed and must somehow be restored to a better balance and to a mutually compatible rate of movement. In the present research an attempt has been made to bring these relationships into the limelight and to view the system as a whole by applying the Systems Analysis Approach.

Meaning of System Analysis:

The term system analysis possesses nearly as many definitions as there are persons who advocate its use. The concept of systems analysis may be defined as an orderly way of identifying and ordering the differentiated components, relationships, processes and other properties of anything that may be conceived as an integrative whole. It provides a basis for the intensive study of complex phenomena that are in some way related within the defined boundaries of a unified system. The system may be physical or non-physical, open or closed, dynamic or static, simple or complex, scholastic or deterministic, contains a supra system and sub-system, be adaptive or not, achieve homeostasis, exist in time and space, be empirical or symbolic and possess numerous other rigorously defined attributes. Thus, in a system two or more parts and their relations form a single, identifiable entity. The systems analysis provides glimpses of its parts and operations.

The systems analysis helps to organise human thinking
within the framework of reason. Through such an analysis, a system is examined not piecemeal, where every facet stands alone, but as a "SYSTEM" - a system with interacting parts that produce their own "indicators" as to whether the interaction is going well or badly.

**Conceptual View of Education as a "System":**

It is possible to divide the activity of education into inputs (things that go into the process), the process itself and the outputs which follow the processing of the inputs. There are three concepts that are central to the secondary education system: inputs, outputs and functioning or operations or processes. The prime inputs of the secondary education system are human and non-human material. Process transforms these inputs into outputs. It can be said that the inputs may come from within and without the system. Like other social systems, education is neither self-sufficient nor self contained. It draws inputs from its environment and thus, depends upon it for its survival. It also exports outputs that are useful to environment.

Just like a human system that needs to regulate its body temperature to remain in good health, the secondary education system needs to sustain in a dynamic equilibrium in order to function properly and effectively. Education system is said to be in dynamic equilibrium when the relationship between the inputs and outputs is in favourable...
balance. When it is not, disequilibrium results and its functioning is affected accordingly.

Secondary education, therefore, consists of mutually interacting components which together form some desired function. Its discrete elements and functions do not behave in isolation because of their inter-relatedness. Every action in one part reverberates throughout the system because all its elements, human or non-human are inextricably linked together. Hence, conceptualizing education as a "System" would provide a useful insight into its functioning.

Subjecting Secondary Education in the Union Territory of Chandigarh in Systems Framework:

The educational system may be perceived as a social system operating in a complex of interacting levels of social system. This means that it is a part of the bigger system and that it is comprised of smaller systems. These bigger and smaller systems may be considered as components of a system called National System of Education to which levels can be assigned. Miller (1965) suggests the terms sub-systems, system and supra system to delineate interacting levels in a system. The interacting levels of the National System of Education of which the secondary education system in the Union Territory of Chandigarh is a part will now be examined.

Just like all other systems at the interacting levels of systems, the secondary education in the Union
Territory of Chandigarh is an open system since it exchanges inputs, outputs with its environment which in this case are the larger systems: the Educational System at the State level, the Secondary Education System at the National level, The National Educational System and Society.

Again, just like all other interacting levels of systems, the secondary education in the Union Territory level is a social system which has inputs, outputs and functions linked which do not behave in isolation because they are inextricably with one another. These inputs and their functions are formally structured for achieving some goals (output). The nature of these relationships should maximize goal achievement. It also derives inputs from within the system in terms of satisfaction among teachers and students that system is achieving its objectives. Thus, it derives inputs from within and from without the system. Like other open systems, there must be a balance between input and output.

Thus, the secondary education in the Union Territory of Chandigarh has been conceptualized as one system in the complex of interacting levels of systems that comprise the National Educational System. It is linked with all the other systems in this nexus of interacting systems through inputs, outputs and feedback processes. Any dysfunction in it will reverberate in the entire system. Thus, the secondary education system must minimize its dysfunction. It can do so by sustaining itself in a dynamic equilibrium through
maximizing goal achievement.

The Paradigm:

Earlier it has been hypothesized that the quality of secondary education is the function of the quantity and quality of inputs. As a theoretical base, the paradigm conceptualizes secondary education system as an input-output system in a dynamic equilibrium. When inputs and outputs are identified and measured, they provide useful information about the functioning of the system. The information would be used as a guide to the allocation of resources within the secondary education system. Resources would be shifted from the inputs that contribute least to the output, to the inputs that contribute most.

The secondary education system, as discussed earlier, has a set of INPUTS which are subjected to a PROCESS designed to attain certain OUTPUTS. They form a dynamic organic whole. In order to assess the functioning of the system, input-output relationships must be examined in a unified vision.

