The chapter deals with the discussion on the results and analysis of the data collected including suggestions thereof.

10.1 Strategic Planning Approach

The hypothesis that strategic planning can be made applicable for educational institution seems to be supported. The strategic planning approach applicable to technical institutions is devised to suit the technical education system. Majority of the experts opined that the strategic planning approach can be easily made applicable to technical education. The various planning components are considered and coordinating approach is desired in planning process. It is found that the leadership role played very heavy weightage in application of strategic planning. The total number of experts out of 62 have supported this hypothesis.

The strategic planning approach can not only be made applicable to industries but also to other non-profit enterprises including technical education institutions for increasing the effectiveness of the organisation, the study supports.

Thus, the hypothesis that technical education institutions can lead to better effectivity and efficiency if the strategic planning concept is made applicable to technical education is proved beyond doubt and
supported fully by the observations.

The hypothesis that the leadership role is playing an important role and its commitment to change predominantly is supported by the study. The leadership qualities required to implement strategic planning approach are specified earlier.

The effect of management change in the field of education is a long term effect. The educational administrator must have thorough understanding of the process of management and educational planning. The institutional development plan can be divided into two parts:-

(a) It consists of elements of development of physical facilities such as construction of building, purchase of equipments, updating of equipments and machinery, additional class rooms and laboratories, hostels and play grounds etc. for which approval of All India Council for Technical Education, the State Government and Universities outside institution are needed.

(b) It consists of plan to cover the improvement of teaching work, practical training, students counselling and guidance, effective functioning of academic activities, research and development activities, extension services, rural development, transfer of technology and faculty improvement, setting priorities and phasing for which the approval of competent authorities are required.

The hypothesis of involvement of top management and educational administrators including teaching faculty in formulation of strategic planning is seen supported by the results of the finding. There has been different various aspect of strategic planning including promotion of human capabilities have been seen in the findings.

The hypothesis of correct assessment of manpower planning is essential before actual planning of the education programmes is also established. However, manpower planning and strategic planning should go together and concurrently. Similarly strategic human resource planning must be integrated with the strategic planning.

In planning process, defining and establishing objectives,
logical planning and task jobs and human resources are essential which is very well supported. The institution must formulate plan, establishing clearly the role of individual teacher to play, a role in institution building and review the plan periodically for progress and with modification of the same.

The hypothesis of attitudinal changes need motivating HRD is well established. HRD activities can also be considered in promoting human capabilities and competitiveness by the finding in survey. The hypothesis of the organisational building through people creating them productive and effective is also supported.

The hypothesis that HRD can be well established through the import of additional training through continuing education and training in technology/professional skills is supported. The role of teachers in the process of organisation buildings is also stressed.

The hypothesis of building effective HRD the change in employees attitude and their personal growth play an important role is also established. HRD identifies training needs, preparation of training development programmes, curriculum designing to meet the specific needs, follow up and evaluation. Employee-employer relations contribute to development of HRD culture in a significant way.

The technical education planning and management has become increasingly complex affair. Due to rapid and massive increase in the influx of students to the technical education system simultaneous growing scarcity of resources have necessitated a continuous and greater effort to improve the planning and resource allocation techniques in education institutions. An approach for strategic planning to technical education is proposed in figure No. 2.

In this study, the following hypothesis are developed by conducting survey and collecting information and each hypothesis is tested on the basis of information collected:

Strategic planning applicability to technical institutions is necessary in the technological changing environment to reduce wastage of resources is more

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Figure No. 2: Proposed strategic planning process for educational (non-profit) institutions.

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beneficial than traditional planning. Strategic planning is a relationship between planning and organisational performance. Strategic planning is a process that must adopt to constantly changing environment.

i) HRD attitudinal changes, organisational climate through training and re-training in technological and professional skill, play a significant role in building effective HRD.

ii) Top management and educational administrators and teachers involvement in the process of strategic planning and its implementation is essential.

iii) For effective implementation of HRD policies and strategic planning process in the technical institutes, the leaders must have special quality like character and integrity, foresight and vision, and good executive capabilities. The role of leader as a King-pin in institution administration for planning academic excellence.

iv) Teachers training and continuing education also play a significant role in effectiveness of HRD, their role in the present context is mixture of academic and administrative functions.

v) The hypothesis that the education system particularly technical education system approach should be mix of social demand approach and productivity approach is also supported.

