

**Faculty of Education and Psychology  
at Freie Universität Berlin**

**The Obstacles of Managing Change in the Educational System of Iran  
(A Study of the High Schools in Kermanshah)**

Dissertation  
For Doctor of Philosophy (PhD)

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## Abbreviations

ADKAR	Awareness, Desire, Knowledge, Ability and Reinforcement
BA	Bachelor of Arts
BS	Bachelor of Science
CLB	Continuum of Leader Behavior
Df	Degree of Freedom
DT	Delphi Technique
EFA	Education For All
ERG	Existence, Relatedness and Growth
F	Frequency
Fb	Feedback
GNP	Gross National Product
ICT	Information and Communication Technology
IT	Information Technology
LO	Learning Organization
NB	Nota Bene
nAch	Need for Achievement
nAff	Need for Affiliation
nPow	Need for Power
OD	Organizational Development
P	Percentage
PhD	Doctor of Philosophy
POSDCoRB	Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting
SBM	School-Based Management
SD	Standard Deviation
SPSS	Statistical Package for Social Sciences
TPB	Theory of Planned Behavior
TQM	Total Quality Management

# 1 Introduction

The world is changing. The rate of change at the current age is more than any other time during human life time. Organizations and human societies should plan and change according to the global changes in order not only to achieve superiority but also to survive. In other words, in order to survive, they should create a competitive advantage. The current conditions prevent organizations and societies which are incapable of planning and making suitable changes from surviving and competing with other similar associates. Anyway, this question is aroused that what world will we be living in 20 years with all the changes in the fields such as information technology (IT), education, biology, medicine, cultural values, population, environment and international relations? Of course, nobody is sure about this, but one thing is certain and that is continuous challenges and increasing changes. As Chambers (2005) has pointed out, everything is changing except the change itself which is always stable.

Although planning for changes and trying to perform it successfully requires a lot of energy, the available facts make organizations evaluate their performance regularly and apply more suitable plans to harmonize themselves with environmental and global changes. Of course there is no doubt that successful, pioneering and proliferating organizations have moved much further and initiate many of changes themselves.

In general, among the organizations which have a determining role on positive changes and development of a country, we can point to the “Ministry of Education” which is the main administrator for educating and human force. Undoubtedly, if ministry of education fulfills its intrinsic and real responsibility, it will be one of the most important organizations which can play a basic and determining role on the way of multilateral changes and developments. On the other hand, disorder and stagnations of educational systems can be the main reason for backwardness and failure in different cultural, social and economic aspects of societies.

In recent decades, ministry of education in Iran has not been able to keep step with global changes or even with the changes of other sections inside the country. Centralized educational system, management problems, low career satisfaction among teachers and personnel of ministry of education and their inappropriate living conditions, lack of motivation among students, improper educational material and content, shortage of budget and educational credits, lack of suitable planning and programming for creating positive changes and lack of successful accomplishment of available plans and programs can be among the problems which prevent educational systems in Iran enjoy the proper changes. Besides the problem of education in Iran at a national level, department of education of Kermanshah has not enjoyed an acceptable place among different provinces of the country; according to the statistics, among 31 provinces of Iran, it has been placed at a lower level than the country’s average in the recent years. For instance, an investigation through the results of entrance exam of universities and comparison of the number of high school students of Kermanshah accepted in universities and higher educational centers with other provinces shows that Kermanshah was among provinces which had the least number of accepted students (Karami, 2007). Of course, there are some other considerable statistics about the same issue which will be dealt with later. The 20-year

experiences of the researcher of teaching and working in different sections and levels of educational system are also indicator of this bitter and harsh reality.

Therefore, considering the researcher's experiences and the problems of education, it seems that our educational system has faced various difficulties and obstacles in planning changing programs and successful implementation of educational changes at schools. It is attempted to recognize the main and effective factors in this regard in the current study. Factors such as: management and leadership of change, education and change of behavior, motivation and change, resistance against change, educational need assessment, organizational structure of education, participation and change, control and supervision, cultural-social grounds of change, financial facilities and situations, and information technology.

## **1.1 Statement of the Problem**

During the three decades after Islamic Revolution of Iran, experts and authorities of educational and cultural affairs have attempted to change and improve the conditions of education in Iran. Some of the most important actions that they have taken and are reported by ministry of education are: preparing document of basic change in educational system, preparing document and declaration of revision of educational system, preparing national document of education during the fourth 5-year program of development of the country, preparing national document of education for everybody, preparing perspective document of developments of education in Iran according to the 20-year perspective document of multilateral economic, cultural and social developments in Iran during 2005 to 2025, holding various scientific seminars such as national-engineering seminar of revision in education, doing research and publishing various articles and books about education, creating major changes in the content of text books, in the structure of education, and in training methods of teachers and instructors, increasing educational coverage rate of children of 6-10 to 98.5, establishing classes in deprived regions, decreasing sexual inequality in educating from 23.4 in 1976 to less than 7% in the year 2003, increasing educational level of teachers during all educational levels, providing new financial sources, providing and training human forces, composing and revising official rules and regulations, increasing the proportion of technical-professional students (Karami, 2007).

Despite all these attempts and apparently performed changes and revisions, and in an age which is known as the age of knowledge and information, and while education is considered as multilateral development key, Ministry of Education of Iran, especially in Kermanshah Province, was not able to enjoy the required efficiency and effectiveness. Considering the concentrated educational system in Iran, some of the suggested plans and changes have not been able to generalize to all different provinces and regions of the country; thus, their efficiency has been under question. In some other cases, the required conditions and grounds for their successful accomplishment have not been provided. For instance, in a study conducted by the researcher, it was revealed that almost all educational plans and changes in schools of Kermanshah have been notified by the Ministry of Education to all schools all over the country and no sign of meaningful plans and changes were seen which could be provided according to the regional and local situations and needs and notified to a specific school, region or province. On the other hand, the book of document and declaration of revision of education system in Iran, which is published by the Ministry of Education as a valid and official document, says that nowadays, most of addressees and supporters of education believe that educational system in Iran is not respondent to the great amount of demands and it needs serious and basic changes. They also claim that it is impossible to ask educational organizations to fulfill their performance

with abolished procedures and without considering increasing needs and demands. Our educational system requires change because of various reasons and there is no doubt in it. We are experiencing a kind of “educational efficiency crisis” in educational system which has turned revision and change of educational system of Iran into one of the most important problems of all experts and authorities of education all over the country. This issue is so important that change and revision of education has been devoted to law makers and executive organizations and its performance has been enjoyed a great significance (Ministry of Education, 2004). It is also stated in this book that despite problems and difficulties in education, we have witnessed a constant decrease in the budget of education since 2000. In 2002, total number of 1160000 out of 15 million students of primary and secondary schools failed and 275000 students abandoned studying.

This is while education in Kermanshah had even more problems and difficulties. The available statistics show that the educational performance of this province was even lower than the average of the country. For instance, the results of exams of first grade of high school in 2007 show that Kermanshah was placed in the 27th rank among the 31 provinces of Iran (Statistical Annual of Ministry of Education, 2008). Moreover, Table 1- 1 of promotion rate of students from 1st grade to the 2nd or from 2nd grade to the 3rd in high schools during 2002 to 2006 shows that the educational performance of Kermanshah was even lower than the average of the country (Karami, 2007).

**Table 1-1** Promotion Rate of High School Students during 2002- 2006

	Year	2002-2003 (%)	2003-2004 (%)	2004-2005 (%)	2005-2006 (%)
Promotion rate of 1 <sup>st</sup> to 2 <sup>nd</sup> grade	Performance of Kermanshah	65.7	67.2	66.5	69.7
	Average of Iran	70.4	71.3	69.8	73
Promotion rate of 2 <sup>nd</sup> to 3 <sup>rd</sup> grade	Performance of Kermanshah	97.4	97.5	96.2	99.1
	Average of Iran	97.8	97.7	96.7	97.9

Despite this fact, it is stated in the perspective document of Islamic Republic of Iran in 20 years (2005-2025) that Iran will change into a developed country up to that time with the first economic, scientific and technological place at regional level specially at the southwest of Asia which includes middle Asia, middle East and neighboring countries (Perspective Document of Iran in 20 Years, 2005). Of course, the role of education has been greatly emphasized in this document. Document of the 4<sup>th</sup> program of development of Iran during the years between 2006 and 2010 has also focused on development of technology and revision of educational system in Iran in order to achieve the perspective objectives in 20 years (Document of the 4<sup>th</sup> Program of Development, 2004).

The mentioned data and information indicate that educational system of Iran, especially in Kermanshah, has not enjoyed the required efficiency and effectiveness and serious researches should be carried out in its different sections and structures. As mentioned earlier, it seems that shortcomings are more serious in planning educational changes and programs as well as their

successful implementation and the following issues have a greater importance for scientific studies: management and leadership of change, motivation and needs of administrators, resistance against change, financial sources of education, participation in education, educational control and supervision, information technology, training administrators and changing their behavior, cultural-social grounds, educational plans, etc. furthermore, among different sections and structures of education, high schools and secondary education enjoy a greater significance due to different factors:

- Secondary education is a link between the official trainings of education in Iran and job markets.
- Secondary education is responsible for training and preparing students to enter universities and higher educational centers.
- Secondary education faces more difficulties in comparison with other educational levels.
- Secondary education in Kermanshah has a weaker performance in comparison with the average of the country.

Therefore, the present study deals with the effective factors on the performance of educational system; it especially tries to recognize the obstacles on the successful implementation of educational changes and programs to high schools.

## **1.2 The Objectives of the Study**

The main objective of this study is recognition of the obstacles on the successful implementation of educational changes and programs to high schools. Besides this main objective, there are some minor objectives which would be dealt with. These objectives would be achieved by investigation of the following issues:

- Leadership of change
- Behavioral change of administrators, such as: principals, teachers, students and their parents
- Process of planning and performing educational changes and programs
- The ways of creating motivation in administrators
- Organizational structure of education
- Resistance against change
- Cultural-social grounds of change
- Financial sources of change
- Participation in the process of change
- Control and supervision on the process of change
- Information technology in the process of change
- managing change in educational systems based on management and change theories
- The extent of achieving objectives of education in the process of educational changes
- Presentation of practical and functional strategies in order to decrease obstacles on the successful implementation of educational changes and programs in the educational processes.



### **1.3 Research Hypotheses**

Regarding the performed studies about obstacles on the successful implementation of educational changes and programs in schools as well as referring to the opinions of experts of education and principals of schools, the following research hypotheses have been formed and analyzed in order to achieve the objectives of this study:

- The transformational leadership does not occur efficiently for the successful implementation of the plans of change.
- The required planning for the behaviour modification of the executives of the plans of change does not occur.
- The designing of the plans of change does not take place based on the scientific needs assessment.
- Necessary planning for creating motivation among the executives of the plans of change does not take place.
- The organizational structure of the system of education has not paved the way for the successful implementation of the plans of change.
- Required planning does not take place to adjust the executives' resistance against the plans of change.
- The necessary socio-cultural backgrounds to execute successful plans of change have not been provided.
- The financial conditions and possibilities required for the successful implementation of the plans of change have not been provided.
- The backgrounds necessary for the participation of the executives in designing and the manner of execution of the plans of change have not been provided.
- The system of the education has not achieved the intended goals in the successful execution of the plans of change.
- There is a significant difference between the average of opinions of male and female headmasters about the obstacles of change.
- Enough scientific control and supervision over the implementation of the plans of change does not take place.
- The conditions and grounds required to use Information Technology (IT) for successful implementation of the plans of change have not been provided.

### **1.4 Research Questions**

In order to increase the validity and accuracy of this research, Delphi technique was used to investigate the opinions of experts of education about the obstacles on the successful accomplishment of educational changes and programs at schools. Thus, the following research questions also were formed and described:

- What are the relevant obstacles of the educational administration and leadership in successful accomplishment of educational changes and programs?
- What are the relevant obstacles to the training of administrators of educational changes and programs?
- What are the relevant problems of the planning educational changes and programs?
- What obstacles are there in the motivation of staffs?

- What are the relevant problems of the organizational structure of education about accomplishment of educational changes?
- What are the relevant problems of control and supervision of accomplishment of educational changes and programs?
- What are the cultural-social obstacles in the accomplishment of educational changes?
- What are the obstacles in participating in planning and accomplishing educational changes?
- What are the reasons for resistance of administrators against change?
- What are the financial problems of accomplishing educational changes?
- What are the problems about information technology and accomplishment of educational changes?
- How far has education been able to achieve its objectives in accomplishing educational changes and programs?

Moreover, in this study relevant evolution of theories and literature of management and change and their application in managing change in education has been surveyed scientifically. Of course, this has been done in order to response to the following research question:

- How can we managing change in educational systems based on management and change theories?

## 1.5 Significance of the Study

As mentioned earlier, politics of Iran in different cultural, social and economic aspects are shaped in a 20-year perspective (2005-2025) and it indicates that Iran should be able to achieve the first economic, scientific and technological place in the region and the Middle East. To achieve the objectives of this program, it requires taking vital and fundamental steps such as:

- Multilateral, scientific and precise recognition of sources and limitations in different sections and structures (investigation and analysis of the current conditions).
- Planning necessary changes and programs based on realities and needs in order to achieve the objectives of this program, regarding recognition resulted from sources and limitations (prediction and planning desirable conditions).
- Exact and prompt accomplishment of planned changes and programs according to the predicted plans in order to achieve the objectives (promotion from the current condition to the desired condition).

Education can play a determining role in achieving the objectives of this program because of its mission in training the required human forces in different sections of the country. This is while the inefficiency of this organization to the needs of the society has lead into preparation of document and declaration of revision of educational system and it has faced various criticisms from its performance. Therefore, educational system in Iran requires fundamental changes in its politics, strategies, programs and performance, especially change in the attitude and viewpoint of human forces at national and regional levels; because as W. Edwards Deming has stated, "Nothing changes without personal transformation"(Senge, 1999).

Thus, conducting valid researches in different sections of educational system of Iran is an unavoidable necessity. This necessity is more noticeable about Kermanshah due to its doubled shortcomings.

It seems that the current research enjoys a great significance. Investigating the obstacles on the successful accomplishment of educational changes and programs, it can present valuable

suggestions in this regard and can provide designers, programmers and administrators of educational programs at national and regional levels with required and essential information. It can also be effective in achieving Iran's major objectives in a 20-year perspective.

## 1.6 Operational Definition of Key Terms

Functional definition of key terms and expressions can help the researcher in doing activities, measuring and changing factors in order to reach the goals of this research. These definitions are used as the basic concepts of research and its findings. Key terms of this research and their definitions are as follows:

**Change of Behavior:** It means providing grounds for creating positive changes in knowledge, attitude, individual behavior and group behavior of administrators for the successful implementation of educational changes and programs.

**Control and Supervision:** It refers to the extent and approach of supervision and evaluation of educational system from the process of planning and performing educational changes and programs at schools.

**Cultural-Social Grounds:** It refers to the existing culture in the society and attitudes and beliefs about education and the ways that people and other organizations and institutes can support and cooperate with education, especially at schools level.

**Delphi Technique:** It is a technique which has been used to identify the extent of unanimous agreement of a group of experts and authorities about a certain issue. In this research, the extent of agreement of experts of education about the obstacles of change is investigated.

**Document of the 5-Year Program of Development:** In order to direct its activities and move according to specific objectives, the government in Iran has prepared 5-year economic, cultural and social programs. The fourth 5-year program is in progress now (2005- 2009).

**Educational Changes and Programs:** Any plans, programs, actions and changes that are planned at the Ministry of Education or province education organization or education department of Kermanshah and are circulated to schools for accomplishment.

**Financial Sources:** It means the extent of investment of government in education, especially at school level. In this research, situation of educational environments, facilities and equipments as well as annual educational budget of schools are noticed.

**Information Technology:** It refers to the extent of attention and emphasis of education on real employment of up-to-date knowledge through connecting internet and the extent of financial investments and facilities for students and teacher to access internet services.

**Motivation:** It refers to internal or external factors which are the main stimulus of behavior and respond to the behavioral questions and are directed according to specific objectives which are successful implementation of educational changes and programs in this research.

**National Document and Declaration of Revision of Educational System:** They are documents which are prepared for education on the basis of the 20-year perspective document. They indicate revisions and changes which should be made in education during the perspective program.

**Obstacles of Change:** If basic and effective factors such as transformational leadership, motivation, resistance against change, etc. are ignored or they are not conducted in accordance with educational and organizational situations and conditions, they will be barrier from successful accomplishment of educational changes and programs at schools.

**Organizational Structure:** It refers to organizational chart of education at different levels of education as well as schools.

**Participation:** It refers to the extent of presence and role of administrators (school principals, teachers, students and their parents) in designing, planning, performing and evaluating educational changes and programs which are circulated to schools.

**Resistance to Change:** It means self reservation and hesitation which is normally expressed as a respond or reaction to the plans and programs of change and is considered as an obstacle against their successful implementation.

**Transformational Leadership:** It is the process of effective guidance in planning and performing educational changes and programs which will lead to improvement of educational performance at schools.

**Twenty-Year Perspective Document:** It is a document which is prepared at national level and includes a desired situation which should be achieved in different economic, social and cultural aspects during a period of 20 years. This period in considered between 2005 and 2025.

## 2 Management

### Introduction

Three main variables of this research are management, change and education. Through chapters two, three and four these variables and evolution of management and change theories have been studied respectively. On the one hand, these chapters consist the theoretical framework of the study and they will be relevant guidelines for the filed study in the current research. Of course, the research hypotheses and questions have been basicly designed based on the literature review and also they were effective in designing the questionnaires. On the other hand, the researcher was keen to conduct an aside conclusion through the literature review of management and change theories and answer to this main research question:

How can we managing change in educational systems based on management and change theories?