Inputs into Secondary Education System:

An input is the sending of entities from the environment into the system. The input, in other words, means things that go into a process. The inputs may be conceived in the form of both human and non human material.
The INPUTS included in the study are as under:

1. Student
2. Teacher
3. Organisational climate
4. Leadership Style
5. Teacher Morale
6. Academic Motivation
7. Achievement Motivation
8. Study Habits

The OUTPUTS included in the study are as under:

1. Academic Achievement of Students
2. Innovativeness of Schools.

**Statement of the Problem:**

The problem may be stated as under:

"SYSTEM ANALYSIS APPROACH TO THE STUDY OF SECONDARY SCHOOLS IN THE UNION TERRITORY OF CHANDIGARH".

**Objectives of the Study**

The objectives of the present study are as follows:

1. To identify the inputs and separate them (theoretically) in order that each of the nine inputs can be subjected to suitable analysis.

2. To study the student input with reference to their social, personal, family and academic background in secondary schools.
(3) To study the teacher input with reference to their academic, professional and socio-economic status.

(4) To study the organizational climate of secondary schools.

(5) To study the input of leadership style of the head of the secondary schools.

(6) To study the teacher morale of secondary schools.

(7) To study the academic motivation of students in secondary schools.

(8) To study the achievement motivation of students in secondary schools.

(9) To identify the study habits of students in secondary schools.

(10) To study the nature and extent of the physical facilities in secondary schools.

(11) To study the academic achievement of the students in secondary schools.

(12) To study the innovativeness of secondary schools in the Union Territory of Chandigarh.

Hypotheses of the Study

Keeping in view the objectives of the present study, following hypotheses have been formulated:

(1) There exists a significant relationship between the student input and the output of schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of schools.
(2) There exists a significant relationship between the teacher input and the output measured in terms of (a) the academic achievement of students and (b) the innovativeness of schools.

(3) There exists a significant relationship between the organizational climate of schools as the input and the output measured in terms of (a) the academic achievement of students and (b) the innovativeness of schools.

(4) There exists a significant relationship between the leadership style of school principals as an input and the output of the secondary schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of secondary schools.

(5) There exists a significant relationship between the teacher morale input and the output of the secondary schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of secondary schools.

(6) There exists a significant relationship between the academic motivation input and the output of secondary schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of secondary schools.

(7) There exists a significant relationship between achievement motivation of students input and the output of secondary schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of secondary schools.
There exists a significant relationship between the input of study habits of students and the output of secondary schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of secondary schools.

There exists a significant relationship between the input of physical facilities of the school and the output of secondary schools measured in terms of (a) the academic achievement of students and (b) the innovativeness of secondary schools.

A varying degree of cross-correlation exists between the inputs and the outputs of the secondary schools in the Union Territory of Chandigarh.

**Design of the Study:**

The present investigation is based on systems approach and can best be called as descriptive and analytical. It does not merely describe inputs and outputs but also analyses the relationships among them.

It revolves round the hypothesis that the quality output is obtained through quality inputs. In other words, the quality inputs are the valid indices of effective functioning. Nine inputs were established as the major components of the paradigm proposed for improving secondary education in the Union Territory of Chandigarh. The study was delimited to the following inputs: teachers, students, organizational climate,
leadership style, teacher morale, academic motivation, achievement motivation, study habits, and physical facilities.

Sample of the Study:

The data were collected from the three sources. They are:

Secondary Schools: Thirty secondary schools were randomly selected out of a total of 45 secondary schools located in Chandigarh.

Teachers: Initially 636 teachers were selected from 30 schools. Of these 636 teachers, 378 were male and 258 female teachers. These teachers were given questionnaires. Only 400 teachers returned the questionnaires. Hence in the final sample only 400 teachers - 230 male and 170 female - were included.

Students: Out of the 30 schools 3116 students - 1704 boys and 1412 girls - were selected and were given questionnaires. Of these 3116 students, only 2580 students who returned the questionnaires were included in the final sample.

Tools Used:
The following tools were used for the collection of data:

1. Self-prepared questionnaire for students.
2. Self-prepared questionnaire for Teachers.
3. Organizational Climate Description Questionnaire by Halpin and Croft (1963).
8. Study Habits Inventory by Wrenn (1941).

Procedure of Data Collection:

The first concern of the study was to lay emphasis on the tools which might enable the investigator to assess the inputs. A survey of literature failed to provide instruments to measure the inputs of students, teachers and physical facilities. The questionnaires were, therefore, developed to study these inputs. For the remaining six inputs i.e., leadership style, organizational climate, teacher morale, study habits, academic motivation, and achievement motivation, instruments/tools were available.