10.2 ORGANISATIONAL EFFECTIVENESS:

The criteria of effectiveness differ according to the nature of the organisation i.e. public or private, profitable or non-profitable, service or production organisation. The educational institutions are non-profit public or private organisation. In this study, efforts are made to develop HRD individually or group wise to enhance their capabilities and creativeness. In a private sector organisation, the job satisfaction, high degree of power, better opportunities for promotion avenues and opportunities for demonstration of skills and abilities are higher leading to higher satisfaction among employees. Organisational commitment is positively related to job satisfaction. It is found that the participation in

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decision making was positively related to job involvement. Group processes facilitate the co-ordination between sub-systems of the organisation and provides an opportunity for growth of individuals in the organisation.

The organisational effectiveness is influenced by large number of factors. It depends on the type of organisation, its ownership or managements, organisational goals and objectives, its planning for growth, national and other competitions, top management, leadership and quality of output. For better effectiveness, it is highly complicated the inter-linkages amongst all above factors. Since large variables are involved in the effectiveness factor, it is difficult to measure the same. There are many studies where different criteria of effectiveness have been used such as social, economical or behavioral, productivity and growth. Some have also used organisational health and job satisfaction, but in this study efforts have been made to use social and productive criteria in achieving effectiveness through human resource development. The capacity development, creativity and innovation and capability developments are considered through manpower training and re-training and education in educational field.

In the healthy organisation, the system inputs particularly the finances and personnel are used effectively. In healthy organisation, the people should work hard. In educational organisations, the special properties need to be considered necessary to build an organisation. It is difficult to specify exactly and precisely the output of institution. The measurement of output is also equally difficult. The input in educational organisation has a wide variation, particularly in relation to students and staff. The intellectual ability, performance, capability in knowledge and skill in subject matter is also varying.

The components like strategic planning, manpower planning, human resource planning, developmental planning are important in human resource planning. Successful planning involves organisation
building, creates an opportunity to develop and maintain sound and clean plan of organisation and also create an opportunity for individual development in different functional areas of organisation.

10.3 HUMAN RESOURCE DEVELOPMENT:

HRD involves personnel appraisal, potential growth, job classification and rotation, counselling and career planning, training and development, climate creation, diagnostic surveys, personal functions, recruitment, industrial relation. Each organisation has a unique culture. An important factor in organisational excellence is the quality of leadership at top.

The hypothesis that human resource development in the technical institution improves the effectiveness of organisation has been supported very well. The relation between HRD and organisation development can also be established. HRD includes promoting individual growth, functional productivity and overall credibility for the function. The following are the steps in development of HRD.

(a) **Organisational needs** (Analysis phase).- This includes identification of needs, performing an organisational needs analysis, defining functions and formulating objectives of HRD.

(b) **Staff development phase** - This includes: identification of roles and activities on the basis of jobs/tasks; identification of competencies needed and assessment of competencies of each person and development of individual development plan (IDP), reassessment after appropriate time.

(c) **Staff and function evaluation phase** - This includes identification of organisational and or environmental barriers.

The HRD activities are aimed primarily on priority basis on the following
1. To promote human capabilities and competencies.
2. To create climate openness and trust.
3. To increase effectiveness and efficiency of organisation.
4. To improve quality of life.
Out of these 4 priorities, priority number 1 and 3 increase the effectiveness of the organisation and ultimately the productivity. However, the priority number 2 and 4 are concerned with the social justice and therefore, the mixed approach in developing the human resource is suggested.

The HRD philosophy aims at the creation of organisational climate, building team work, integration of individuals, collaborative culture, promotion of human capabilities and competence in terms of skills and knowledge to improve the efficiently and effectiveness of organisation.

10.4 HYPOTHESIS:

1) Strategic planning concept can very well be adopted to technical institutions in collaboration with manpower planning and human resource planning. Strategic plan is a mid term plan.

2) The main objective of HRD activities are to promote human capabilities and competence amongst the employees for organisational effectiveness, which has been very well supported in the study.

3) The hypothesis that the top management shall be involved in formulation of strategic planning is also supported. In this process all people from top to bottom should be asked to participate in formulation of strategic plan depending upon the skills, knowledge and capabilities.