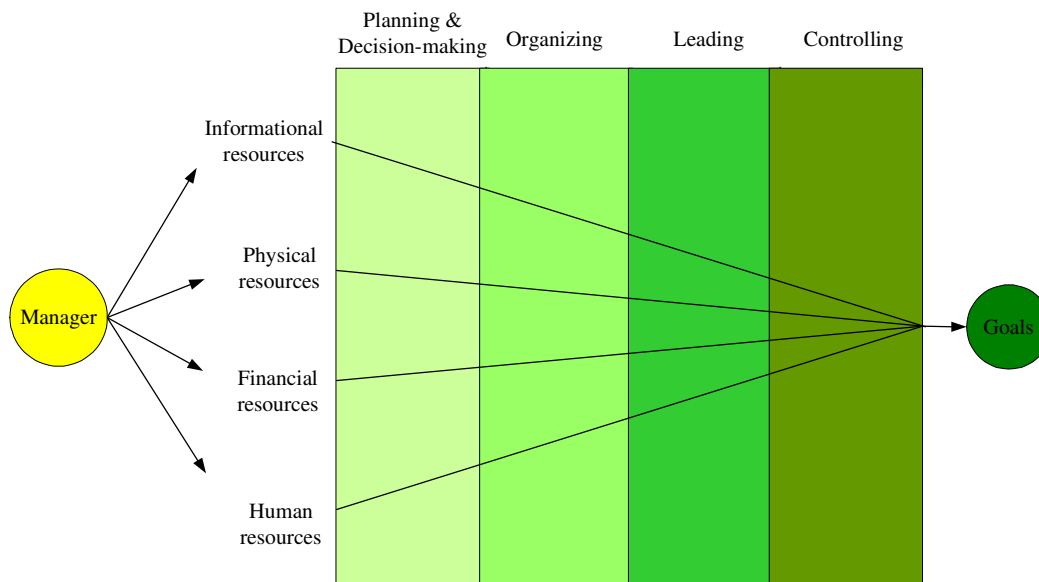
### 2.1 Management Definitions

It is obvious after a review of the literature that there are almost as many definitions of management as there are writers in the field. A common thread that appears in these definitions is the manager's concern for accomplishing organizational goals or objectives. According to Hersey and Blanchard management is the process of working with and through individuals and groups and other resources to accomplish organizational goals. This definition, it should be noted, makes no state of business or industrial organizations. Management, as defined, applies to organizations whether they are business, educational institutions, hospitals, political organizations, or even families. To be successful, these organizations need their management employees to have interpersonal skills (Hersey and Blanchard, 2001). Early twentieth-century management writer Mary Parker Follett defined management as "the art of getting things done through people (<http://wiki.answers.com>, 01.12.2009).

Some considered management as the science and art of creating coordination in efforts of the organization's members and use of resources in order to reach defined objectives. Another group defined management as carrying out duties such as planning, organizing, creating coordinating, controlling, etc. one of the scholars of management and economy –Herbert Simon- defined management equal to decision-making and considered it as the best and noblest role of a manager. In another definition, management is the process of adopting organizational resources to reach organizational objectives through planning, decision-making, organizing, leading and control (Dubrin, 2004). Robbins (2005) notes a manager is a person who works with and through other people by coordinating their work activities in order to accomplish organizational objectives and management is coordinating work activities so that they are completed efficiently and effectively with and through other people.

## 2.2 Management Process

Those who have defined management have named some duties that any manager is required to carry out in his job. Authors and scholars of the field have addressed these duties based on their own viewpoint and specializations. Some have focused on particular duties and other group emphasized on other duties. A useful method to understand managers' tasks is to pay attention to their job as a process or a collection of activities in order to provide goods or services. In procedural viewpoint toward management, managers use organizational resources to reach the objectives and carries out four management duties (planning and decision-making, organizing, leading and controlling) as shown in **Figure 2- 1** (Dubrin, 1990).



**Figure 2- 1 Management Process**

### 2.2.1 Organizational Resources

Managers use resources to get to their objectives. Organization's traditional resources are divided into human, financial and physical categories. In recent years, technological resources of information are of high importance. Organizations provide goods and services through these resources and other ones. A manager's efficiency depends on his skill in appropriate adaptation of resources to provide goods and services and get to organization's objectives. Any of them will be discussed briefly:

#### 2.2.1.1 Technological and Informational Resources

One of the resources that many of organizations intensively need in order to survive is access to information technology. It is important and needed information used by managers and organizations in doing different tasks and helps them effectively in reaching to organizational objectives (Dubrin, 1990).

### **2.2.1.2 Physical Resources**

The second group of resources that managers use to reach organization's objectives is physical resources. Physical resources are tangible and real tools including raw material, building, official equipments, computers, machines and physical properties.

### **2.2.1.3 Financial Resources**

Another resource of an organization is its capital. In other words, financial resources include the money manager and organization use to reach organizational objectives. Since the organization's capital is used to obtain other resources (human, equipments, technology), survival of the organization depends on sufficiency of financial resources.

### **2.2.1.4 Human Resources**

One of important organizational resources is organization's human resources or its members. In fact, organization as a simple complex consists of individuals. A commercial organization's human resources can include several specialists like engineers, accountants, sales persons, secretaries, mechanics and machines and computer users. People through whom managers of the company reach to their objectives.

## **2.3 Management Duties (Functions) and Their Systemic Relations**

Management authorities and those who defined it have determined managers' duties and functions in their definitions. Gulick and Urvick for the first time expressed managers' duties by using the word "POSDCoRB". According to them, managers' duties include planning, organizing, staffing, directing, coordinating, reporting and budgeting. However, the four duties most of the authorities have agreed upon are: planning and decision-making, organizing, directing (leading) and controlling Figure 2- 2 shows management duties or functions in relation to management and organizational effectiveness.

### **2.3.1 Planning**

Planning is one of the fundamental duties of a manager. It requires forecasting, defining objectives and destinations of the organization and sectors and finding proper ways to achieve them. In order to reach the organization's objectives, planning introduces logical and rational ways (koontz, 1990).

Planning is the first step management process. Organizations need planning in order to be successful. Members of organizations also need objectives as well as plans to reach them. Planning is the process of aiming and exact determination of the path of progress and reaching to the objectives (Lussier, 1997).

Planning is the logical thinking through goals and making the decision as to what needs to be accomplished in order to reach the organizations' objectives. Managers use this process to plan for the future, like a blueprint to foresee problems, decide on the actions to evade difficult issues and to beat the competition (Bateman and Snell, 2007).

### **2.3.2 Organizing**

Organizing is vital for success. A manager must design and establish organizational system to perform the plans. Organizing is the process of delegation of authority and creating coordinating among functions and resources in order to reach the objectives (Lussier, 1997). Organizing is defined as recognizing and classifying needed activities, grouping vital activities within the

framework of reachable objectives, allocating a group of activities to a manager and authorizing him to supervise them and creating horizontal and vertical coordinating in organizational structure (Koontz, 1990). When managers organize, they determine what tasks are to be done, who is to do them, how the tasks are to be grouped, who reports to whom and where decisions are to be made (Robbins, 2005).

Today is the age of complex and large organizations and managers should know how to organize, establish, amend and change them. Organizing is an essential step in reaching to the objectives and it is through organizing that the general objective and the main mission of the organization is divided into more detailed objectives and duties of units. As a result, the objective becomes possible. It is by organizing those duties, authorities and responsibilities of the units and posts are defined and their coordination and relationship are determined. Organizing is a constant and permanent process a manager is always facing and is not limited to early stages of organization designing.

A manager must know their subordinates and what they are capable of in order to organize the most valuable resources an organization has, its employees (Bateman and Snell, 2007).

### **2.3.3 Directing (Leading)**

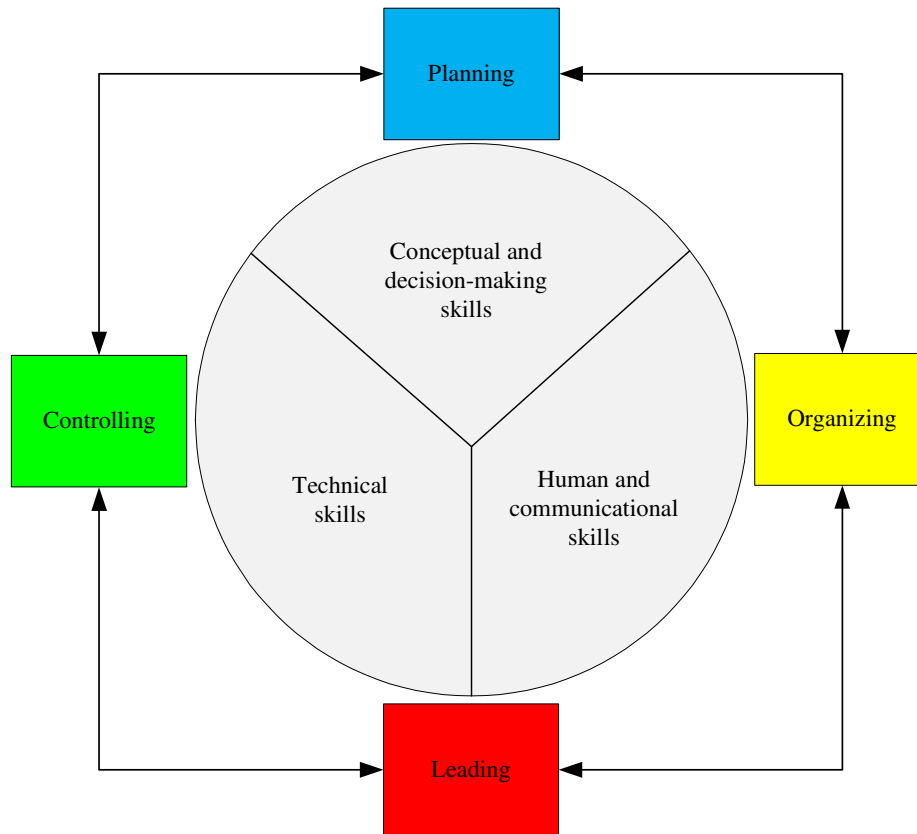
In addition to planning and organizing, should cooperate with his staff in doing their daily jobs. Directing is the process of influencing the staff to make them try to reach organizational objectives. Managers should relate the staff with the objectives and motivate them (Lussier, 1997). Directing also includes interpersonal processes like motivation, relation, leading and guiding the employees in reaching to their objectives. Simply put, directing is the process through which the organization's manager tries to establish motivation and effective relation in order to ease his duties and prod his staff to carry out their duties willfully. Therefore, leading in its organizational aspect is not separate from and independent of management, but one of its main and important functions. Any manager should carry out this function in addition to other functions like planning, organizing and controlling. The most important point in leading is directing and influencing the members of organization. Leading requires influencing people and manager as a leader should be able to influence his employees. In other words, he must make his employees accept his influence and power.

### **2.3.4 Controlling**

There is no doubt that no activity in an organization would be successful, unless it is controlled properly. Controlling informs the manager about the possible ways toward objectives and missions and gives him authority of pursuit, assessment and correction. Controlling is equipment managers of different levels of an organization –from the highest levels to supervision levels– use and its necessity is completely clear. Without an effective control system, organization fails to complete its missions and cannot use its resources appropriately.

Controlling means being certain of accordance between function and plans, and comparing real function to predetermined standards. If there exists significant difference between desirable determined function and current real function, manager should amend it (Dubrin, 1990). Without controlling, objectives could not be obtained. Controlling is the process of establishing and enforcing mechanisms to be certain of reaching to the objectives (Lussier, 1997).

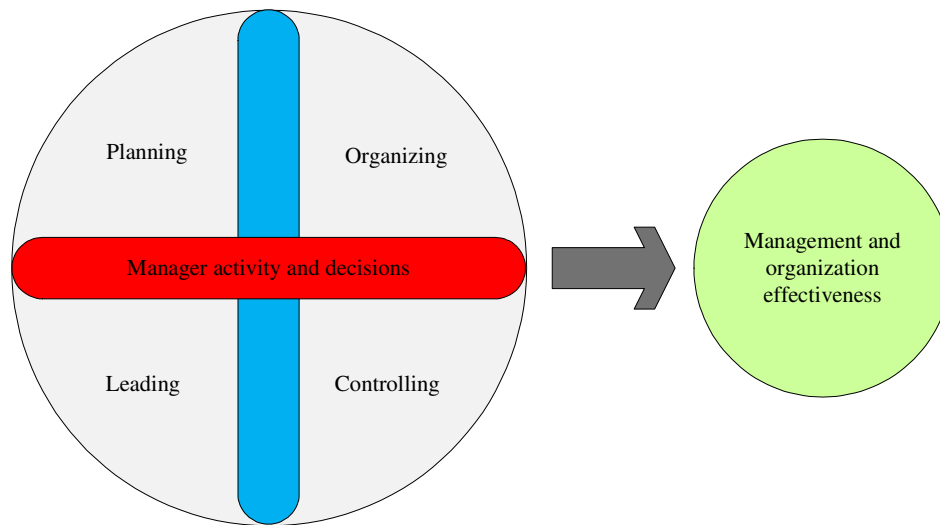




**Figure 2- 2** Management Functions

## 2.4 Systemic Relationship of Management Duties (Functions)

It must be mentioned that the relationship of management functions is not a linear process. They are systematically related and interdependent. It is an incorrect assumption that managers plan firstly, and then organize, lead, and finally control. Managers often carry out all these functions simultaneously. In addition, any of the functions is related to other ones. For instance; if you plan weakly, you would not reach your objective, even if you organize, lead and control effectively. Also, if you start with correct planning, but organize and lead weakly, you may not reach to your objectives. Figure 2- 3 shows this process (Lussier, 1997). As it is shown in this Figure, any of management functions is a component of the entire system and according to bilateral arrows; these functions are in close relation and compose management functions as a whole.



**Figure 2- 3** Systematic Relationship of Management Functions

## 2.5 Management Skills

Robert L. Katz believes that three main managerial skills that must be cultivated and enhanced by the organization are *technical*, *human*, and *conceptual*. The degree of development a manager has in each of these three skills will have a strong impact not only upon the success of the organization but also upon the career success of the manager.

**2.5.1 Technical Skills** are those abilities that are essential to use knowledge, methods, techniques, and equipments and carry out a certain task. Examples of technical skills are writing computer programs, analyzing marketing statistics. Technical skills are usually obtained through training programs that an organization may offer its managers or employees or may be obtained by way of a college degree.

**2.5.2 Human Skills** engage the ability to work with, motivate, and direct persons or groups in the organization whether they are subordinates, peers, or superiors. Human skills, therefore, relate to the individual's expertise in interacting with others in a way that will enhance the successful completion of the task at hand. Some human skills that are often necessary for managers to display are effective communication, creation of a positive attitude toward others and the work setting, development of cooperation among group members, and motivation of subordinates.

**2.5.3 Conceptual Skills** need an ability to realize the degree of complexity in a given situation and to reduce that complexity to a level at which certain courses of action can be derived. Examples of situations that require conceptual skills include the passage of laws that

affect hiring patterns in an organization, a competitor's change in marketing strategy, or the reorganization of one department which ultimately affects the activities of other departments in the organization. The appropriate mix of these skills varies as an individual advances in management from supervisory to top-management positions. This is illustrated in Figure 2- 4.

Management levels	Skills needed
Top management	Conceptual
Middle management	Human
Supervisory management	Technical

**Figure 2- 4** Management Skills Necessary at Various Levels of an Organization

While successful managers must possess a high level of capability in technical, human, and conceptual skills, it is also true that each skill will vary in importance according to the level at which the manager is situated in the organization. In general, technical skills become least essential at the top level of the management hierarchy, replaced with a greater emphasis on conceptual skills. Technical skills are most pronounced at lower levels of management because first-line managers are closer to the production process, where technical expertise is in greatest demand. Human skills are similarly necessary at each level of the management hierarchy. Conceptual skills are vital for top managers because the plans, policies, and decisions developed at this level require the ability to understand how a change in one activity will affect changes in other activities (<http://en.articlesgratuits.com/management>, 05.05.2009).

## 2.6 Distinction between Management and Leadership

Management and leadership are often thought of as one and the same thing. There is, however, an important difference between these two concepts. Leadership is a broader concept than management. Management is thought of as a special concept in which the achievement of organizational goals is important. The main distinction between the two concepts, therefore, returns to the word organization. Leadership occurs any time one attempts to influence the behavior of an individual or group, regardless of the reason. It may be for one's own goals or for those of others, and may or may not be congruent with organizational goals. Warren Bennis believes that the manager administrates; the leader innovates. The manager maintains; the leader develops. The manager focuses on control, organizations and structure; the leader concentrates on trust and people. A manager does things right; a leader does the right things (Heresy and Blanchard, 2001).

According to Kotter management is a set of process that can keep a complicated system of people and technology running smoothly. The most important aspects of management include planning, budgeting, organizing, staffing, controlling, and problem solving. Leadership is a set

of process that creates organizations in the first place or adapts them to significantly changing circumstances. Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles (Kotter, 1996). A leader can be a manager, but a manager is not necessarily a leader.

## **2.7 Evolution of Management Theories and Thoughts**

In the field of management and organization, propounding management and organization theories can be traced back to the early years of the 20<sup>th</sup> century when Taylor and Fayol presented the principles of administrative and scientific management and Weber suggested the Bureaucracy theory. Afterwards, movement of human relationship and behavior management shaped in 1930's and the last school based on contingency and systemic theories was founded. Nowadays, this school is the dominant thought in management and organization.

Several scholars have classified management and organization theories differently; however, three main schools of scientific management, human relationship and systems management can be noticed in almost all of them. Following the historical classifications, William Scott divides schools of management into three categories: 1- school of the Classic, dealing division of labor, hierarchy, span of control and logical structure, 2- school of the Neoclassic, known through the movement of human relationships and 3- systemic school of organization, describing organization as a system with variables dependent on environment. In systemic thought, organization is a holistic system consisting of related and interactive components and interdependency is its main characteristic. If parts and sections which form an organization are studied separately, organization would not be understood correctly since interrelations among sectors and components are the factors making organization a united complex; relations to which previous schools did not pay considerable attention.

Systemic thought in management provided a more complete image of organization through paying attention to the organization's internal and external factors and suggested subtler theories to analyze management and organization. Contingency theory is extracted from systemic school in management, considers absolutism in management as a mistake and defines that desirability of any method in management depends on conditions and situations surrounding the organization at a particular time and location. In this theory, desirability of management methods depends on the situation and a single method which is desirable and appropriate in a given situation, in another situation may not seem so. Therefore, such theories are named "depending on" theories, as well.

### **2.7.1 Classic Management Theories**

Salient characteristics of Classic management, i.e. bureaucracy, administrative and scientific management, include enforcement of management in early stages of organizations, paying attention to quantity and increasing the output, respecting enforcement rules and regulations, employment rules and official hierarchy, legal power and authority and professional capacities. Each of the American Frederick Winslow Taylor, called the father of the world's scientific management, French Henry Fayol and German Max Weber had a considerable role and share in formation and realization of Classic management. Although being physically far apart, they all have suggested similar ideas. This is why all the three theories seem related to classical management. The theories have advantages and disadvantages. Principles of proficiency, division of labor, structure, preventability, stability and rationality are some of the advantages

and inflexible rules, mere attention to quantity increase, goal displacement, self-centeredness, high expenses of control and supervision, centralization and mechanical view toward organization and people are some of the disadvantages.

### **2.7.1.1 Taylor's Scientific Management**

Taylor (1856-1915), a proficient American engineer, who had started working as a joss and progressed to be a head engineer proposed his scientific management theory in 1911 by publishing his book named "Principles of Scientific Management". Since traditional work methods of that time were bothering him, he tried to define particular instructions, regulations and rules to prevent losses in employees' attempts and increase their efficiency. His collection of techniques designed to prevent losses in employees' attempts and increase their efficiency was called "Principles of Scientific Management". They are briefly defined as the followings:

- 1-There is only one best way to do any task.
- 2 -There is only one best tool to do any task.
- 3-In order to do any task, first the best way and then the main tool must be determined through study and analysis.
- 4-Any individual must be rewarded with regard to his function.