The data required for the investigation was collected from three sources: students, teachers, schools (principals, librarians, office records). Self-prepared questionnaire of student input was used to measure the student input. Junior Index Motivation (JIM) Scale was used to assess the academic achievement of students. A test of Achievement Motivation by Prayag Mehta was used to assess the n-ach level of students. Further, study habits of students were assessed with the help of Study Habits Inventory by Wrenn.
Teacher input was measured with the help of questionnaire prepared by the investigator. Organizational Climate Description Questionnaire by Halpin and Croft was used to measure the Organizational Climate. Leadership style of teachers was measured with the help of Leadership Behaviour Description Questionnaire by Halpin and Winer. Teacher morale was assessed with the help of an opinionnaire i.e., Purdue Teacher Opinionnaire by Bently and Remphal.

To assess the physical facilities input, a self-prepared questionnaire for principals was used. Output was measured with the help of Adaptability Scale by Buch and with the help of school records.

Three booklets containing above mentioned tools and questionnaires were prepared. One booklet was meant for students, second for teachers and the third was to be filled in jointly by the Principal, the office staff, the librarian etc. of the school.

**Administration of Student Questionnaires:**

With the approval of the principals of the schools concerned, the investigator visited all sample schools and got the questionnaires filled in on the spot from the students.

**Administration of Teacher Questionnaires:**

The investigator utilized her visit to the schools for requesting and handing over the questionnaires meant for teachers.
personally to each staff member. Through the personal visits and requests, the investigator was able to get back more than 60% questionnaires duly filled in.

**Administration of Questionnaire for Secondary Schools:**

The investigator also made use of her visit to each school for requesting the Principals to get the questionnaire for their respective schools filled in. After repeated visits and personal requests, the investigator was able to get the required information from 30 schools.

All the questionnaires were scored and following statistical techniques were employed to analyse the data.

**Statistical Procedure:**

Because a jumbled mass of raw data is confusing and difficult for the eye and mind to grasp, one must decide how to organise, reduce and summarize one's data into the most meaningful form. In the present investigation the following statistical techniques were employed.

1) For the purpose of making interpretable comparisons between inputs and outputs, and even amongst the inputs and also for getting a sharp perception of the data in a compact form, Mean and Standard Deviations were calculated.

2) Correlations were calculated to determine the relationships between inputs and outputs and also among the different inputs.
3) The Stanine Scale was used to classify raw scores into 'high', 'average' and 'low' categories against a standard norm.

4) The multiple correlation technique was used to determine whether a significant relationship existed between different inputs and outputs and also to determine the joint effect of all inputs on outputs (Garrett, 1962).

Results:

The major findings of the research are as follows:

(1) The mean score of the sample as a whole of the teacher input has been calculated to be 23.27 with an SD of 3.43. The mean score of the female teacher input is 23.48 with an SD of 3.90 and the male teacher input 23.03 with an SD of 4.40. It was found that out of a sample of 400 teachers drawn from 30 secondary schools in the Union Territory, qualitatively, 7.50 per cent fall in the 'High' category, 59.75 per cent in the 'Average' category and 32.75 per cent in the 'Low' category. There are 16.09 per cent male and 17.65 per cent female teachers who fall in the 'High' category. The percentages of male and female teachers labelled 'Average' are 70 and 60.59 respectively. Those who fall in the 'Low' category include 13.91 per cent male and 21.76 per cent female teachers.
(2) The mean score of the whole sample of the student input is 13.70 with an SD of 4.36. The mean score of male students has been found to be 13.83 with an SD of 2.56 and of girl students 13.45 with an SD of 3.13. It was found that out of 2580 students included in the study, 516 (20%) are in the 'High' category, 1794 (69.53%) belong to 'Average' category and 270 (10.47%) are in the 'Low' category. Out of 1428 boy students, 238 (16.67%) belong to the 'High' category, and 248 (17.36%) belong to the 'Low' category and 942 (65.97%) to the 'Average' category. Whereas out of 1152 girls students, 108 (9.38%) are categorised as 'High', 768 (66.67%) as 'Average' and 276 (23.95%) as 'Low'.

(3) Out of 30 secondary schools, 15 (50%) of them have an organizational climate with open tendencies and the remaining 15 (50%) have an organizational climate with closed tendencies.

(4) There are 26 per cent principals who exhibit HH leadership style. The percentage of principals who show 'No focus' (LL) leadership style is 37. There are 20 per cent principals who show HL leadership style. About 17.00 per cent principals are such as show LH leadership style.