4) Improving organisation skill, creation of productive and effective people, building cohesive and effective team, and attitudinal change, organisational climate, communication and co-ordination, integration of individuals and collaborative culture are the major areas to develop effective organisation.

5) Integration of manpower planning, with strategic planning and human resource planning will benefit organisation to be more productive and effective. In any planning of technical institutions, the manpower assessment and planning plays vital role.

6) In the system design approach in strategic planning, the team work and

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team planning and involvement of all the people in organisation plays an important role in promoting the effectiveness and efficiency of the organisation. Involvement of teachers and faculty in planning process and in administration will lead to better organisation.

7) The teacher training on competency based requirement and providing the training as pre-service and in-service programmes including practical training in industry will enhance the capability and competence of teachers to promote high quality training and quality product.

8) The educational institutions and particularly technical education institutions are social service to the community and not purely an economic service. Quality of product type approach in educational planning would be useful to make the technical institutions more effective and productive.

10.5 EDUCATIONAL PLANNING:

The success of application of strategic planning concept to technological institutions depends on the role of Government and its policy. Educational planning approach applicable to technical institutions depends on function of organisations and its usefulness. The organisation planning in case of industries can be of productivity and economic approach. In case of educational institution the mixed approach of productivity and social justice is useful. The educational organisation are non-profit oriented organisation. The social justice and productivity of educational institutions can not be measured accurately. Economic approach to technical education planning is considerable.

The importance of manpower planning and motivating the HRD and development of organisation cannot be ignored in planning and restructuring organisation for improving the capabilities, managerial activity, productivity and traits of individual of the organisation.

10.6 ROLE OF TEACHER AND DEVELOPMENT OF TEACHERS:

The role of teachers is considered very important to implement effectively the educational programmes. The role of teachers has been
changed considerably in past few decades. Besides teaching, the teachers have to perform extra curricular activities, social services, research, professional development etc. The teacher must update his knowledge and skills regularly. The following are the few areas:

The different types of training can upgrade the professional, managerial, and technical skills of all the ingredients of the organisation to make the organisation effective. Organisational growth, change in employees attitude, individual growth, new technologies etc. are visualised in effective organisation. The information and data required for identification of training needs:

a) job description of individual
b) job performance review
c) potential growth within organisation
(a) by short term courses/seminars/workshops
(b) thorough understanding projects and consultancy
(c) by on-the-job-training
(d) industrial and practical training
(e) higher academic qualifications

The policy support is needed from the management and State Government by accepting staff development programmes for different categories of people continuously, by providing human resource and providing suitable rewards and promotions etc. The policy of State Government should include identification of staff development needs, identification of potential staff, selection of appropriate persons, preparing the staff development plan at institution and State level. The management should extend full support in terms of finances, motivating the staff and identifying suitable agency for training. It is suggested that certain basic staff development programmes are compulsory.

The values, skills, knowledge and human relations, the factors that the teacher possesses largely influence the quality of education. The teachers play an important role in development and growth of technical institutions by way of training and particularly in the organisational

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development process. He plays a role of catalytic. The teacher should be represented on various management committees and boards including planning and teachers' welfare committees. Evaluation of teachers through performance appraisal system must be developed. Strategic planning is vital in technical institutions as well as in industries because of effectively discharging individual responsibilities, organisational development for appropriate objectives and aims of organisation, helps in development and utilisation human resources, contribution in decision making for guaranteeing the success.

The need for review and revise the present Quality Improvement Programme (QIP) suitably in view of change in functions of teachers. More programmes are needed by the Government of India (GOI) for training of engineering college teachers. Such facility should also be launched for teachers of technical institutions. Teachers association can play a significant role in upholding professional integrity, enhancing the dignity of the teacher and in curbing the professional misconduct.

10.7 LEADERSHIP IN EDUCATIONAL ORGANISATION:

The leaders in implementing strategic planning approach as well as in development of educational organisation plays an important role and he should possess some important characteristic and should have qualities like foresight/vision, honesty, character, public relation, initiative and drive to serve the people etc. The leaders help create a vision of the future. The leaders in organisation must have full powers and authority to deal with the situation arising in institution due to various reasons. The leaders must also be accountable for their performance and should see that resources at his disposal are utilised properly and also plan to generate resources from different sources.