Principles of scientific management and adopting them in industrial organizations made the foundations of new knowledge of management and led to the creation of several theories within the territory of large public and private organizations. By adopting scientific methods, Taylor tried to increase the production and also find a way to pay more to the staff and teach and train them. Scientific management emphasized on division of labor into its components and submitting each part of the job to those who are skillful in doing it. It also focused on time and motion study. At first, the objective of division of labor in this theory was to improve the efficiency and to benefit from work force and production staff. However in practice, this process destroyed the comprehensiveness of the work and led to alienation and frustration from the job.

### **2.7.1.2 Fayol's Administrative Management Theory**

Administrative management theory is one of the first comprehensive statements of a general theory of management, developed by the French management theorist Henri Fayol (1841–1925), one of the most influential contributors to modern concepts of management. Fayol has proposed that there are five primary functions of management: (1) *planning* to foresee, anticipate and make plans. (2) *Organizing* to provide the *Function* with all is needed for its smooth running: Supplies, Tools, Funding, and Employees. (3) *Commanding* to lead the people employed by the organization. (4) *Coordinating* to harmonize all actions of an organization in order to facilitate its smooth running and success and (5) *controlling* to *verify* if everything happens in accordance with defined plans, orders given, and accepted principles. Controlling is described in the sense that a manager must receive feedback on a process in order to make necessary adjustments.

For Fayol any Organization can be subdivided into 6 types of *operations*. Each *operation* being fulfilled by its corresponding *essential function*:

- 1-Technical operations (production, manufacturing, transformation)
- 2-Commercial operations (purchases, sales, exchanges)

- 3-Financial operations (seek for capital and finance management)
- 4-Security operations (protection of goods and people)
- 5-Accounting operations (balance, cost control, statistics, etc)
- 6-Administrative operations

Fayol laid down the following principles of organization (he called them principles of management):

- 1) **Specialization of labor.** Specializing encourages continuous improvement in skills and the development of improvements in methods.
- 2) **Authority.** The right to give orders and the power to exact obedience.
- 3) **Discipline.** No slacking, bending of rules.
- 4) **Unity of command.** Each employee has one and only one boss.
- 5) **Unity of direction.** A single mind generates a single plan and all play their part in that plan.
- 6) **Subordination of Individual Interests.** When at work, only work things should be pursued or thought about.
- 7) **Remuneration.** Employees receive fair payment for services, not what the company can get away with.
- 8) **Centralization.** Consolidation of management functions. Decisions are made from the top.
- 9) **Scalar Chain (line of authority).** Formal chain of command running from top to bottom of the organization, like military.
- 10) **Order.** All materials and personnel have a prescribed place, and they must remain there.
- 11) **Equity.** Equality of treatment (but not necessarily identical treatment).
- 12) **Personnel Tenure.** Limited turnover of personnel. Lifetime employment for good workers.
- 13) **Initiative.** Thinking out a plan and do what it takes to make it happen.
- 14) **Esprit de corps.** Harmony, cohesion among personnel (<http://analytictech.com>. 20.04.2009).

Fayol believed that financial needs of the employees must be met in order to make them give priority to the organization's interests over their own interests and remain a member of the organization.

Fayol has been described as the father of modern operational management theory. A primary difference between Fayol and Taylor was that Taylor viewed management processes from the bottom up, while Fayol viewed it from the top down. In the classic *General and Industrial Management* Fayol wrote that “Taylor's approach differs from the one we have outlined in that he examines the firm from the ‘bottom up’. He starts with the most elemental units of activity the workers’ actions then studies the effects of their actions on productivity, devise new methods for making them more efficient, and apply what he learns at lower levels to the hierarchy”. He suggests that Taylor has staff analysts and advisors working with individuals at lower levels of the organization to identify the ways to improve efficiency. According to Fayol, the approach results in a “negation of the principle of unity of command”.

### **2.7.1.3 Max Weber's Bureaucracy**

As a result of establishment of large commercial and productive organizations and increase in governments' duties, a new and efficient official system was needed. It was clearly impossible to provide services and products needed for universal consumption, without the existence of an official system and appropriate support. Thus in 1920's a celebrated German scholar, Max Weber (1864- 1920), designed a system with particular characteristics based on his knowledge about the capacity of growth and development of industrial attempts. He believed that in order to gain the desired result of the vast group efforts and reach the stage of industrial, commercial and different kinds of public service growth and efflorescence, the only way is to create a system based on human wisdom and knowledge. He called his new system bureaucracy. He insisted that no machine in the world would work as carefully and cheaply as bureaucracy. Some of the characteristics of the Weber's bureaucracy system are:

- 1- Division of labor based on rules and regulations in order to reach defined organizational objectives.
- 2- Respecting organizational hierarchy in a way that any inferior within the organization is supervised by his superior.
- 3- Carrying out duties based on impersonal and official relations.
- 4- Employment with regard to specialized and technical qualifications.

By adopting organizational hierarchy, division of labor with regard to specialization and efficiency, setting similar working instructions, rules and regulations, defining levels of authority, impersonal relations, emphasizing on archiving and keeping the background of the work and creating rational and logical order, bureaucracy could establish comprehensive and large organizations in which a great number of staff were working regularly.

At last, regardless of positive results of the school of classic management, adaptation of scientific management principles and vast spread of bureaucracy made individuals within large organizations be regarded as equal members and act as lifeless production tools. Regarding enlargement of organizations and attempts to enforce bureaucracy and principles of scientific management, a large extent of human values and staff's needs were gradually neglected and human -to some extent- was only used to increase efficiency, just like other production tools.

### **2.7.2 Neoclassic Theories or Movement of Human Relations**

In 1930's, following the researches done in the scope of increasing management efficiency in organizations, scholars found out that unlike previous implications, the main factors which affect the increase of organizational production are not merely payment and working conditions, but it is human interactive relations which are established during work period. The result of such researches led to the exploration of the movement of human relationships. Knowledge of human relationships made it clear that those Classic management theories in which human was merely economically important and workers were like machines whose power should be used as mechanical energy to increase production, was no more of great importance and cannot considerably increase the output and improve organizations' level of production. On the other hand, it is through human relationships that one can understand the factors influencing organizational behavior and effecting the decrease or increase of output and production. Therefore, this important human aspect which was neglected so far turned to be significant.

Indeed, although the movement of human relations had a great role in exploring important aspects of human interactive relations and informal aspect of organization, since it has ignored the formal phase of organization, there are some criticisms to it, as well.

### **2.7.2.1 Elton Mayo's Hawthorne Experiments**

School of human relations was started by Hawthorne's studies and analyses. During 1924 to 1932 Elton Mayo led Hawthorne's studies. Mayo and his group started their experiments by studying a group of girls who attached telephone amplification machines in Hawthorne's factory belonging to Western Electric Company and gained incredible results; the workers were happy and satisfied of being noticed in work place and during work and this had increased their efficiency. In other words, Hawthorne's studies with Mayo's guidance found that efficiency is not a merely technical phenomenon, but a social process. In fact, it is not financial aspects or physical working situations that determine the degree of efficiency, but it is determined by workers' viewpoint toward work and colleagues and supervisors. Hence, managers discovered their need to understand human relationships.

Mayo found that the main factors influencing the increase of organizational production are not merely payment and working situations, but creating motivation and interactive relations among people. Such findings encouraged managers to ease the participation of workers in planning, organizing and controlling the work and use their cooperation. The studies also explored informal groups within organizations and their importance as another aspect of formal organization. His research findings have contributed to organizational development in terms of human relations and motivation theory (<http://accel-team.com>, 21.04.2009).

### **2.7.2.2 Mary Parker Follett**

Among authorities reacting to the one-dimensional Classic management theories, Mary Parker Follett (1868- 1933) may be known as the pioneer of the turn from Classic theories to the Behavioral theories. She considered coordinating of great importance and believed that the main issue in any organizational or group work is establishing and preserving consonant human relationships. The bases of Follett's thoughts are the participation in carrying out the job and emphasis on manager's duty in society to prepare a situation in which individuals cooperate voluntarily. Follett's thoughts also played significant role in establishment of the movement of human relationships.

Follett believed that responsible managers who are in direct contact with workers must create the coordinating and not the organizations' superior managers who have a little contact with workers. She proposes that coordinating should be taken into account from the early stages of founding a system, however is not finished when the system is designed. It is a constant process and a part of the manager's duty. She points out that constant coordinating leads to feedbacks through which plans and policies can be set and revised. She objects the mechanical view to organization and proposes a biologic and social model, instead. When she talks about the nature of control, the issue gets clearer. She has a famous sentence –"organization is control"- and believes that organizations' sole aim is to control. Nevertheless, she emphasizes that the real nature of control is the coordinating among components and declares that at physiologic level,



control means coordinating, since for example; without coordinating among muscles -which is controlling them- no one can ascend or descend the stairs. A runner in comparison to a usual man can make more coordinating since he has more control and this is the case found in organizations. Follett has proposed four basic principles of coordinating:

- 1) Coordinating as interactive communication among all factors of a situation.
- 2) Coordinating through establishing direct contact among all members with related jobs.
- 3) Coordinating in early stages.
- 4) Coordinating as a constant process.

She recognized the holistic nature of community and advanced the idea of "reciprocal relationships" in understanding the dynamic aspects of the individual in relationship to others. Follett advocated the principle of what she termed "integration," or non coercive power-sharing based on the use of her concept of "power with" rather than "power over." Her ideas on negotiation, power, and employee participation were highly influential in the development of the fields of organizational studies, alternative dispute resolution, and the Human Relations Movement. She was also a pioneer in the establishment of community centers.

### 2.7.2.3 Maslow's Hierarchy of Human Needs

Abraham Harold Maslow (1908-1970) is a famous American psychologist. He presented the ideas of needs hierarchy in his book, "Motivation and Personality" in 1943. The behavior of individuals at a particular moment is usually determined by their strongest need. It would seem significant, therefore, for managers to have some understanding about the needs that are commonly most important to people. An interesting framework that helps explain the strength of certain needs was developed by Maslow. According to Maslow, there seem to be a hierarchy into which human needs arrange themselves, as illustrated in Figure 2- 5.

The *physiological* needs are shown at the most extensive level of the hierarchy because they tend to have the highest strength until they are somewhat satisfied. These are the essential human needs to sustain life itself- housing, food, and clothing. Until these essential needs are satisfied to the degree needed for the sufficient operation of the body, the majority of a person's activity will possibly be at this level, and the other needs will provide little motivation. But what happens to a person's motivation when these essential needs begin to be fulfilled? Instead of physiological needs, other levels of needs become important, and these motivate and dominate the behavior of the individual. And when these needs are somewhat satisfied, other needs appear, and so on up the hierarchy.

When physiological needs become gratified, the *safety*, or *security*, needs become predominant. These needs are fundamentally the need to be free of the fear of physical danger and deprivation of the basic physiological needs.

When physiological and safety needs are fairly well satisfied, *social*, *belonging* or *affiliation*, will appear as dominant in the need structure. Since people are social beings, they have a need to belong to and be accepted by various groups. When social needs become dominant, a person will attempt for meaningful relations with others.

After persons begin to satisfy their need to belong, they usually want to be more than just a member of their group. They then feel the need for *esteem*-both self-esteem and respect from others. Most people have a need for a high assessment of themselves that is firmly based in reality-recognition and respect from others. Satisfaction of this esteem needs produces feelings of

self-confidence, status, power, and control. People begin to feel that they are useful and have some effect on their environment.

When esteem needs begin to be sufficiently satisfied, the *self-actualization* needs emerge and become more dominant. Self-actualization is the need to maximize one's potential, whatever it may be. As Maslow expressed it, "What a man can be, he must be." Thus, self-actualization is the desire to become what one is competent of becoming. However, the hierarchy does not necessarily follow the pattern described by Maslow. It was not his intent to say that this hierarchy applies universally. Maslow felt this was *typical* pattern that operates most of the time. He realized, however, that there were numerous exceptions to this general tendency (Hersey and Blanchard, 2001).

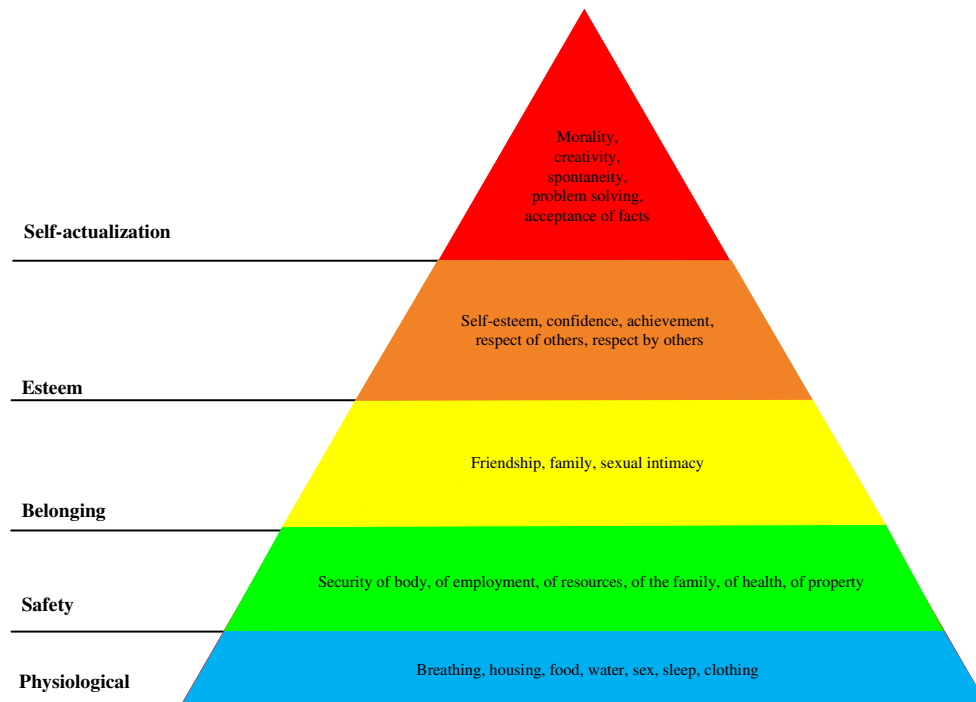


Figure 2- 5 Maslow's Hierarchy of Needs

#### 2.7.2.4 McGregor's Theory X and Theory Y

Douglas McGregor (1906-1964) in his book "Human Side of Enterprise" published in 1960 presented theories on people's behavior in work place and introduced two models of them in theory X and theory Y. Having observed the behavior of managers with employees, he concluded that managers' viewpoint toward the nature and motivation of human is based on some particular assumptions and they prefer to behave according to these assumptions.

Assumptions of Theory X assume that most people prefer to be directed, are not interested in assuming responsibility, and want safety above all. Accompanying this philosophy is the belief that people are motivated by money, fringe benefits, and the threat of punishment. Managers who believe Theory X assumptions effort to structure, control, and closely supervise their workforce. These managers feel that external control is obviously suitable for dealing with

unreliable, irresponsible, and immature people. After describing Theory X, McGregor questioned whether this view of human nature is proper and if management practices based upon it are suitable in many situations today: Are not people in a democratic society, with its increasing level of education and standard of living, capable of more mature behavior? Drawing heavily on Maslow's hierarchy of needs, McGregor concluded that Theory X assumptions about human nature, when commonly applied, are often inexact and that management approaches that develop from these assumptions may fail to motivate many persons to work toward organizational objectives. Management by direction and control may not succeed, according to McGregor, since it is a doubtful method for motivating people whose physiological and safety needs are rationally satisfied and whose social, esteem, and self-actualization needs are becoming predominant.

McGregor felt that management needed practices based on a more correct understanding of human nature and motivation. As a result of his feeling, McGregor developed an alternate theory of human behavior called Theory Y. assumptions of this theory assume that people are not, by nature, lazy and unreliable. It postulates that people can be basically self-directed and creative at work if properly motivated. Therefore, it should be an essential task of management to unleash this potential in individuals. Properly motivated people can achieve their own goals best by directing their own efforts toward accomplishing organizational goals (Hersey and Blanchard, 2001).

#### 2.7.2.5 Management Systems and Styles of Likert

Rensis Likert (1903-1981) has conducted much research on human behavior within organisations, particularly in the industrial situation. He has examined different types of organizations and leadership styles, and he asserts that to achieve maximum profitability, good labor relations and high productivity, every organization must make optimum use of their human assets. The form of the organization which will make greatest use of the human capacity, Likert contends, is; highly effective work groups linked together in an overlapping pattern by other similarly effective groups. His programs were intended to help organizations move from Theory X to Theory Y assumptions. Organizations at present have widely varying types of management style and Likert has identified four main systems:

- **Exploitive-authoritative system**, where exhibit an autocratic, top-down approach to leadership, where decisions are imposed on subordinates, where motivation is characterized by threats, where high levels of management have great responsibilities but lower levels have virtually none, where there is very little communication and no joint teamwork. System 1 results in mediocre performance.
- **Benevolent-authoritative system**, where leadership is by a condescending form of master-servant trust, where motivation is mainly by rewards, where managerial personnel feel responsibility but lower levels do not, where there is little communication and relatively little teamwork. Employees are allowed a little more interaction, communication, and decision making than system 1 but within boundaries defined by management.
- **Consultative system**, where leadership is by superiors who have substantial but not complete trust in their subordinates, where motivation is by rewards and some involvement, where a high proportion of personnel, especially those at the higher levels feel responsibility for achieving organization goals, where there is some communication (both vertical and horizontal) and a moderate amount of teamwork. This system increase employee interaction, communication, and decision making. Although employees are

consulted about problems and decisions, management still makes the final decisions. Productivity is good, and employees are moderately satisfied with the organization.

- **Participative-group system**, which is the optimum solution, where leadership is by superiors who have; complete confidence in their subordinates, where motivation is by economic rewards based on goals which have been set in participation, where personnel at all levels feel real responsibility for the organizational goals, where there is much communication, and a substantial amount of cooperative teamwork. This system is almost opposite of system 1. Communication occur both laterally and vertically, and decisions are linked throughout the organization by overlapping group membership. System 4 achieves high levels of productivity, quality, and member satisfaction (Cummings and Worley, 2008).

This fourth system is the one which is the ideal for the profit oriented and human-concerned organization, and Likert says that all organizations should adopt this system. In summary, Likert has found that the closer the management style of an organization approaches System 4, the more likely it is to have continuous record of high productivity. Similarly, the closer this style reflects System 1, the more likely it is to have a sustained record of low productivity. Clearly, the changes involved may be painful and long-winded, but it is necessary if one is to achieve the maximum rewards for the organization. ([http://accel-team.com/human\\_relations](http://accel-team.com/human_relations), 23.04.2009).