(5) The mean of the morale of teachers as a whole has been found to be 230.95 with an SD of 56.80. The mean score
of the morale of female teachers is 230.85 with an SD of 49.09 whereas of male teachers it is 239.39 with an SD of 51.30. There are 42 percent teachers whose level of morale is 'High' whereas the percentage of teachers whose morale is 'Low' is 56.75. A very small percentage (1.25) of teachers are placed in the 'Average' category. There are 42.36 percent female and 47.83 percent male teachers who are placed in the 'High' category. There are 2.94 percent female and 12.6 percent male teachers who are found in the 'Average' category. The percentage of teachers having a 'Low' level of morale are 54.70 women and 39.56 men.

(5) The mean score of the faculty morale of schools has been found to be 223.73 with an SD of 37.88. There are 43.34 percent teachers whose level of morale is 'High' whereas the percentage of teachers whose morale level is 'Low' is 53.33. A very small percentage (3.33) of teachers are placed in the 'Average' category.

(6) The mean score of the academic motivation of students as a whole is 59.48 with an SD of 39.18. The mean academic motivation of boys is 60.25 with an SD of 44.06 and of girls 55.77 with an SD of 24.11. There are 47.05% students whose level of academic motivation is 'High' whereas 44.73% students are found to have a 'Low' level of academic motivation.
The percentage of students with an 'Average' level of academic motivation is 8.22. As many as 43.97% boys and 48.79% girls are placed in the 'High' category, 12.67 per cent boys and 7.20 per cent girls in the 'Average' category and 43.34 per cent boys and 44.01 per cent girls in the 'Low' category.

(7) The mean achievement motivation score of secondary school students of Chandigarh has been found to be 15.93 with an SD of 1.67. Similarly, the mean n-ach score of boys is 15.93 with an SD of 1.40 and of girls 15.92 with an SD of 1.67. It is also found that no student is placed in 'High' and 'Low' categories, so far as his or her level of achievement motivation is concerned. All the sample students are placed in the 'Average' category. Similarly none of the boys or girls are placed in 'High' or 'Low' categories and all of them are placed in the 'Average' category from the point of view of achievement motivation.

(8) The mean score of students as a whole, on study habits inventory, is 110.59 with an SD of 15.79. The mean score of boys is 108.57 with an SD of 16.63 and of girls is 111.26 with an SD of 15.79. Out of a sample of 2580 students, 1043 (40.42 per cent) are placed in the 'High' category, 832 (32.25 per cent) in the 'Average' category and 705 (27.33 per cent) in the 'Low' category. There are 53.64 per cent...
Teacher is the most costly input of the system of secondary education. Though the quality of the teacher input is not discouraging, there is still scope to improve further the quality of teachers. The components of the teachers' personality that make him qualitative should be identified and "specifications" may be evolved to determine the quality of the teacher input. These specifications may help to recruit the best professionals from the manpower market. At present there is no scientific and uniform criteria for the recruitment of teachers to the secondary schools. The recommendations of the National Commission For School Teachers can profitably be used to improve the quality of the teacher input.

When it is accepted that the students form the prime input of the system of secondary education and also its prime output, then we should take measures to see that students, during their period of learning in schools, develop such personal and personality traits as make them qualitative. It has been found in this study that the quality of the student input is not up to the mark. This means that the system of secondary education will, in the years to come, require the development of specifications for the quality of the students to grow accordingly. For this purpose personal and educational guidance can play an important role.
considered to be significant for improving the output of secondary schools. The system of secondary education should develop such techniques and training programmes as may enhance the level of academic motivation among students.

The secondary schools are poorly equipped and have the paucity of physical facilities. Even their use is at a discount. To improve the input of physical facilities, firstly, the concept of physical facilities needs to be subjected to a fresh thinking. Secondly, there is need to develop specifications in respect of physical facilities. The planners and architects responsible for designing and running the schools should keep these factors in view.

The quantitative and qualitative input of study habits has been found to be average. It has been mentioned earlier that each input is inter-dependent and inter-related with other inputs for the effective functioning of the system. As revealed in this study, the system of secondary education is not getting a high quality of input of study habits. Naturally, this will have a consequent effect on the total functioning of the system of secondary education. This brings into focus the need to improve the study habits of students. The strategy of parent-teacher cooperation need to be adopted to inculcate good study habits among students. The concept of parental
support for creating better learning situation for the child should be given due importance.

Similarly, the average quality of the input of achievement motivation of students is indicative of the fact that the system of secondary education in the Union Territory of Chandigarh is not maintaining perfect health. To improve the health of the system of secondary education, the level of the achievement motivation of students needs to be increased. To achieve this objective, training programmes should be introduced for principals, teachers and students.