10.8 SUGGESTIONS:

(1) There is an emerging demand that central recruitment of teaching professionals be based on merit and aptitude for teaching. A special
recruitment board be established to maintain quality of teachers and eventually a uniform service condition.

(2) Within the education system, the emerging trends have been posing management challenges, say for example inter departmental services, inter dependent library services, workshop facilities and services. The internal co-operation amongst the department needs co-operative attitudes among users.

(3) New attitudes conducive to development approach has to be developed besides skills and knowledge in managerial roles of decision making and leadership.

(4) Net working is essential in view of the scarce resources both at regional and national level. This net working can be in the areas of books, case studies, literature, faculty, research etc. Work technologies are fast changing. Information collection on all aspects is necessary.

(5) Management skills and methods have become more sophisticated. More emphasis is laid on developing professionalism among managers. Replacing the age old and traditional methods of management will improve the efficiency of the system.

(6) Further rapid changes in the economic scene and the trend towards globalisation of the country's trade, traditional methods of working manually need to be replaced. Office mechanisation and computerisation is essential.

(7) Advances in science and technology necessitate development of new skills and new attitudes in large number of people at managerial and operational levels.

(8) Improving the planning capability of the top level executives to changing needs and expectations.

(9) The training programmes to be offered should make the managers/planners become adaptable to these emerging changes, introduction of new work technologies and development of skills in new operational areas.

(10) Manpower development and training assumes great importance
particularly when the present education system is passing through a structural transformation. A consistent effort should be made to see that the teachers are well equipped, well trained and well organised in the institutions.

(11) A progressive management is naturally concerned about the needs and comforts of its employees, in their immediate work place and during their association with organisation. The institute has to recognise the responsibility to have welfare measures for their employees. The institute can introduce several intensive training for self development and educating their employees for higher degrees, financial assistance to teachers' awards for meritorious works etc.

(12) One of the major features of the proposed organisational renewal in improving internal competencies of these institutions is about a management change.

(13) The training for HRD is always unfortunately remain isolated from main objectives of the institution. There is need to integrate with overall objectives of the institution.

(14) There is a need to work out co-ordination at the national level to establish, identify norms of national standards and priorities in the field of technical education. There should be better co-ordination between policy making bodies i.e. AICTE, DTE, University and Local Management Boards etc.

(15) Students, teachers and administrative staff expert representation on the management committees of the institution. Management Board should invariably consists of prominent industrialists, academicians or professionals of repute.

(17) Granting high autonomy to different units in the organisation for use of resources and outputs. High autonomy also characterises co-ordination and inter-agency mechanism. An effective linkage be established between technical institutes and industries.

(18) It is suggested by various respondents following cells/Centres be established in the administrative machinery of the Government. It is

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observed from the study that it is necessary to establish the State College for Educational administrators planners, teachers and supporting staff with following functional areas -

(a) To provide induction and in-service education to all senior officers (administrators) and teachers.

(b) To have a research wing where the studies would be conducted in problems of educational administration, management and planning.

(c) It should conduct continuously pre-service and in-service training programmes to teachers and other supporting staff.

(d) It should have the policy of cross administration experience, case studies, data and information collection and supply, manufacturing teaching materials, training aids etc. and should build inter-state contacts.

(e) It shall arrange seminars, conferences, workshops or educational planning and managements.

(f) It should arrange the practical training to teachers to keep pace with latest technologies in industries.

(g) It should conduct classes for resources generation, resource planning and utilisation.

(h) It should arrange short term courses as continuing education programmes.

(19) The State Government should establish a State Council for Technical Education similar to that of All India Council for Technical Education at national level.

(20) Establishment of Curriculum Development Cell at State Board of Technical Education.

(21) Establishment of manpower Planning, Monitoring and Evaluation Cell to function on the following lines.

a) Analysis of existing manpower structure

b) Inventory of employment and short term requirement for manpower

c) Assessment of available facilities for training on-the-job training

d) Allocation of various occupations according to occupational
e) Estimated output from the educational syllabus etc.

(22) Establishment of Human Resource Development Board for Technical Education to create a HRD mechanism at state and regional level.

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