### 2.7.2.6 Motivation-Hygiene Theory

Frederick Irving Herzberg (1923-2000) was a noted psychologist who became one of the most influential names in business management. He is most famous for introducing job enrichment and the Motivation-Hygiene theory. Herzberg by his researches realized that people have two different categories of needs that are essentially independent of each other and affect behavior in different ways. He found that when people felt dissatisfied with their jobs, they were concerned about the environment in which they were working. On the other hand, when people felt good about their jobs, this had to do with the work itself. Herzberg called the first category of needs *hygiene* or *maintenance* factors: hygiene of preventing job dissatisfaction; maintenance because they are never completely satisfied-they have to continue to be maintained. He called the second category of needs *motivators* since they seemed to be effective in motivating people to superior performance.

#### Hygiene Factors

Company policies and administration, control, working conditions, interpersonal relations, money, status, and safety may be thought of as maintenance factors. These are not an essential part of a job, but they are related to the conditions under which a job is performed. Herzberg found that hygiene factors produced no growth in worker output ability; they only prevented losses in worker performance due to work restriction.

#### Motivators

Satisfying factors that involve feelings of achievement, professional growth, and recognition that one can experience in a job that offers challenge and scope are referred to as motivators. Herzberg used this term since these factors seem capable of having a positive effect on job satisfaction, often resulting in an increase in one's total output capacity.

What we really need to do with work, Herzberg suggests, is to *enrich* the job. By job enrichment is meant the deliberate upgrading of responsibility, scope, and challenge in work (Hersey and Blanchard, 2001).

Herzberg believes that both aforementioned approaches must be enforced simultaneously and argues that managers should treat their staff in a way that results in the least dissatisfaction. They should put the staff to work in a way that success, knowledge for success, interest and responsibility can be achieved and the staff can progress and improve. ([http://accel-team.com/human\\_relations/hrels](http://accel-team.com/human_relations/hrels), 15.03.2009).

### 2.7.2.7 McClelland's Theory of Needs

In his *acquired-needs* theory, David McClelland (1917-1998) proposed that an individual's specific needs are acquired over time and are shaped by one's life experiences. Most of these needs can be classed as *achievement*, *affiliation*, or *power*. A person's motivation and effectiveness in certain job functions are influenced by these three needs. McClelland's theory sometimes is referred to as the *three need theory* or as the *learned needs theory*.

#### Achievement

People with a high need for achievement (nAch) seek to excel and thus tend to avoid both low-risk and high-risk situations. Achievers avoid low-risk situations because the easily attained success is not a genuine achievement. In high-risk projects, achievers see the outcome as one of chance rather than one's own effort. High nAch individuals prefer work that has a moderate probability of success, ideally a 50% chance. Achievers need regular feedback in order to monitor the progress of their achievements. They prefer either to work alone or with other high achievers.

#### Affiliation

Those with a high need for affiliation (nAff) need harmonious relationships with other people and need to feel accepted by other people. They tend to conform to the norms of their work group. High nAff individuals prefer work that provides significant personal interaction. They perform well in customer service and client interaction situations.

#### Power

A person's need for power (nPow) can be one of two types-personal and institutional. Those who need personal power want to direct others, and this need often is perceived as undesirable. Persons who need institutional power (also known as social power) want to organize the efforts of others to further the goals of the organization. Managers with a high need for institutional power tend to be more effective than those with a high need for personal power.

People with different needs are motivated differently.

*a) High need for achievement*-High achievers should be given challenging projects with reachable goals. They should be provided frequent feedback. While money is not an important motivator, it is an effective form of feedback.

*b) High need for affiliation*-Employees with a high affiliation need perform best in a cooperative environment.

*c) High need for power*-Management should provide power seekers the opportunity to manage others.

Note that McClelland's theory allows for the shaping of a person's needs; training programs can be used to modify one's need profile ([www.netmba.com](http://www.netmba.com), 24, 04, 2009).

### 2.7.2.8 ERG Theory

Clayton Alderfer proposed the ERG theory, which like Maslow's theory, describes needs as a hierarchy. The letters ERG stand for three levels of needs: *Existence*, *Relatedness*, and *Growth*. The ERG theory is based on the work of Maslow, so it has much in common with it but also differs in some important aspects.

Studies had shown that the middle levels of Maslow's hierarchy have some overlap; Alderfer addressed this issue by reducing the number of levels to three. The ERG needs can be mapped to those of Maslow's theory as follows:

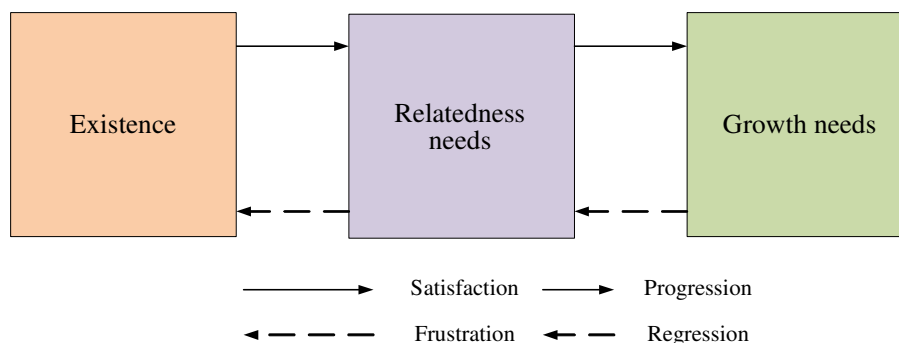
- Existence: Physiological and safety needs
- Relatedness: Social and external esteem needs
- Growth: Self-actualization and internal esteem needs

Like Maslow's model, the ERG theory is hierarchical-existence needs have priority over relatedness needs, which have priority over growth. In addition to the reduction in the number of levels, the ERG theory differs from Maslow's in the following three ways:

- Unlike Maslow's hierarchy, the ERG theory allows for different levels of needs to be pursued simultaneously.
- The ERG theory allows the order of the needs be different for different people.
- The ERG theory acknowledges that if a higher level need remains unfulfilled, the person may regress to lower level needs that appear easier to satisfy. This is known as the frustration-regression principle.

Thus, while the ERG theory presents a model of progressive needs, the hierarchical aspect is not rigid. This flexibility allows the ERG theory to account for a wider range of observed behaviors. For example, it can explain the "starving artist" who may place growth needs above existence ones.

If the ERG theory holds, then unlike with Maslow's theory, managers must recognize that an employee has multiple needs to satisfy simultaneously. Furthermore, if growth opportunities are not provided to employees, they may regress to relatedness needs. If the manager is able to recognize this situation, then steps can be taken to concentrate on relatedness needs until the subordinate is able to pursue growth again (www.envisionsoftware.com, 29.02.2009). The stages of this theory are shown in Figure 2- 6.

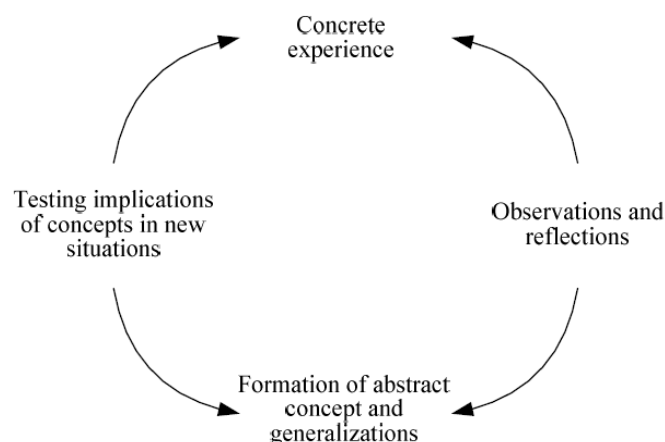


**Figure 2- 6** The Three Need Stages of ERG Theory

### 2.7.2.9 Field Theory

In 1946, German social scientist Kurt Lewin launches the Research Center for Group Dynamics at the Massachusetts Institute of Technology. His contributions in change theory, action research, and action learning earn him the title of the “father of organization development”. Lewin is renowned for his field theory. The field theory is the “proposition that human behavior is the function of both the person and the environment: expressed in symbolic terms,  $B = f(P, E)$ ”. This means that one’s behavior is related to both one’s personal characteristics and to the social situation in which one finds oneself.

Lewin is best known for his work in the field of organization behavior and the study of group dynamics. His research discovered that learning is best facilitated when there is a conflict between immediate concrete experience and detached analysis within the individual. His cycle of action, reflection, generalization, and testing is characteristic of experiential learning (www.nwlink.com, 20.02.2009) as shown in Figure 2- 7.



**Figure 2- 7** The Cycle of Lewin’s Field Theory

### 2.7.2.10 Maturity Theory

Chris Argyris examined industrial organizations to determine what effect management practices have had on individual behavior and personal growth within the work environment. In examining the widespread worker apathy and lack of effort in industry, Argyris questions whether these problems are simply the result of individual laziness. He suggests that this is not the case. Argyris contends that, in many cases, when people join the force, they are kept from maturing by the management practices utilized in their organizations. In these organizations, they are given minimal control over their environment and are encouraged to be passive, dependent, and subordinate; therefore, they behave immaturely.

Disturbed by what he finds in many organizations, Argyris, as did McGregor, challenges management to provide a work climate in which everyone has a chance to grow and mature as individuals, as members of a group by satisfying their own needs, while working for the success of the organization. He believed that giving people the opportunity to grow and mature

on the job helps them satisfy more than just physiological and safety needs, which in turn motivates them and allows them to use more of their potential in accomplishing organizational goals. Although all employees do not want to accept more responsibility or deal with the added problems responsibility inevitably brings, Argyris contends that the number of employees whose motivation can be improved by increasing and upgrading their responsibility is much larger than most managers would suspect (Hersey and Blanchard, 2001).

### **2.7.2.11 Theory of Stimulus-Response and Reinforcement**

According to this theory which is proposed by Clark Hull, stability in behavior depends on degrees and number of reinforcements. Rewarding leads to the repetition of behavior and lack of it prevents the repetition. Hence, regarding Hull's theory, behavior is a consequence of Stimulus-Response relationship.

Hull declares that improvement of occupational function depends on factors such as positive reinforcement. Positive enhancement includes appreciating people's function and presenting regular feedback to their behavior and function; a method which motivates them in work place. According to Hull's belief, various independent variables can influence behavior, but a limited number of them can motivate (www.sonoma.edu, 22.01.2009).

In general, the movement of human relationship in 1930's addressed human issues through a new viewpoint and paid peculiar attention to human factor. Regarding this aspect, this school is the first climax of evolution history of organizational behavior. However, the methods of behavioral researches in this school were not so successful and only some superficial implications about human and his behavior. Most theories in this period addressed provocation in individual behavior and did not talk much about groups and organizations.

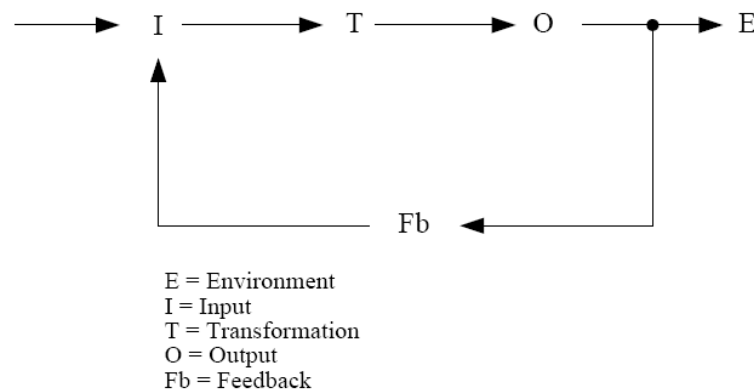
## **2.7.3 Modern Theories and Systemic Management Thought**

### **2.7.3.1 Systems Theory**

One of the biggest breakthroughs in how we understand and guide change in organizations is systems theory and systems thinking. System theory was used by L. von Bertalanffy, a biologist, as the basis for the field of study known as 'general system theory', a multidisciplinary field (1968). Some influences from the contingency approach can be found in system theory. System theory is the transdisciplinary study of the abstract organization of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities, and the (usually mathematical) models which can be used to describe them. A system can be said to consist of four things. The first is objects – the parts, elements, or variables within the system. These may be physical or abstract or both, depending on the nature of the system. Second, a system consists of attributes – the qualities or properties of the system and its objects. Third, a system had internal relationships among its objects. Fourth, systems exist in an environment. A system, then, is a set of things that affect one another within an environment and form a larger pattern that is different from any of the parts. The fundamental systems-interactive paradigm of organizational analysis features the continual stages of input, throughput (processing), and output, which demonstrate the concept of openness/closedness. A closed system does not interact with its environment. It does not take in

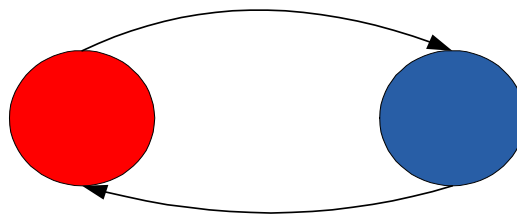


information and therefore is likely to atrophy, that is to vanish. An open system receives information, which it uses to interact dynamically with its environment. Openness increases its likelihood to survive and prosper. Several system characteristics are: wholeness and interdependence (the whole is more than the sum of all parts), correlations, perceiving causes, chain of influence, hierarchy, supra-systems and subsystems, self-regulation and control, goal-oriented, interchange with the environment, inputs/outputs, the need for balance/homeostasis, change and adaptability (morphogenesis) and equifinality: there are various ways to achieve goals. Different types of networks are: line, commune, hierarchy and dictator networks. Communication in this perspective can be seen as an integrated process – not as an isolated event ([www.tcw.utwente.nl/theorieenoverzicht](http://www.tcw.utwente.nl/theorieenoverzicht), 25.01.2009). Figure 2- 8 shows the Conceptual Model of system theory.



**Figure 2- 8** Conceptual Model of System Theory

The word system probably has more varied meanings than any other word in use today. According to Bertalanffy the definition of system is: A system is an entity which maintains its existence through the mutual interaction of its parts as is shown in Figure 2- 9. The key emphasis here is "mutual interaction," in that something is occurring between the parts, over time, which maintains the system. A system is different than a heap or a collection, mostly.



**Figure 2- 9** Mutual Interaction in System Theory

This definition of a system implies something beyond cause and effect. Rather than simply A affects B, there is an implication that B also affects A. Examples of systems are particle, atom, molecule, cell, organ, person, community, state, nation, world, solar system, galaxy, and universe, in increasing levels of complexity. In truth there is only one system, "the Universe," and all other systems are really just sub-systems of this larger system. The relevant question has to do with where one chooses to draw boundaries. From the mutual interaction of the parts of a system there arise characteristics which can not be found as characteristic of any of the individual parts (<http://managementhelp.org/systems>, 13.01.2009).

### 2.7.3.2 Contingency Approach

The contingency approach believes that it is impossible to select one way of managing that works best in all situations like promoted by Taylor. This approach to management is based on the idea that there is no one best way to manage and that to be effective, planning, organizing, leading, and controlling must be tailored to the particular circumstances faced by an organization. Managers have always asked questions such as "What is the right thing to do? Should we have a mechanistic or an organic structure? Should we have a functional or divisional structure? Should we have a wide or narrow span of management? Should we have a tall or flat organizational structure? Simple or complex control and coordination mechanisms? Should we be centralized or decentralized? Should we use task or people oriented leadership styles? What motivational approaches and incentive programs should we use?" The contingency approach to management (also called the situational approach) assumes that there is no universal answer to such questions because organizations, people, and situations vary and change over time. Thus, the right thing to do depends on a complex variety of critical environmental and internal contingencies.

Environmental change and uncertainty, work technology, and the size of a company are all identified as environmental factors impacting the effectiveness of different organizational forms. According to the contingency perspective, stable environments suggest mechanistic structures that emphasize centralization, formalization, standardization, and specialization to achieve efficiency and consistency. Certainty and predictability permit the use of policies, rules, and procedures to guide decision making for routine tasks and problems. Unstable environments suggest organic structures which emphasize decentralization to achieve flexibility and adaptability. Uncertainty and unpredictability require general problem solving methods for non-routine tasks and problems. Paul Lawrence and Jay Lorsch suggest that organizational units operating in differing environments develop different internal unit characteristics, and that the greater the internal differences, the greater the need for coordination between units. (<http://www.referenceforbusiness.com/management>, 30.04.2009)

Four important ideas of Contingency Theory are: 1. There is no universal or one best way to manage. 2. The design of an organization and its subsystems must 'fit' with the environment. 3. Effective organizations not only have a proper 'fit' with the environment but also between its subsystems and. 4. The needs of an organization are better satisfied when it is properly designed and the management style is appropriate both to the tasks undertaken and the nature of the work group ([www.valuebasedmanagement.net](http://www.valuebasedmanagement.net), 01.05.2009).

### 2.7.3.3 Contingency Theory of Leadership

In contingency theory of leadership, the success of the leader is a function of various contingencies in the form of subordinate, task, and or group variables. The effectiveness of a given pattern of leader behavior is contingent upon the demands imposed by the situation. These theories stress using different styles of leadership appropriate to the needs created by different organizational situations. No single contingency theory has been postulated. Some of the theories are:

#### 2.7.3.3.1 Fiedler's Contingency Theory

Fiedler's theory is the earliest and most extensively researched. Fiedler's approach departs from trait and behavioral models by asserting that group performance is contingent on the

leader's psychological orientation and on three contextual variables: group atmosphere, task structure, and leader's power position. This theory explains that group performance is a result of interaction of two factors. These factors are known as leadership style and situational favorableness. In Fiedler's model, leadership effectiveness is the result of interaction between the style of the leader and the characteristics of the environment in which the leader works.

### 2.7.3.3.2 Hersey & Blanchard's Situational Theory

In contrast to Fiedler's contingency leadership model and its underlying assumption that leadership style is hard to change, the Hersey-Blanchard situational leadership model suggests that successful leaders do adjust their styles. For Hersey and Blanchard the key issue in making these adjustments is follower maturity, as indicated by their readiness to perform in a given situation. "Readiness," in this sense, is largely based on two major factors – follower ability and follower confidence.

The situational leadership model views leaders as varying their emphasis on task and relationship behaviors to best deal with different levels of follower maturity. The two-by-two matrix shown in the small Figure indicates that four leadership styles are possible.

- a) **Delegating Style**—allowing the group to take responsibility for task decisions; this is a low-task, low-relationship style.
- b) **Participating Style**—emphasizing shared ideas and participative decisions on task directions; this is a low-task, high-relationship style.
- c) **Selling Style**—explaining task directions in a supportive and persuasive way; this is a high-task, high-relationship style.
- d) **Telling Style**—giving specific task directions and closely supervising work; this is a high-task, low-relationship style.

Managers using the situational leadership model must be able to implement the alternative leadership styles as needed. To do this, they have to understand the maturity of followers in terms of readiness for task performance and then use the style that best fits (Hersey and Blanchard, 2001).

Hersey and Blanchard believe that leaders should be flexible and adjust their styles as followers and situations change over time. The model also implies that if the correct styles are used in lower-readiness situations, followers will mature and grow in their abilities and confidence. This willingness to understand follower development and respond with flexibility allows the leader to become less directive as followers mature.