The education system is expected to produce highly educated, trained and motivated manpower for dealing with the challenges facing the nation today. Hence, the inescapable strategy should be to make schools function as centres of human resource development.

There should be more stress on innovation. Innovation should not be just for the heck of it, but carefully calculated changes be brought about to achieve the much needed improvement. The present study reveals that the schools in the Union Territory need to be more innovative if they desire to produce quality output. So new strategies should help schools get rid of their sluggish nature and start changing more rapidly and in
the right direction. For achieving these goals, teachers and principals need to be exposed to innovative ideas more frequently.

Whenever an institution fails to achieve the desired objectives, it is mainly due to poor leadership. The input of leadership style, in the case of the present study, is not very satisfactory. There is need to develop a strategy by which this input may be improved further in our secondary schools. The management techniques used in industry and military organisations have paid rich dividends. Planners in the field of education should utilise new management techniques to improve the quality of the leadership input.

If the above suggestions are really to be implemented, the whole system of secondary education will have to be reconceived, replanned and re-designed. For this purpose, relevant and penetrating research, experimentation and evaluation should be conducted. This means that the process of educational research should be strengthened on a priority basis. There is also need to develop reliable and valid instruments for evaluating the functioning, both from inside and outside, of the secondary schools. The strategy for this type of research would be to, firstly, identify the inputs which have a relationship with the outputs. Secondly, attention must be paid to the relationship
between these inputs and their functions. The strategy must also aim at improving the whole series of relationships between its various levels and internal working parts and between the secondary schools and its environment on both input and output sides. It is here that the systems approach can help in improving the functioning of the secondary schools or any particular educational institution.

It is evident that the relationship between the inputs and outputs are, at present, in a badly disorganised State. Somehow it must be brought in a balanced position. The suggested strategy must focus on the relationships between the inputs and the outputs. It must seek to improve a whole series of relationships among the educational systems at various levels and among different internal working parts. The systems approach to improve these relationships may be adopted as a future strategy.

We need "educational engineers" to study the educational system where it is wasteful, where it is out of touch with modern requirements, where and why its output falls. Such engineers should make a thorough analysis of the various hard and soft inputs of the educational system. The hard inputs are the students who constitute the raw material of the educational enterprise - teachers, finance and physical facilities, whereas the soft or psychological inputs are the achievement motivation,
leadership style, organisational climate, teacher morale, academic motivation, study habits, etc. The systems approach adopted in this study provides a rich ground to make a thorough analysis of the educational systems at all levels.

So far as the output of secondary schools in the Union Territory of Chandigarh is concerned, it has been found that it is not of a very high quality both in terms of the academic achievement of students and the innovativeness of the schools. The output is an indicator of the health of the system. From this point of view it may be said that the system of secondary education in Chandigarh is not functioning very well. This requires the planners and system analysts to review their strategies and models in such a way that the output becomes more qualitative.

Societal changes are taking place at such a rapid pace that educational institutions are finding it difficult to adjust. The targets always seem to be moving. As a consequence, educational planners are becoming very interested in futurism. This is an exciting field which educational planners can explore.

The needed shift of emphasis in developing a new strategy for secondary schools should be towards quality. The methods and strategies followed so far in
dealing with the problems of secondary schools have been confined largely to the outer shell and broad aggregate dimensions of secondary schools. They do not get at its inner life. They take the existing arrangements for granted and assume that they are working satisfactorily. The needs of the hour are more inputs. This may not be a profitable way of looking at the problem, the quality of the outputs, the results of inputs and their processing. Therefore, while using the new strategy, one must penetrate deeply into the matter and aggregate dimensions of the system. This, in other words, means that the secondary schools should design a process of utilising the inputs. For this to be achieved, they must examine various alternative "systems" for obtaining the "quality" output.

There should be a strong feedback to streamline, enrich and make productive the present system of secondary education by resorting to continuous and varied research designs and exercises in the area of systems analysis.

In conclusion, it may be said that the planning can not be done at the desk or with the help of pure imagination. It must be based on relevant and penetrating research, experimentation, evaluation and feedback. Naturally, one of the requirements will be to strengthen the process of research in education. One of the necessary steps in this direction is to develop better instruments for assessing
the performance of the secondary schools both from inside and outside. There should be two features of this type of research: first, to identify the inputs which are related to the outputs, and second, the research must focus on the relationships between these inputs and their functions. It must seek to improve a whole series of relationships between its various levels and internal working parts, and between secondary schools and its environment on both input and output sides. This is where the systems approach can help in improving the functioning of the secondary schools in particular and the education system in general.