The Hersey-Blanchard situational leadership model is intuitively appealing and has been widely used in management development programs. Even though empirical research support has been limited, the conclusion seems to be that the basic ideas of the model have merit. Leaders might do well to consider altering styles to achieve the best fits with followers and situations, even as they change with time. Also, the model reminds leaders that the skill levels and task confidence of followers should be given continuing attention through training and development efforts (Schermerhorn, 1997).

Blanchard and Hersey extended their model to include the development level of the follower. They stated that the leader's chosen style should be based on the competence and commitment of his followers. They categorized the possible development of followers into four levels, which they named D1 to D4:

- I. **D1: Low Competence, High Commitment** - They generally lack the specific skills required for the job in hand. However, they are eager to learn and willing to take direction.

- II. **D2: Some Competence, Low Commitment** - They may have some relevant skills, but won't be able to do the job without help. The task or the situation may be new to them.
- III. **D3: High Competence, Variable Commitment** - They are experienced and capable, but may lack the confidence to go it alone, or the motivation to do it well or quickly.
- IV. **D4: High Competence, High Commitment** - They are experienced at the job, and comfortable with their own ability to do it well. They may even be more skilled than the leader.

Contingency theory is similar to situational theory in that there is an assumption of no simple one right way. The main difference is that situational theory tends to focus more on the behaviors that the leader should adopt, given situational factors (often about follower behavior), whereas contingency theory takes a broader view that includes contingent factors about leader capability and other variables within the situation (<http://changingminds.org>, 20.01.2009).

### 2.7.3.3 Continuum of Leader Behavior (CLB)

Tannenbaum and Schmidt believe the leader selects one of seven possible leader behaviours depending upon the forces among the leader, follower, and situation. As Figure 2- 10 indicates, the range of choices is between democratic, or relationship-oriented, behaviours and authoritarian, or task-oriented, behaviours. Leaders influence their followers in either of two ways: (1) They can tell their followers what to do and how to do it or (2) they can share their leadership responsibilities with their followers by involving them in the planning and execution of the task. The former is the traditional authoritarian style, which emphasizes task concerns. The latter is the more nondirective democratic style, which stresses the concern for human relationships. As a result, in the authoritarian style, all policies are determined by the leader; in the democratic style, policies are open for group dialogue and decision. There is a wide diversity of styles of leader behaviour between these two extremes (Hersey and Blanchard, 2001).

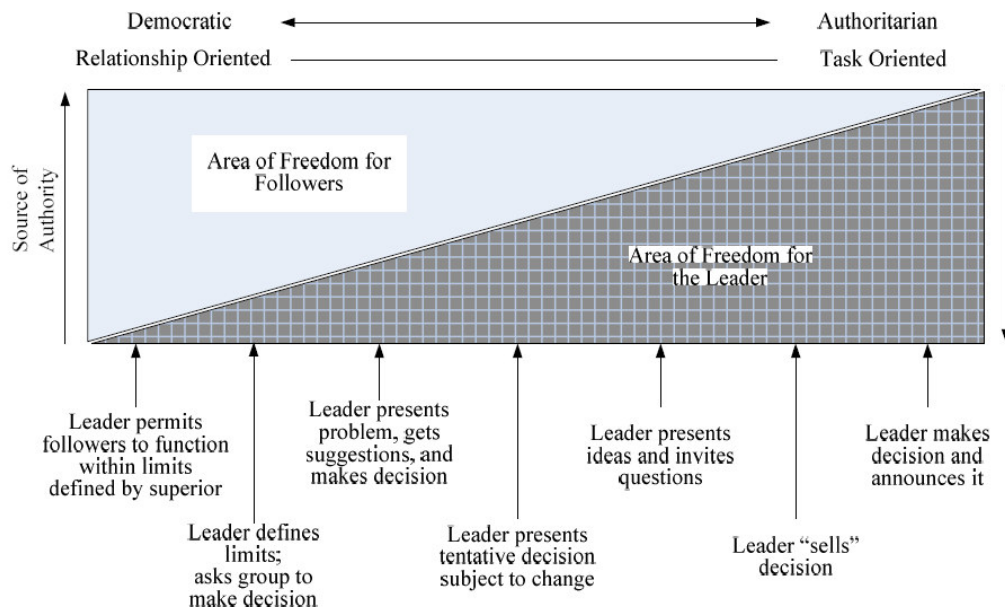


Figure 2- 10 Continuum of Leader Behaviour

#### **2.7.3.3.4 Contingency Theory of Decision-making (Vroom and Yetton, 1973)**

According to this model, the effectiveness of a decision procedure depends upon a number of aspects of the situation:

- 1) The importance of the decision quality and acceptance.
- 2) The amount of relevant information possessed by the leader and subordinates.
- 3) The likelihood that subordinates will accept an autocratic decision, or cooperate in trying to make a good decision if allowed to participate.
- 4) The amount of disagreement among subordinates with respect to their preferred alternatives (www.fsc.yorku.ca, 15.01.2009).

Leaders can take a strong or limited approach in these. In clarifying the path, they may be directive or give vague hints. In removing roadblocks, they may scour the path or help the follower move the bigger blocks. In increasing rewards, they may give occasional encouragement or pave the way with gold.

This variation in approach will depend on the situation, including the follower's capability and motivation, as well as the difficulty of the job and other contextual factors. Leaders who show the way and help followers along a path are effectively 'leading'. This approach assumes that there is one right way of achieving a goal and that the leader can see it and the follower cannot. This casts the leader as the knowing person and the follower as dependent. It also assumes that the follower is completely rational and that the appropriate methods can be deterministically selected depending on the situation (<http://changingminds.org>, 25.04.2009).

#### **2.7.3.4 Total Quality Management**

The initial concepts for TQM originated with W. Edwards Deming's work in Japan during the recovery period following Japan's defeat during Second World War. With a disastrous condition existing, Japan's leaders decided to employ Dr. Deming as a consultant to revitalize their industries. The result is evident, as Japan has overtaken the world in many areas. TQM known as "continuous process improvement" and "continuous quality," it grew out of a manufacturing emphasis on quality control and represents a long-term effort to orient all of an organization's activities around the concept of quality. Quality is achieved when organizational processes reliably produce products and services that meet or exceed customer expectations. Deming has stated his basic concepts into 14 points that are:

- 1) Create a constancy of purpose toward improvement of product and service.
- 2) Adopt a new philosophy.
- 3) Cease dependence on mass inspection.
- 4) End the practice of awarding business on the basis of price tag alone.
- 5) Improve constantly and forever the system of production and service.
- 6) Institute modern methods of training.
- 7) Institute leadership.
- 8) Drive out fear so that everyone may work effectively for the organization.
- 9) Break down barriers between staff areas.
- 10) Eliminate arbitrary numerical goals, slogans, and targets.
- 11) Eliminate work standards and numerical quotas.
- 12) Remove barriers that rob employees of their pride in workmanship.
- 13) Institute a vigorous program of education and retraining.
- 14) Take actions to accomplish the transformation.

There are numerous definitions offered for the term TQM. For example, Jablonski (1991) defines it as: A cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity using teams. Vincoli (1991) defines TQM: Total Quality Management is a customer-focused, strategic and systematic approach to continuous performance improvement. Before the word "customer" usually referred to someone outside the organization, a person someone else worried about. TQM views customers in a different light: the customer is the person who receives my work as input for his or her work. The next person is the work process is my customer, and I must meet his or her requirements.

TQM involves six basic principles: 1) customer focus, 2) focus on the process as well as the results, 3) prevention versus inspection, 4) mobilizing expertise of the workforce, 5) fact-based decision making, and 6) feedback.

The key factors that determine successful quality efforts are: 1) top management support; 2) customer focus; 3) long-term strategic planning; 4) employee empowerment and teamwork; 5) measurement and analysis of products and processes; and 6) quality assurance (Herman and Herman, 1994).

### 2.7.3.5 Learning Organization (LO)

According to Peter Senge learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. The organizations that will truly excel in the future will be the organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization. (He believes that there are five disciplines, which must be mastered when introducing such an organization:

1. **Systems Thinking** -- the ability to see the big picture and to distinguish patterns instead of conceptualizing change as isolated events. Systems thinking need the other four disciplines to enable a learning organization to come about. There must be a paradigm shift -- from being unconnected to interconnected to the whole, and from blaming our problems on something external, to a realization that how we operate, our actions, can create problems.
2. **Personal Mastery** -- begins "by becoming committed to lifelong learning," and is the spiritual cornerstone of a learning organization. Personal Mastery involves being more realistic, focusing on becoming the best person possible, and to strive for a sense of commitment and excitement in our careers to facilitate realization of potential. People with a high level of personal mastery live in a continual learning mode. They never 'arrive'. Sometimes, language, such as the term 'personal mastery' creates a misleading sense of definiteness, of black and white. It is a process. It is a lifelong discipline. People with a high level of personal mastery are acutely aware of their ignorance, their incompetence, and their growth areas. And they are deeply self-confident.
3. **Mental Models** -- they must be managed because they do prevent new and powerful insights and organizational practices from becoming implemented. The process begins with self-reflection, unearthing deeply held belief structures and generalizations, and understand how they dramatically influence the way we operate in our own lives. Until there is realization and a focus on openness, real change can never be implemented.

4. **Building Shared Visions** -- visions cannot be dictated because it begins with the personal visions of individual employees, who may not agree with the leader's vision. What is needed is a genuine vision that elicits commitment in good times and bad, and has the power to bind an organization together. Building shared vision fosters a commitment to the long term.

5. **Team Learning** -- is important because currently, modern organizations operate on the basis of teamwork, which means that organizations cannot learn if team members do not come together and learn. It is a process of developing the ability to create desired results; to have a goal in mind and work together to attain it.

He adds to this recognition that people are agents, able to act upon the structures and systems of which they are a part. All the disciplines are, in this way, 'concerned with a shift of mind from seeing parts to seeing wholes, from seeing people as helpless reactors to seeing them as active participants in shaping their reality, from reacting to the present to creating the future. For Peter Senge, real learning gets to the heart of what it is to be human. We become able to re-create ourselves. This applies to both individuals and organizations. Thus, for a 'learning organization it is not enough to survive. "Survival learning" or what is more often termed "adaptive learning" is important – indeed it is necessary. But for a learning organization, "adaptive learning" must be joined by "generative learning", learning that enhances our capacity to create (Senge, 2006).

Senge believes the essential rationale for such organizations is that in situations of swift change only those that are flexible, adaptive and productive will excel. For this to happen, it is argued, organizations need to 'discover how to tap people's commitment and capacity to learn at *all* levels (www.infed.org, 02.05.2009).

What learning organizations do is set us free because employees no longer have to be passive players in the equation; they will learn to express ideas and challenge themselves to contribute to an improved work environment by participating in a paradigm shift from the traditional authoritarian workplace philosophy to one where the hierarchy is broken down, and human potential is heralded. Learning organizations foster an environment wherein people can "create the results they truly desire," and where they can learn to learn together for the betterment of the whole (Rheem, 1995). Here we will look at the three aspects of leadership that Peter Senge identifies and link his discussion with some other writers on leadership:

**Leader as designer** The functions of design are rarely visible, Peter Senge argues, yet no one has a more sweeping influence than the designer. The organization's policies, strategies and 'systems' are key area of design, but leadership goes beyond this. Integrating the five component technologies is fundamental. However, the first task entails designing the governing ideas, the purpose, vision and core values by which people should live. Building a shared vision is crucial early on as it 'fosters a long-term orientation and an imperative for learning. Other disciplines also need to be attended to, but just how they are to be approached is dependent upon the situation faced. In essence, 'the leaders' task is designing the learning processes whereby people throughout the organization can deal productively with the critical issues they face, and develop their mastery in the learning disciplines.

**Leader as steward** While the notion of leader as steward is, perhaps, most commonly associated with writers such as Peter Block (1993), Peter Senge has some interesting insights on this strand. His starting point was the 'purpose stories' that the managers he interviewed told about their organization. He came to realize that the managers were doing more than telling stories, they were relating the story: 'the overarching explanation of why they do what they do, how their organization needs to evolve, and how that evolution is part of something larger. Such purpose stories provide a single set of integrating ideas that give meaning to all aspects of the leader's work and not unexpectedly 'the leader develops a unique relationship to

his or her own personal vision. He or she becomes a steward of the vision. One of the important things to grasp here is that stewardship involves a commitment to, and responsibility for the vision, but it does not mean that the leader owns it. It is not their possession. Leaders are stewards of the vision; their task is to manage it for the benefit of others. Leaders learn to see their vision as part of something larger. Purpose stories evolve as they are being told, 'in fact, they are as a result of being told. Leaders have to learn to listen to other people's vision and to change their own where necessary. Telling the story in this way allows others to be involved and to help develop a vision that is both individual and shared.

**Leader as teacher** Peter Senge starts here in juncture that the first responsibility of a leader is to define reality. While leaders may draw inspiration and spiritual reserves from their sense of stewardship, 'much of the leverage leaders can actually exert lies in helping people achieve more accurate, more insightful and more *empowering* views of reality. Building on an existing 'hierarchy of explanation' leaders, Peter Senge argues, can influence people's view of reality at four levels: events, patterns of behavior, systemic structures and the 'purpose story'. By and large most managers and leaders tend to focus on the first two of these levels (and under their influence organizations do likewise). Leaders in learning organizations attend to all four, but focus predominantly on purpose and systemic structure. Moreover they "teach" people throughout the organization to do likewise. This allows them to see 'the big picture' and to appreciate the structural forces that condition behavior. By attending to purpose, leaders can cultivate an understanding of what the organization and its members are seeking to become. One of the issues here is that leaders often have strengths in one or two of the areas but are unable, for example, to develop systemic understanding. A key to success is being able to conceptualize insights so that they become public knowledge, 'open to challenge and further improvement.

"Leader as teacher" is not about "teaching" people how to achieve their vision. It is about fostering learning, for everyone. Such leaders help people throughout the organization develop systemic understandings. Accepting this responsibility is the antidote to one of the most common downfalls of otherwise gifted teachers losing their commitment to the truth (Senge, 2006).

Pedler et al. believe that The Learning Company is a vision of what might be possible. It is not brought about simply by training individuals; it can only happen as a result of learning at the whole organization level. Learning Company is an organization that facilitates the learning of all its members and continuously transforms itself (Pedler *et al.*, 1996).



## 3 Change

### 3.1 Responsibility for managing change

The employee does not have a responsibility to manage change - the employee's responsibility is no other than to do their best, which is different for every person and depends on a wide variety of factors (health, maturity, stability, experience, personality, motivation, etc). Responsibility for managing change is with management and executives of the organization - they must manage the change in a way that employees can cope with it. The manager has a responsibility to **facilitate** and **enable** change, and all that is implied within that statement, especially to understand the situation from an objective standpoint (to 'step back', and be non-judgmental), and then to help people understand reasons, aims, and ways of responding positively according to employees' own situations and capabilities. Increasingly the manager's role is to interpret, communicate and enable - not to instruct and impose, which nobody really responds to well (www.business.com, 06.05.2009).

### 3.2 Change Management Principles

- At all times involve and agree support from people within system (system = environment, processes, culture, relationships, behaviors, etc., whether personal or organizational).
- Understand where you/the organization is at the moment.
- Understand where you want to be, when, why, and what the measures will be for having got there.
- Plan development towards above No.3 in appropriate achievable measurable stages.
- Communicate, involve, enable and facilitate involvement from people, as early and openly and as fully as is possible (www.businessballs.com, 06.05.2009).

### 3.3 Fast Changing Environments

Planning, implementing and managing change in a fast-changing environment is increasingly the situation in which most organizations now work. Dynamic environments such as these require dynamic processes, people, systems and culture, especially for managing change successfully, notably effectively optimizing organizational response to market opportunities and threats. Key elements for success are:

- Plan long-term broadly- a sound strategic vision, not a specific detailed plan (the latter is impossible to predict reliably). Detailed five years plans are out of date two weeks after they are written. Focus on detail for establishing and measuring delivery of immediate actions, not medium-to-long-term plans.
- Establish forums and communicating methods to enable immediate review and decision-making. Participation of interested people is essential. This enables their input to be gained, their approval and commitment to be secured, and automatically takes care of communicating the actions and expectations.

- Empower people to make decisions at a local operating level, delegate responsibility and power as much as possible (or at least encourage people to make recommendations which can be quickly approved).
- Remove (as far as is possible) from strategic change and approval processes and teams (or circumvent) any ultra-cautious, ultra-autocratic or compulsively-interfering executives. Autocracy and interference are the biggest obstacles to establishing a successful and sustainable dynamic culture and capability.
- Encourage, enable and develop capable people to be active in other areas of the organization via 'virtual teams' and 'matrix management'.
- Scrutinize and optimize ICT (information and communications technology) systems to enable effective information management and key activity team-working.
- Use workshops as a vehicle to review priorities, agree broad medium-to-long-term vision and aims, and to agree short term action plans and implementation method and accountabilities.
- Adjust recruitment, training and development to accelerate the development of people who contribute positively to a culture of empowered dynamism (www.businessballs.com, 06.05.2009).

### 3.4 How Do Transformations and Changes take Place?

Leaders often encounter the need to transform organizations from low performance to acceptable performance or from acceptable performance to high performance. At other times, a leader is expected to move an organization from a crisis mode to high ground. Leader can be as immense as the process of organizational change. To focus on the leader's role, we look at several ways in which transformations take place:

- **Raising people's awareness.** The transformational leader makes group members aware of the importance and values of certain rewards and how to achieve them.
- **Helping people look beyond self-interest.** The transformational leader helps group members look to "the big picture" for the sake of the team and the organization.
- **Helping people search for self-fulfillment.** The transformational leader helps people go beyond a focus on minor satisfactions to a quest for self-fulfillment.
- **Helping people understand the need for change.** The transformational leader must help group members understand the need for change both emotionally and intellectually.
- **Investing managers with a sense of urgency.** To create the transformation, the leader assembles a critical mass of managers and imbues in them the urgency of change. The managers must also share the top leader's vision of what is both necessary and achievable.
- **Committing to greatness.** Business can be an opportunity for individual and organizational greatness. By adopting this greatness attitude, leaders can ennoble human nature and strengthen societies.
- **Adopting a long-range perspective and at the same time observing organizational issues from a broad rather than a narrow perspective.** Such thinking on the part of the transformational leader encourages many group members to do likewise. Unless many people think with a future orientation, and broadly, an organization cannot be transformed.

- **Building trust.** Another useful process for transforming an organization is to build trust between leaders and group members, particularly because distrust and suspicion are rampant during an organizational revival (Dubrin, 2004).

## 3.5 The Types of Change

### 3.5.1 Planned versus emergent change

Sometimes change is deliberate, a product of conscious reasoning and actions. This type of change is called planned change. In contrast, change sometimes unfolds in an apparently spontaneous and unplanned way. This type of change is known as emergent change (Dawson, 1996).

### 3.5.2 Episodic versus continuous change

Another distinction is between episodic and continuous change. Episodic change, according to Weick and Quinn (1999), is ‘infrequent, discontinuous and intentional’. Sometimes termed ‘radical’ or ‘second order’ change, episodic change often involves replacement of one strategy or program with another.

Continuous change, in contrast, is ‘ongoing, evolving and cumulative’. Also referred to as ‘first order’ or ‘incremental’ change, continuous change is characterized by people constantly adapting and editing ideas they acquire from different sources. At a collective level these continuous adjustments made simultaneously across units can create substantial change.

The distinction between episodic and continuous change helps clarify thinking about an organization’s future development and evolution in relation to its long-term goals. Few organizations are in a position to decide unilaterally that they will adopt an exclusively continuous change approach. They can, however, capitalize upon many of the principles of continuous change by engendering the flexibility to accommodate and experiment with everyday contingencies, breakdowns, exceptions, opportunities and unintended consequences that punctuate organizational life (Orlikowski, 1996).

Ackerman (1997) has distinguished between three types of change: developmental, transitional and transformational.

**Developmental change** may be either planned or emergent; it is first order, or incremental. It is change that enhances or corrects existing aspects of an organization, often focusing on the improvement of a skill or process.

**Transitional change** seeks to achieve a known desired state that is different from the existing one. It is episodic, planned and second order, or radical.

**Transformational change** is radical or second order in nature. It requires a shift in assumptions made by the organization and its members.

Transformation can result in an organization that differs significantly in terms of structure, processes, culture and strategy. It may, therefore, result in the creation of an organization that operates in developmental mode – one that continuously learns, adapts and improves. In general, it can be said that there are two types of change include Happen Change and Planned Change.

### The Nature of Planned Change

The pace of global, economical, and technological development makes change an inevitable feature of organizational life. However, change that happens to an organization can be distinguished from change that is planned by its members. Organization development is directed at bringing about planned change to increase an organization’s effectiveness. It is generally

initiated and implemented by managers. Organizations can use planned change to solve problems, to learn from experience, to reframe shared perceptions, to adapt to external environmental changes, to improve performance, and to influence future changes (Cummings and Worley, 2008).

## 3.7 Theories of Planned Change

Conceptions of planned change have tended to focus on how change can be implemented in organizations. Called “theories of changing,” these frameworks describe the activities that must take place to initiate and carry out successful organizational change. In this section we describe some of these theories of changing as follows:

### 3.7.1 Kotter’s Eight-Stage Change Process

John P. Kotter’s highly regarded books *Leading Change* (1996) and the follow-up *The Heart of Change* (2002) that they describe a helpful model for understanding and managing change. He built on Lewin’s three-step model to create a more detailed approach for implementing change. Kotter began by listing common failures that occur when managers try to initiate change. These included the inability to create a sense of urgency about the need for change; failure to create a coalition for managing the change process; the absence of a vision for change and to effectively communicate that vision; not removing obstacles that could impede the achievement of the vision; failure to provide short-term and achievable goals; the tendency to declare victory too soon; and not anchoring the changes into the organization’s culture. Kotter then established eight sequential steps to overcome these problems. (Robbins, 2005) Each stage acknowledges a key principle identified by Kotter relating to people’s response and approach to change, in which people **see**, **feel** and then **change**. These eight step change model can be summarized as:

1. **Establishing a sense of urgency**
  - examining the market and competitive realities
  - identifying and discussing crises, potential crises, or major opportunities
2. **Creating the guiding coalition**
  - putting together a group with enough power to lead the change
  - getting the group to work together like a team
3. **Developing a vision and strategy**
  - creating a vision to help direct the change effort
  - developing strategies for achieving that vision
4. **Communicating the change vision**
  - using every vehicle possible to constantly communicate the new vision and strategies
  - having the guiding coalition role model the behavior expected of employees
5. **Empowering broad-based action**
  - getting rid of obstacles
  - changing systems or structures that undermine the change vision
  - encouraging risk taking and non-traditional ideas, activities, and actions
6. **Generating short-term wins**
  - planning for visible improvements in performance, or “wins”
  - creating those wins

- visibly recognizing and rewarding people who made the wins possible

#### 7. Consolidating gains and producing more change

- using increased credibility to change all systems, structures, and policies that don't fit together and don't fit the transformation vision
- hiring, promoting, and developing people who can implement the change vision
- reinvigorating the process with new projects, themes, and change agents

#### 8. Anchoring new approaches in the culture

- creating better performance through customer-and productivity-oriented behavior, more and better leadership, and more effective management
- articulating the connections between new behaviors and organizational success
- developing means to ensure leadership development and succession

The first four steps in the transformation process help defrost a hardened status quo. If change were easy, you wouldn't need all that effort. Phase's five to seven then introduce many new practices. The last stage grounds the change in the corporate culture and helps make them stick. Successful change of any magnitude goes through all eight stages, usually in the sequence. Although one normally operates in multiple phases at once, skipping even a single step or getting too far ahead without a solid base almost always creates problems (Kotter, 1996).

### 3.7.2 ADKAR'S Change Model

ADKAR is a goal-oriented change management model that allows change management teams to focus their activities on specific business results. The ADKAR model was first published by Prosci in 1998 after research with more than 300 companies undergoing major change projects. In 2006, Prosci released the first complete text on the ADKAR model in Jeff Hiatt's book ADKAR. This model is intended to be a coaching tool to help employees through the change process. The ADKAR model creates focus on the first element that is the root cause of failure. This approach helps focus energy on the area that will produce the highest probability for success. The ADKAR model has five elements or objectives. All five elements must be in place for a change to be realized. They are as follows:

**Awareness** represents a person's understanding of the nature of the change, why the change is being made and the risk of not changing. Awareness also includes information about the internal and external drivers that created the need for change, as well as "what's in it for me."

**Desire** represents the willingness to support and engage in a change. Desire is ultimately about personal choice, influenced by the nature of the change, by an individual's personal situation, as well as intrinsic motivators that are unique to each person.

**Knowledge** represents the information, training and education necessary to know how to change. Knowledge includes information about behaviors, processes, tools, systems, skills, job roles and techniques that are needed to implement a change.

**Ability** represents the realization or execution of the change. Ability is turning knowledge into action. Ability is achieved when a person or group has the demonstrated capability to implement the change at the required performance levels.

**Reinforcement** represents those internal and external factors that sustain a change. External reinforcements could include recognition, rewards and celebrations that are tied to the realization of the change. Internal reinforcements could be a person's internal satisfactions with his or her achievement or other benefits derived from the change on a personal level (Hiatt, 2006).

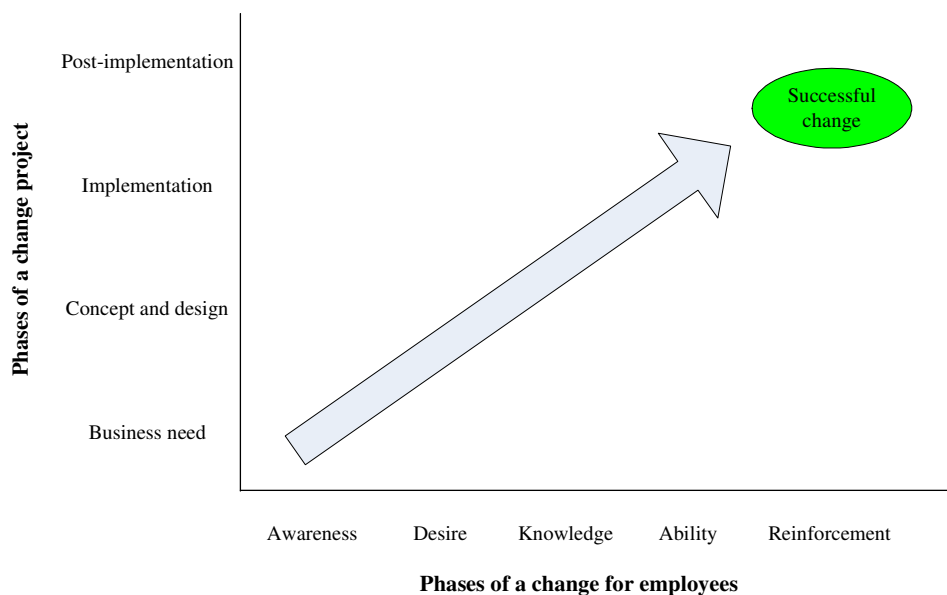
The elements of the ADKAR model fall into the natural order of how one person experience change. ADKAR provides a solid foundation for change management activities, including readiness assessment, sponsorship, communications, coaching, training, recognition, and resistance management. A manager, can use this model to identify gaps in change management process and to provide effective coaching for employees. The ADKAR model can be used:

- To diagnose employee resistance to change.
- To help employees transition through the change process.
- To create a successful action plan for personal and professional advancement during change.
- To develop a change management plan for employees.
- As a coaching tool to support individuals through the change process.
- To guide change management activities like communications, sponsorship, coaching and training.
- To diagnose a struggling change by performing an ADKAR assessment.

The ADKAR model has the ability to identify why changes are not working and help to take the necessary steps to make the change successful. You will be able to break down the change into parts, understand where the change is failing and address that impact point. ADKAR model attempt to answer three fundamental questions about change:

- Why do some changes fail when others succeed?
- How can we make sense of the many methods and tactics for managing change?
- How can we lead change successfully, both in our personal lives and professional careers?

To use the ADKAR model effectively, you will need to understand the underlying framework for change initiatives. In Figure 3- 1, change happens on two dimensions: the business dimension (vertical axis) and the people dimension (horizontal axis). Successful change happens when both dimensions of change occur simultaneously (www.change-management.com, 07.03.2009).



**Figure 3- 1** Success Factors for Change Using ADKAR

### 3.7.2.1 Business Dimension of Change

The business dimension of change includes the typical project elements:

- Business need or opportunity is identified.
- Project is defined (scope and objectives).
- Business solution is designed (new processes, systems and organizational structure).
- New processes and systems are developed.
- Solution is implemented into the organization.

These are the standard elements of a business change that managers feel most comfortable managing.

### 3.7.2.2 People Dimension of Change

Research shows that problems with the people dimension of change are the most commonly cited reason for project failures. In a study with 248 companies, effective change management with employees was listed as one of the top-three overall success factors for the project. Helping managers be effective sponsors of change was considered the most critical success factor overall.

Effective management of the people dimension of change requires managing five key goals that form the basis of the ADKAR model:

- Awareness of the need to change
- Desire to participate and support the change
- Knowledge of how to change (and what the change looks like)
- Ability to implement the change on a day-to-day basis
- Reinforcement to keep the change in place

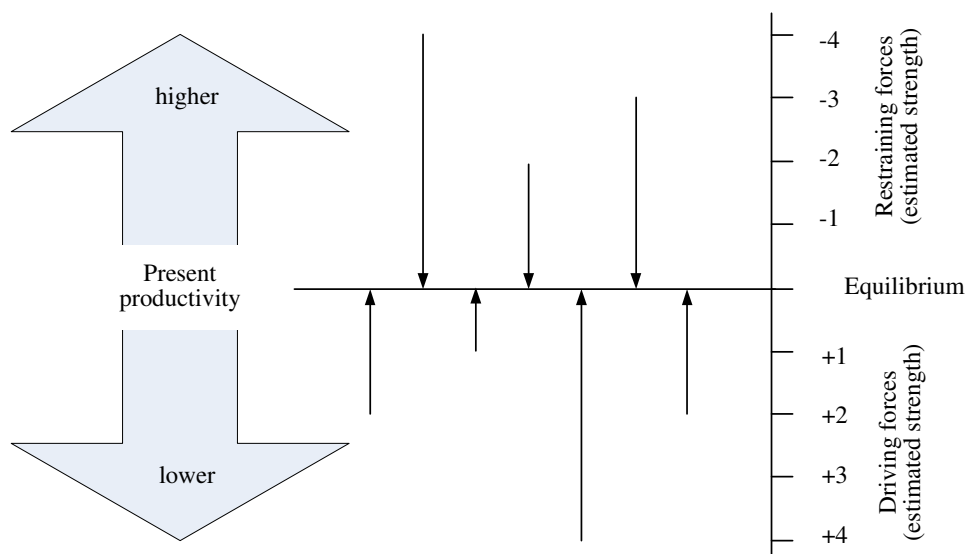
This model helps guide change management activities for both organization and individual change management.

### 3.7.3 Lewin's Change Model

Kurt Lewin (1951) introduced the three-step change model. This social scientist views behavior as a dynamic balance of forces working in opposing directions. Driving forces facilitate change because they push employees in the desired direction. Restraining forces hinder change because they push employees in the opposite direction. Therefore, these forces must be analyzed and Lewin's three-step model can help shift the balance in the direction of the planned change (www.csupomona.edu, 01.03.2009). Figure 3- 2 illustrates Lewin change model.

According to Lewin, the first step in the process of changing behavior is unfreezing the existing situation or status quo. The status quo is considered the equilibrium state. Unfreezing is necessary to overcome the strains of individual resistance and group conformity. Unfreezing can be achieved by the use of three methods. First, increase the driving forces that direct behavior away from the existing situation or status quo. Second, decrease the restraining forces that negatively affect the movement from the existing equilibrium. Third, find a combination of the two methods listed above. Some activities that can assist in the unfreezing step include: motivate participants by preparing them for change, build trust and recognition for the need to change, and actively participate in recognizing problems and brainstorming solutions within a group (Robbins, 2005). Lewin's second step in the process of changing behavior is movement or change. In this step, it is necessary to move the target system to a new level of equilibrium. Three actions that can assist in the movement step include: persuading employees to agree that the status quo is not beneficial to them and encouraging them to view the problem from a fresh perspective, work together on a quest for new, relevant information, and connect the views of

the group to well-respected, powerful leaders that also support the change (www.csupomona.edu, 01.03.2009).



**Figure 3- 2** Driving and Restraining Forces in Equilibrium

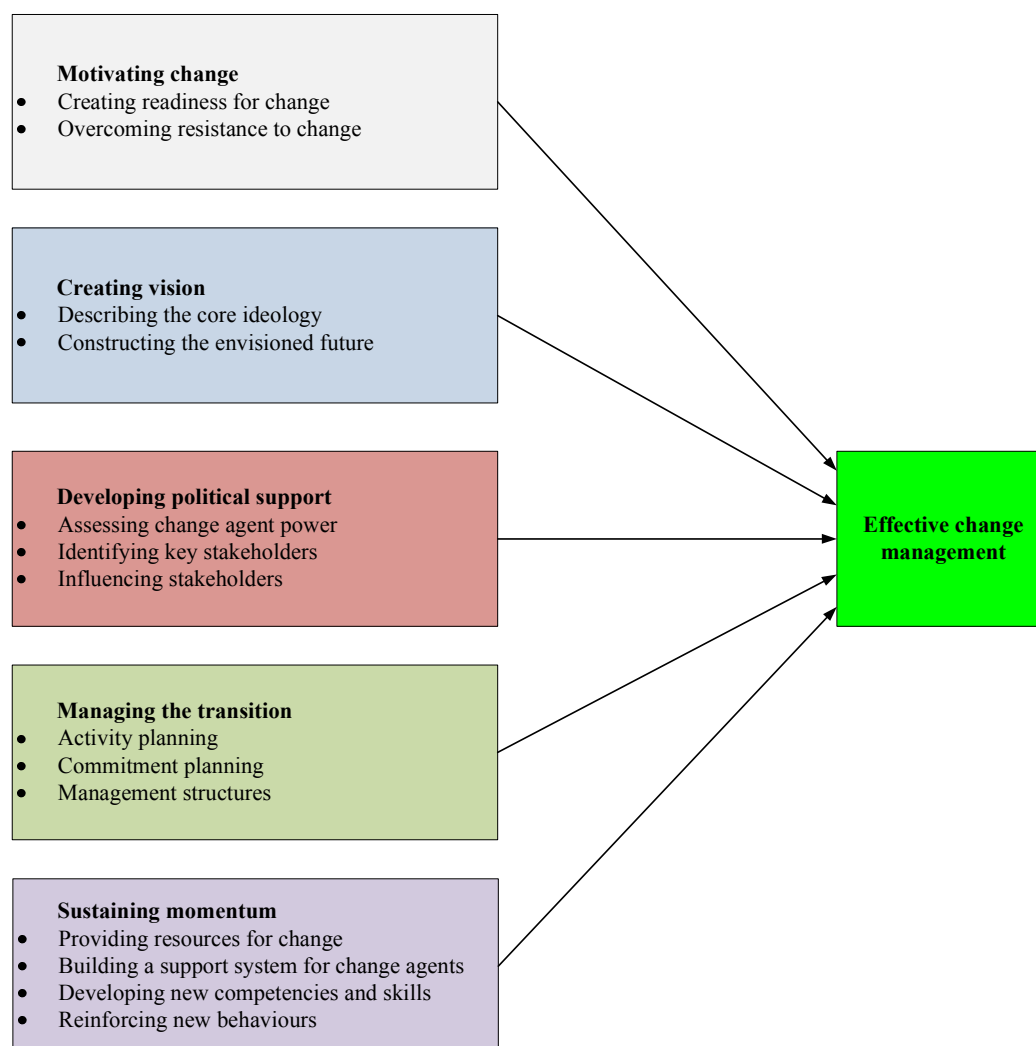
The third step of Lewin’s three-step change model is refreezing. This step needs to take place after the change has been implemented in order for it to be sustained or “stick” over time. It is high likely that the change will be short lived and the employees will revert to their old equilibrium (behaviors) if this step is not taken. It is the actual integration of the new values into the community values and traditions. The purpose of refreezing is to stabilize the new equilibrium resulting from the change by balancing both the driving and restraining forces. One action that can be used to implement Lewin’s third step is to reinforce new patterns and institutionalize them through formal and informal mechanisms including policies and procedures. Therefore, Lewin’s model illustrates the effects of forces that either promote or inhibit change. Specifically, driving forces promote change while restraining forces oppose change. Hence, change will occur when the combined strength of one force is greater than the combined strength of the opposing set of forces (Robbins, 2005).

### 3.7.4 Cummings and Worley’s Model of Effective Change Management

The OD literature has directed considerable attention to leading and managing change. The diversity of practical advice for managing change can be organized into five major activities, as shown in Figure 3- 3. The activities contribute to effective change management and are listed roughly in the order in which they typically are performed. Each activity represents a key element in change leadership. The first activity involves *motivating change* and includes creating a readiness for change among organization members and helping them address resistance to change. Leadership must create an environment in which people accept the need for change and commit physical and psychological energy to it. Motivation is a critical issue in starting change because ample evidence indicates that people and organizations seek to preserve the status quo and are willing to change only when there are compelling reasons to do so. The second activity is concerned with *creating a vision* and is closely aligned with leadership activities. The vision provides a purpose and reason for change and describes the desired future state. Together, they provide the “why” and “what” of planned change. The third activity involves *developing political support* for change. Organizations are composed of powerful



individuals and groups that can either block or promote change, and leaders and change agents need to gain their support to implement changes. The fourth activity is concerned with *managing the transition* from the current state to desired future state. It involves creating a plan for managing the change activities as well as planning special management structures for operating the organization during the transition. The fifth activity involves *sustaining momentum* for change so that it will be carried to completion. This includes providing resources for implementing the changes, building a support system for change agents, developing new competencies and skills, and reinforcing the new behaviors needed to implement the changes. However, unless individuals are motivated and committed to change, unfreezing the status quo will be extremely difficult. In the absence of vision, change is likely to be disorganized and diffused. Without the support of powerful individuals and groups, change may be blocked and possibly sabotaged. Unless the transition process is managed carefully, the organization will have difficulty functioning while it moves from the current state to the future state. Without efforts to sustain momentum for change, the organization will have problems carrying the changes through to completion. Thus, all five activities must be managed effectively to realize success (Cummins and Worley, 2008).



**Figure 3- 3 Activities Contributing to Effective Change Management**

### 3.7.5 Organizational Development

“No discussion of managing change would be complete without including organizational development. Organizational development (OD) is not an easily defined single concept. Rather, it’s a term used to encompass a collection of planned-change interventions built on humanistic-democratic values that seek to improve organizational effectiveness and employee well-being. The OD paradigm values human and organizational growth, collaborative and participative process, and a spirit of quality. The change manager may be directive in OD; however, there is a strong emphasis on collaboration. The following briefly identifies the underlying values in most OD efforts.

*Respect for people:* Individuals are perceived as being responsible, conscientious, and caring. They should be treated with dignity and respect.

*Trust and support:* The effective and healthy organization is characterized by trust, authenticity, openness, and a supportive climate.

*Power equalization:* Effective organizations deemphasize hierarchical authority and control.

*Confrontation:* Problems shouldn’t be swept under the rug. They should be openly confronted.

*Participation:* The more that people who will be affected by a change are involved in the decisions surrounding that change, the more they will be committed to implementing those decisions” (Robbins, 2005).

### 3.7.6 Action Research Model

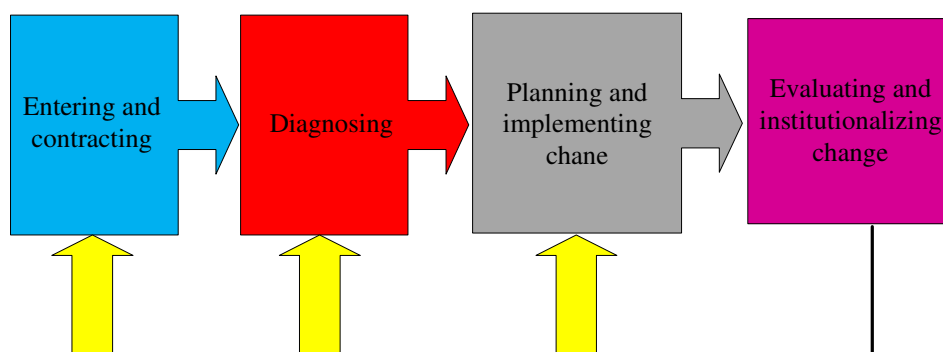
The action research model focuses on planned change as a cyclical process in which initial research about the organization provides information to guide subsequent action. Then the results of the action are assessed to provide further information to guide further action, and so on (Cummings and Worley, 2008)

The process of action research consists of five steps: diagnosis, analysis, feedback, action, and evaluation. Action research provides at least two specific benefits for an organization. First, it is problem focused. The change agent objectively looks for problems and the type of problem determines the type of change action. While this may seem intuitively obvious, a lot of change activities aren’t done this way. Rather, they are solution-centered. The change agent has a favorite solution—for example, implementing flextime, teams, or a process reengineering program—and then seeks out problems that his or her solutions fit. Second, because action research so heavily involves employees in the process, resistance to change is reduced. In fact, once employees have actively participated in the feedback stage, the change process typically takes on a momentum of its own. The employees and groups that have been involved become an internal source of sustained pressure to bring about the change (Robbins, 2005).

### 3.7.7 General Model of Planned Change

This model describes the four basic activities that organization members and practitioners jointly carry out in organization development. As shown in Figure 3- 4 the arrows connecting the different activities in the model show the typical sequence of events, from entering and

contracting, to diagnosing, and to planning and implementing change, to evaluating and institutionalizing change. The lines connecting the activities emphasize that organizational change is not a straightforward, linear process but involves considerable overlap and feedback among the activities.



**Figure 3- 4** General Model of Planned Change

### 3.7.7.1 Entering and Contracting

The first of activities in planned change concerns entering and contracting. These events help managers decide whether they want to engage further in a planned change program and to commit resources to such a process. Entering an organization involves gathering initial data to understand the problems facing the organization or the positive opportunities for inquiry. Once this information is collected, the problems or opportunities are discussed with managers and other organization members to develop a contract or agreement to engage in planned change. The contract spells out future change activities, the resources that will be committed to the process, and how OD's practitioners and organization members will be involved.

### 3.7.7.2 Diagnosing

In this stage of planned change, the client system is carefully studied. Diagnosis can focus on understanding organizational problems, including their causes and consequences, or on identifying the organization's positive attributes. The diagnostic process is one of the most important activities in OD. It includes choosing an appropriate model for understanding the organization and gathering, analyzing, and feeding back information to managers and organization members about the problems or opportunities that exist. Diagnostic models for analyzing problems explore three levels of activities. Organization issues represent the most complex level of analysis and involve the total system. Group-level issues are associated with department and group effectiveness. Individual-level issues involve the way jobs are designed.

### 3.7.7.3 Planning and Implementing Change

In this stage, organization members and practitioners jointly plan and implement OD interventions. They design interventions to achieve the organization's vision or goals and make

action plans to implement them. There are several criteria for change, its current change capability, its culture and power distributions, and the change agent's skills and abilities. Depending on the outcomes of diagnosis, there are four major types of interventions in OD:

- a. Human process interventions at the individual, group, and total system levels.
- b. Interventions that modify an organization's structure and technology.
- c. Human resource interventions that seek to improve member performance and wellness.
- d. Strategic interventions that involve managing the organization's relationship to its external environment and the internal structure and process necessary to support a business strategy.

Implementing interventions is concerned with managing the change process. It includes motivating change, creating a desired future vision of the organization, developing political support, managing the transition toward the vision, and sustaining momentum for change.

#### **3.7.7.4 Evaluating and Institutionalizing Change**

The final stage in planned change involves evaluating the effects of the intervention and managing the institutionalization of successful change programs. Feedback to organization members about the intervention's results provides information about whether the changes should be continued, modified, or suspended. Institutionalizing successful changes involves reinforcing them through feedback, rewards, and training (Cummings and Worley, 2008).

#### **3.7.8 Lippitt's Phases of Change Theory**

Lippitt, Watson, and Westley (1958) extend Lewin's Three-Step Change Theory. They created a seven-step theory that focuses more on the role and responsibility of the change agent than on the evolution of the change itself. Information is continuously exchanged throughout the process. The seven steps are:

- a. Diagnose the problem.
- b. Assess the motivation and capacity for change.
- c. Assess the resources and motivation of the change agent. This includes the change agent's commitment to change, power, and stamina.
- d. Choose progressive change objects. In this step, action plans are developed and strategies are established.
- e. The role of the change agents should be selected and clearly understood by all parties so that expectations are clear. Examples of roles are: cheerleader, facilitator, and expert.
- f. Maintain the change. Communication, feedback, and group coordination are essential elements in this step of the change process.
- g. Gradually terminate from the helping relationship. The change agent should gradually withdraw from their role over time. This will occur when the change becomes part of the organizational culture. They point out that changes are more likely to be stable if they spread to neighboring systems or to subparts of the system immediately affected (Lippitt, Watson and Westley, 1958).

#### **3.7.9 Prochaska and DiClemente's Change Theory**

Initially, the purpose of Prochaska and DiClemente model of change behavior was to show

where a patient was in their journey to change certain health behaviors. Throughout the years, this model has been extended to other audiences other than solely health patients. The model defines a more general process of change and, therefore, it tends to be less specific. They found that people pass through a series of stages when change occurs. The stages discussed in their change theory are: Pre-contemplation, contemplation, preparation, action, and maintenance. (Prochaska and et al., 1994) Progression through the stages is cyclical, not linear. This is because initially many individuals relapse on their change efforts and do not successfully maintain their gains the first time around. Prochaska and DiClemente have created a spiral model to represent the various stages of their theory:

**Pre-contemplation:** The first aspect of the model shows the movement of intentional change from pre-contemplation to contemplation of the issue. Pre-contemplation exists when an individual is unaware or fails to acknowledge the problems without engaging in any change process activities. Individuals in this stage do not want to change their behavior and may insist that their behavior is normal.

**Contemplation:** The second stage exists when the individual raises consciousness of the issue. Individuals in this stage are thinking about changing their behavior, but they are not ready to commit to the change process yet.

**Preparation:** This stage occurs when the individual is ready to change their behavior and plans to do so within the next two weeks. These individuals will need counseling, social support, and assistance with problem solving during this stage of change.

**Action:** The action stage follows shortly thereafter. It is characterized by an increase in coping with behavioral change and the individual begins to engage in change activities.

**Maintenance:** Finally, maintenance is the last stage of this change theory. In this final stage, actions to reinforce the change are taken coupled with establishing the new behavioral change to the individual's lifestyle and norms. This stage may last six months up to the lifespan of the individual.

Counseling to avoid relapses is necessary to ensure a successful long-term change. In this spiral model, individuals have the ability to exit at any time if they decide not to change. The model takes into account behavioral relapses or return to the previously existing behavior. In the case of relapses, many individuals do not let up. They can revisit the contemplation stage and prepare for action in the future. The spiral pattern of the model suggests that many individuals learn from their relapses instead of circling around the issue (Alisia, 2005).

### 3.7.10 Social Learning Theory

The social learning theory proposed by Albert Bandura has become perhaps one of the most influential theories of learning and development. While rooted in many of the basic concepts of traditional learning theory, Bandura believed that direct reinforcement could not account for all types of learning. His theory added a social element, arguing that people can learn new information and behaviors by watching other people. Known as observational learning (or modeling), this type of learning can be used to explain a wide variety of behaviors.

"Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977).

Basic Social Learning Concepts are:

- a. *People can learn through observation.* Bandura believes that people learn behaviors, emotional reactions, and attitudes from role models whom they wish to emulate. (Bandura, 2002) According to Wagner (2005), in his famous "Bobo doll" studies, Bandura demonstrated that children learn and imitate behaviors they have observed in other people. The children in Bandura's studies observed an adult acting violently toward a Bobo doll. When the children were later allowed to play in a room with the Bobo doll, they began to imitate the aggressive actions they had previously observed. Bandura identified three basic models of observational learning:
  - 1) A live model, which involves an actual individual demonstrating or acting out a behavior.
  - 2) A verbal instructional model, which involves descriptions and explanations of a behavior.
  - 3) A symbolic model, which involves real or fictional characters displaying behaviors in books, films, television programs, or online media.
- b. *Mental states are important to learning.* Bandura noted that external, environmental reinforcement was not the only factor to influence learning and behavior. He described intrinsic reinforcement as a form of internal reward, such as pride, satisfaction, and a sense of accomplishment. This emphasis on internal thoughts and cognitions helps connect learning theories to cognitive developmental theories. While many textbooks place social learning theory with behavioral theories, Bandura himself describes his approach as a 'social cognitive theory.'
- c. *Learning does not necessarily lead to a change in behavior.* While behaviorists believed that learning led to a permanent change in behavior, observational learning demonstrates that people can learn new information without demonstrating new behaviors (<http://psychology.about.com>, 25.12.2008).

### 3.7.10.1 The Modeling Process

Not all observed behaviors are effectively learned. Factors involving both the model and the learner can play a role in whether social learning is successful. Certain requirements and steps must also be followed. The following steps are involved in the observational learning and modeling process:

**Attention:** In order to learn, you need to be paying attention. Anything that detracts your attention is going to have a negative effect on observational learning. If the model interesting or there is a novel aspect to the situation, you are far more likely to dedicate your full attention to learning.

**Retention:** The ability to store information is also an important part of the learning process. Retention can be affected by a number of factors, but the ability to pull up information later and act on it is vital to observational learning.

**Reproduction:** Once you have paid attention to the model and retained the information, it is time to actually perform the behavior you observed. Further practice of the learned behavior leads to improvement and skill advancement.

**Motivation:** Finally, in order for observational learning to be successful, you have to be motivated to imitate the behavior that has been modeled. Reinforcement and punishment play an important role in motivation. While experiencing these motivators can be highly effective, so

can observing other experience some type of reinforcement or punishment? For example, if you see another student rewarded with extra credit for being to class on time, you might start to show up a few minutes early each day (<http://psychology.about.com>, 25.12.2008).

Observational learning or social learning allows for learning without any change in behavior and has therefore been used as an argument against strict behaviorism which argued that behavior change must occur for new behaviors to be acquired (Bandura, 1977).

### 3.7.11 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior of Icek Ajzen (1980) helps to understand how we can change the behavior of people. The TPB is a theory which predicts deliberate behavior, because behavior can be deliberative and planned. TPB is the successor of the similar Theory of Reasoned Action of Ajzen and Fishbein. The succession was the result of the discovery that behavior appeared not to be 100% voluntary and under control, which resulted in the addition of perceived behavioral control. With this addition the theory was called the Theory of Planned Behavior. Briefly, according to TPB, human action is guided by three kinds of considerations:

- 1) **Behavioral Beliefs** (beliefs about the likely consequences of the behavior).
- 2) **Normative Beliefs** (beliefs about the normative expectations of others).
- 3) **Control Beliefs** (beliefs about the presence of factors that may facilitate or impede performance of the behavior).

Ajzen's three considerations are crucial in circumstances, projects, and programs when changing behavior of people. In their respective aggregates, behavioral beliefs produce a favorable or unfavorable attitude toward the behavior, normative beliefs result in perceived social pressure or subjective norm, and control beliefs give rise to perceived behavioral control. In combination, attitude toward the behavior, subjective norm, and perception of behavioral control lead to the formation of a behavioral intention. As a general rule, the more favorable the attitude and subjective norm and the greater the perceived control, the stronger should be the person's intention to perform the behavior in question.

Recently (2002) Ajzen investigated Residual Effects of Past on Later Behavior. He came to the conclusion that this factor indeed exists but cannot be described to habituation as many people think. A review of existing evidence suggests that the residual impact of past behavior is attenuated when measures of intention and behavior are compatible and vanishes when intentions are strong and well formed, expectations are realistic, and specific plans for intention implementation have been developed.

## 3.8 Levels of Change

Change can take place at four levels: knowledge changes, attitudinal changes, individual behavior changes and group or organizational behavior changes. The relationship between the time and the difficulty of making each of these levels of change is illustrated in Figure 3- 5.

Changes in knowledge tend to be the easiest to make, they generally come from reading or hearing something new. Attitude changes tend to be more difficult and take longer due to the emotional element of having "to change the way of thinking". Changes in individual behavior are significantly more difficult and take longer than the previous two levels of change. This discrepancy between knowledge, attitude and behavior is often due to an unwillingness to let go of patterns of behavior that they feel comfortable with. While individual behavior is difficult enough to change, it becomes even more complicated, difficult and time consuming when trying

to implement change within groups or organizations, at this level you are fighting against values, traditions and customs that have developed over years (Hersey and Blanchard, 2001).

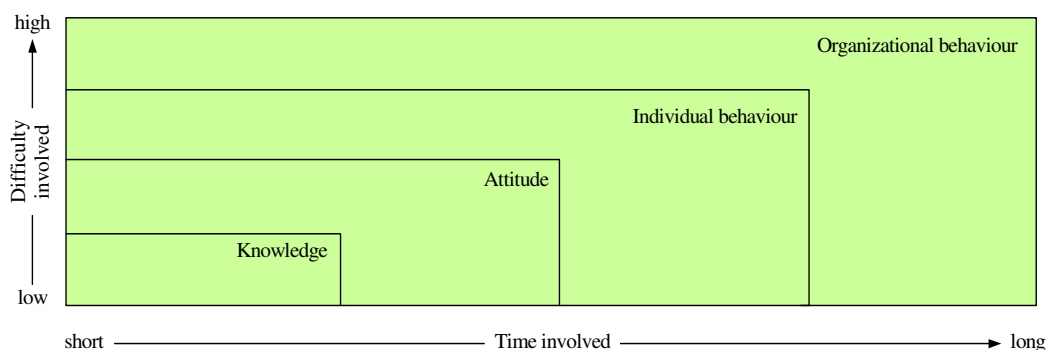


Figure 3- 5 Time and Difficulty Involved in Making Various Changes

### 3.9 Approaches to Change

There have traditionally been two approaches to achieving group or organizational change, a participative approach and a directive approach (Hersey and Blanchard, 2001).

**The participative approach** starts by making new knowledge available to individuals. The intention being that the individuals will appropriate this new "learning" and develop a positive attitude and commitment in the direction of the desired change. The next step, significantly more difficult to achieve, is to transfer this commitment into actual behavior "back at work" hoping that if sufficient individuals (the "critical mass") change, then the group or organization will change.

With the participative change cycle, a significant advantage is that once the change is accepted it tends to be long lasting. Since everyone has been involved in the development of the change, each person tends to be more highly committed to its implementation.

In other words this type of change process can become self-perpetuating. If one of its executive sponsors or charismatic leaders disappeared halfway through, the initiative might change somewhat, but it would keep going, because its vitality would not depend on any one individual (Senge, 1999).

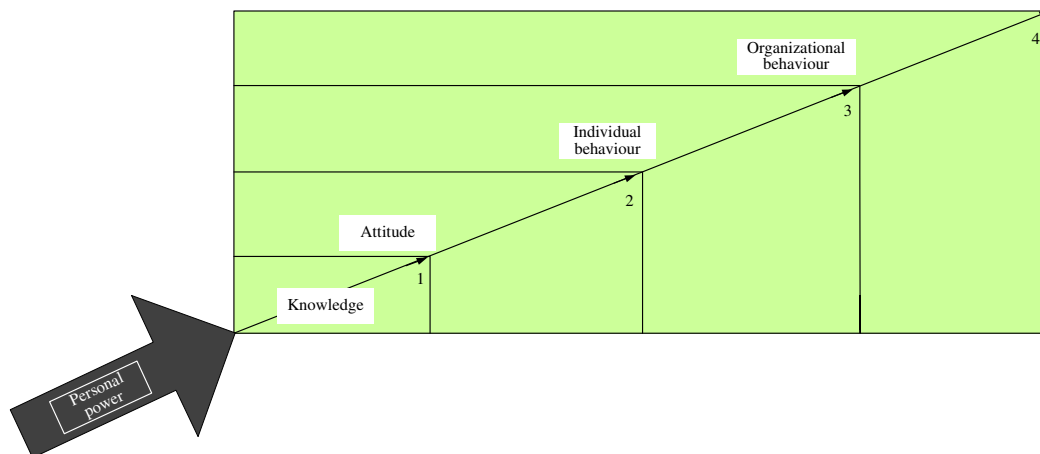
The first fundamental point in the literature on participatory change is decision-making and control by 'insiders' or employees in an organization. Change should be people-centered and the role of 'outsiders' such as planners, developers and researchers should be as enablers and facilitators. In the case of participation as a *means*, people are brought into a project in order for its aims to be accomplished more efficiently, effectively or cheaply. In contrast, participation is an *end* when the community or group set up a process to control its own change (Hamdhaidari and Wright, 2001). Participative change cycle is illustrated in Figure 3- 6.

**Directive change** starts with a change being imposed on the total organization, with individuals being forced to behave and interact in new ways. The behavioral changes are often initially superficial, with individuals "playing along" with the new change. These new behaviors and



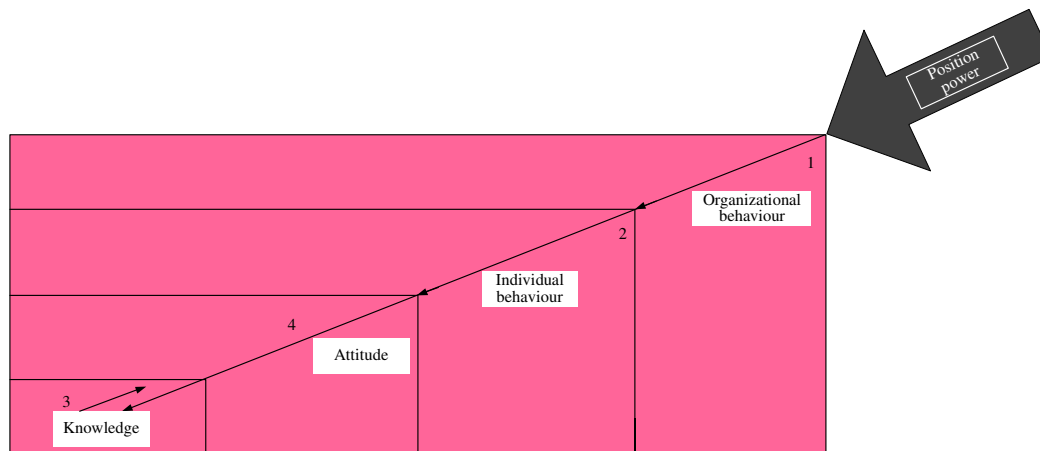
interactions create new knowledge, which (it is hoped) tends to develop a positive approach to this new change, and hence a "real" change in behavior. The hope is that "if people will only have a chance to see how the new system works, then they will support it."

In this type of change process the change effort is powerful only so long as it is pushed. Success often depends entirely on a single leader's continued effort to feel the system with enthusiasm, ideas, and initiative. When the leader moves on or loses interest or energy, or actions fail to produce desired results for some reason, then the force of the initiative begins to decelerate (Senge, 1999).



**Figure 3-6** Participative Change Cycle

On the other hand a disadvantage of this change strategy is that it tends to be volatile. It can be maintained only as long as the leader has position power to make it stick. It often results in animosity, hostility, and in some cases, overt and covert behavior to undermine and overthrow. This directive approach is shown in Figure 3-7.



**Figure 3-7** Directive Change Cycle

### 3.10 How to Design an Effective Change Plan?

Researchers have identified a number of contingencies present in the change situation that can affect intervention success. More generic contingencies that apply to all OD interventions are:

**Readiness for Change:** Intervention success depends heavily on the organization being ready for planned change. Indicators of readiness for change include sensitivity to pressure for change, dissatisfaction with the status quo, availability of resources to support change, and commitment of significant management time. When readiness for change is low, however, interventions need to focus first on increasing the organization's willingness to change.

**Capability to Change:** Managing planned change requires particular knowledge and skills, including the ability to motivate change, to lead change, to develop political support, to manage the transition, and to sustain momentum. If organization members do not have these capabilities, then a preliminary training intervention may be needed before members can engage meaningfully in intervention design.

**Cultural Context:** The national culture within which the organization is embedded can exert a powerful influence on members' reactions to change, so intervention design must account for the cultural values and assumptions held by organization members. Interventions may have to be modified to fit the local culture, particularly when OD practices developed in one culture are applied to organizations in other culture.

**Capabilities of the Change Agent:** Many failures in OD result when change agents apply interventions beyond their competence. In designing interventions, OD practitioners should assess their experience and expertise against the requirements needed to implement the intervention effectively. When a mismatch is discovered, practitioners can explore whether the intervention can be modified to fit their talents better, whether another intervention more suited to their skills can satisfy the organization's needs' or whether they should enlist the assistance of another change agent who can guide the process more effectively (Cummings and Worley, 2008).

### 3.11 Resistance to Change

Change can generate deep resistance in people and in organizations, thus making it difficult, if not impossible, to implement organizational improvements. At a personal level, change can arouse considerable anxiety about letting go of the known and moving to an uncertain future. People may be unsure whether their existing skills and contributions will be valued in the future, or have significant questions about whether they can learn to function effectively and to achieve benefits in the new situation. At the organizational level, resistance to change can come from three sources. *Technical resistance* comes from the habit of following common procedures and the consideration of sunk costs invested in the status quo. *Political resistance* can arise when organizational changes threaten powerful stakeholders, such as top executive or staff personnel, or call into question the past decisions of leaders. Organization change often implies a different allocation of already scarce resources, such as capital, training budgets, and good people. Finally, *cultural resistance* takes the form of systems and procedures that reinforce the status quo, promoting conformity to existing values, norms, and assumptions about how things should operate (Cummings and Worley, 2008).

Robbins (2005) believes that "one of the most well-documented findings from studies of individual and organizational behavior is that organizations and their members resist change. In a sense, this is positive. It provides a degree of stability and predictability to behavior. If there were not some resistance, organizational behavior would take on the characteristics of chaotic randomness".

### 3.12 Process of Resistance to Change

Stages of an individual's resistance to change follow a specific pattern of stages, and leaders must be aware of and know how to isolate and deal with each of these stages. The stages of an individual's resistance to change are eight in number:

Stage One: Denial	Stage Five: Acceptance
Stage two: Defensiveness	Stage Six: Adaptation
Stage Three: Interest	Stage Seven: Internalization
Stage Four: Involvement	Stage Eight: Ownership (Herman, 1994)

### 3.13 Managing Resistance to Change

There is a universal condition that wherever there is a change effort, there will be resistance. It may be caused situationally by the need to learn new things or destroy old and familiar ones, or it may result from the individual dynamics of a fear of failing, or of looking silly or incompetent. The reaction to resistance often is anger and frustration. Those who resist are the "bad guys," so the energy goes into straightening them out, rather than finding the cause of the resistance and dealing with it in a nonjudgmental manner. Resistance is energy. Energy is the asset that drives the organizational machine. Resistance usually appears as negative energy, and that induces negative energy in management's dealing with it. Or, as often occurs, management's strategy is to get rid of the negative energy, to smooth things over. The net result of such a strategy is that the energy is reduced, and with it the asset that drives the system.

An effective strategy is one where the goal is to convert the negative energy to positive energy, to change the balance. Creating and stating clear goals, sharing the change strategy, appreciating contributions at all levels, and rewarding group progress are the types of action plans that tend to produce the best results.

A useful formula for thinking about the resistance process is:  $C = (A, B, D) > X$ .

Where:

$C$  = change

$A$  = level of dissatisfaction with the status quo

$B$  = desirability of the proposed change or end state

$D$  = practicality of the change (minimal risk and disruption)

$X$  = cost of changing

Factors  $A$ ,  $B$ , and  $D$  must outweigh the perceived costs  $X$  for change to occur. If any person or group whose commitment is needed is not sufficiently dissatisfied with the present state of affairs  $A$ , eager to achieve the proposed end state  $B$ , and convinced of changing is too high, and that person or group will resist the change. Looking at the readiness for the change of key individuals whose commitment is needed against the dimensions of the formula can give some clues to the leaders about which strategies might be effective in reducing resistance and building commitment to change (Beckhard, 1992).

### 3.14 Overcoming Resistance to Change

There are at least three major strategies for dealing with resistance to change:

**Empathy and support:** A first step in overcoming resistance is to learn how people are experiencing change. This strategy can identify people who are having trouble accepting the changes, the nature of their resistance, and possible ways to overcome it, but it requires a great deal of empathy and support. It demands a willingness to suspend judgment and to see the situation from another's perspective, a process called active listening. When people feel that those people who are responsible for managing change are genuinely interested in their feelings and perceptions, they are likely to be less defensive and more willing to share their concerns and fears. This more open relationship not only provides useful information about resistance but also helps establish the basis for the kind of joint problem solving needed to overcome barriers to change.

**Communication:** People resist change when they are uncertain about its consequences. Lack of adequate information fuels rumors and gossip and adds to the anxiety generally associated with change. Effective communication about changes and their likely results can reduce this speculation and allay unfounded fears. It can help members realistically prepare for change. However, communication is also one of the most frustrating aspects of managing change.

**Participation and Involvement:** One of the oldest and most effective strategies for overcoming resistance is to involve organization members directly in planning and implementing change. Participation can lead both to designing high quality changes and to overcoming resistance to implementing them. Members can provide a diversity of information and ideas, which can contribute to making the innovations effective and appropriate to the situation. They also can identify pitfalls and barriers to implementation. Involvement in planning the changes increases the likelihood that members' interests and needs will be accounted for during the intervention. Consequently, participants will be committed to implementing the changes because doing so will suit their interests and meet their needs. Moreover, for people having strong needs for involvement, the act of participation itself can be motivating, leading to greater effort to make the changes work (Cummings and Worley, 2008).

### 3.15 Benefits of Resistance against Change

Most people look toward resistance against change as a negative harmful phenomenon. Managers also concern about resistance against changes and its consequences. But it must be noticed that resistance is a natural flow dependent on changes. It can also be a criterion to assess the suggested change. Resistance may prevent many of unpredicted mistakes, threats and dangers. Finally, the least benefit of resistance is to protect the organization against casual unplanned changes which are based on individual tendencies. It makes managers step toward changes more carefully and thoughtfully, as well.

### **3.16 Guidelines of Making a Successful Change**

Organizations' managers need to pay attention to the following guidelines in order to make successful changes:

- Staffs' needs and interests must be in accordance with organizations' needs and interests, i.e. effectiveness and efficiency.
- Changes must be begun through experimental plans.
- Factors effecting changes must be studied and analyzed systematically.
- All organizational levels including managers and staffs must be involved in change.
- Organization's theoretical principles i.e. speech and practical principles i.e. behavior must be consonant and unified.
- Education, communication, participation and research should be used to improve changing process.
- Change must be introduced in a way that the staffs consider it their own thought and innovation.
- Managers must carefully allocate sufficient time to recognize the issues related to change.
- Changes should be introduced realistically and their advantages must be expressed clearly.
- Information related to the change must be clear and available for the staffs.

## 4 Education and Change Management

### 4.1 Meaning of Education

There exist many definitions for education. According to William Evans (2009) “education is a distinctive kind of practice that requires, on the part of teachers, the virtue of *phronesis*, the sort of practical judgement that lies in the intelligent and caring sensitivity to the demands of the unrepeatable occasions that constantly arise in dealing with students”. John Dewey asserts that education means a great task of preparing situations that provide and guarantee growth and respect and admire humans' life regardless of their age. In his opinion, the aim of scholastic teaching and training is to provide and continue education through organizing forces and abilities which provide and guarantee growth. Moreover, tendency toward learning from life and setting the situations in a way that every issue is learned during life process is the utmost result of education.

Socrates says that education must provide people with those kinds of knowledge which lead to efflorescence of man's mind. He asserts that being aware of the truth makes a person act accordingly. Aristotle, as well, considers understanding and thinking as the aim of education. Plato believes that correct training makes citizens wise and logical, and then they would understand everything. Education must be a process transferring people from their current position to a higher one and change limited "to be"s to unlimited "to become"s.

Another group of authorities declare that education is the society's official way to preserve and transfer culture. By this definition, education is the process through which beliefs, norms, knowledge and skills of a society are transferred to the new generation. Hence, referring to education, it can be said that:

- Education is a process and a constant and permanent activity.
- Education seeks to change human's behavior.
- The concern and result of education is to make physical, mental and social evolution in human.
- Education seeks to create a grown and consonant personality of human.
- Education is a bilateral interaction between the student and teacher to reach the desired objectives.

### 4.2 Expectations from Education

Throughout history, it is expected from education to bring up future men and prepare today's generations for future society and life. Therefore, educational programmers and policy makers, teachers and education administrators should know the requirements and necessities of future life to be able to nurture required knowledge and wisdom in children and youth.

In previous traditional societies with gradual evolutions and changes, it was not so essential to know the future in which today's generations should live. Society was basically stagnant in a way that its evolution was nothing more than repetition of the past.

However in today's world, due to scientific and technical progresses –also known as the revolution of knowledge, science and technology- the content of scientific publications and productions is increasing so fast that a current American scientist –Robert Oppenheimer- says that from the beginning of the creation of human being to present time, 90% of the scholars of experimental sciences live in our age. Social and economical evolutions and changes of societies are so fast that information and knowledge soon outdate. In fact, these evolutions end up with new objectives and responsibilities for schools, scholastic institutes and education. Providence and analysis of countries' future evolutions and changes is something required for today's rapid life and it adds to education's responsibilities. Thus, necessity of providence and constructive change and evolution in education is more severe than any other field. Here are some current expectations from education's administrators:

- In today's competitive world, any society needs well-brought-up managers in industry and business. So, schools should act better than before.
- Schools should use technology increasingly in order to progress and reach a better position.
- School teachers and managers should be more responsible for their works' results as well as their function.
- Little, gradual and incomplete changes are not proper to education system (schools and scholastic organizations). But the whole construction of education must be revised.
- Authorizing teachers, parents and local people and empowering them to make decisions previously made by managers and administrators of higher official levels in schools.
- Educational managers at region and school levels need oral knowledge and recognition about notions and processes of change in order to react and act in these fields.

### **4.3 Unique Features of Educational Management**

Nowadays, art and science of management is among the subtlest, hardest and the most useful activities of human and an important indicator of current civilization. It is an effective factor in social, cultural and economical development and growth of the current societies. Among different branches of management, management of educational organizations is of great importance and has a pivotal role, since all objectives and elements of these organizations are human-related and their role is to alter inexperienced people into skillful, inventive, self-aware and grown-up ones, as well as to provide the society's need for human resources in cultural, social and economic sectors. If an organization neglects its duties, the result would directly influence individuals dealing with that organization, and if a problem happens in production line of an industrial organization, some of its products would be lost and some financial loss which can be restituted would be imposed to the organization. But if Education Organization and its managers are not aware of the nature of their task, or if there is a pause in teaching-learning process, or if the results of education who are students are lost due to incorrect training, the ethical, social and economical outcomes would influence the society and cannot be restituted easily.

Thus, in education system all levels of management is of high position and unique characteristics which cannot be compared to management in other organizations. No education system can reach its objectives without efficient experienced capable managers. So, investment

in training qualified managers of different organizational levels in education -especially school managers- with regard to qualitative and quantitative aspects, is the best and most useful kind of investment.

#### **4.4 Aiding Theories of Change for Educational Managers**

In order to change educational managers into real leaders, changes must be considered as positive challenges to improve schools and educational regions. Managers as educational leaders are in charge of directing changes to the correct course and using all opportunities of change to speed the moves toward future and desirable aims. This type of leading especially in the first years of the current century is of higher importance, since in order to make their future, nations need to believe in and support education more than ever.

In today's societies, change is an essential and inevitable issue and theories of change focus on this matter, too. Thus, managers and educational leaders are expected to be pioneers, directors and leaders of change. They are not expected to be neutral and open to change. They must effectively use theories and science of change management in order to reach their organizational objectives in accordance with the present and future needs and situations (Herman, 1994).

#### **4.5 Usage of Transformational Leadership in Educational Systems**

A leader can create a transformation only when he empowers others by giving them power and authority and causes transformation and serious stable change in the work method of the school or school district. Through empowering the staff, such a leader expands the foundation of leading, lets desirable changes take place because of having several proponents and beneficiary individuals participate in decision-making about changes in a united and sincere way.

A good example of transformational leadership activities is a school district and its school managers who enforced school-based management voluntarily. In this type of management beneficiary administrators who had no official authority to decide or right to give their opinions can decide about or intervene in their school affairs. When decisions about the budget, education, staff's affairs, supervision and management of school affairs are made together, the entire organizational culture of schools and school districts would face transformation.

#### **4.6 Total Quality Management as a Proper Tool for Change**

Nowadays, improving quality is a necessity in fields like industry and production, health and education. In the scope of education, due to factors such as permanent decrease of budgets, low level of learners' knowledge and skill and governments' and people's insistence on vast improving or restructuring educational systems, more attention is paid to quality. At global level, actions such as making the schools' management self-governed, praising managers' innovations and tendency toward making changes in different fields of education, are significant signs of such attention. In this situation, management authorities in education consider notions of total quality management –with little adjustment and modification- as important means to restructure and change educational systems.



## 4.7 Reforms in Education

In past, reforms in education systems of most countries were carried out by central government and within the framework of a united single program at national level. However, since such reforms does not practically have considerable effect on improving teaching-learning process and main pivotal activities in education, authorities and advocates of reforms turned their focus toward school and classrooms as the main locations of teaching, educating and learning. Hence, decentralization and authorization became the center of reforms in education. It is two decades that school-based management is in the agenda of reform programs of most countries as a new and effective sample of decentralization.

Universal experiences have shown that unilateral descending reforms in educational system which pass through different official levels are transferred to the lower levels gradually and with delay. On the other hand, educational reforms which are designed at high levels of education system in a centralized and similar way and schools are ordered to enforce them, generally do not lead to change and improvement of the main process of teaching, education and learning in schools and classrooms. Based on these experiences, it is advised to consider schools in planning, decision-making and managing as independent units and not as the mere performers of the similar programs ordered from higher levels to lower ones. There are some basic steps to enforce participative management system in an organization:

- 1) **Tendency toward Decentralization:** Tendency toward decentralization leads to authorizing the inferior, more and increase of their participation in decision-making. Some advantages of tendency toward decentralization in participative management system are: paying attention to the needs, enforcement facilities and situations, possibility of exchange of ideas between high and low levels or interaction of managers and planners and performers, paying attention to the staffs' individual differences, paying attention to the innovations, inventions and freedom of action and paying attention to decision-making in low levels.
- 2) **Decrease of Bureaucracy:** If participative management in an organization looks forward to change and innovation and emphasizes on quality, it is essential to modify many of limiting official regulations, since it is the nature of bureaucracy to limit the staffs' participation and their innovations and inventions. Therefore in many cases, quantity turns to be prior to quality. Natural centralization of bureaucracy is a good reason for this claim. Decrease of bureaucracy eases participation in organizations and in enforcement of participative management, it is another transformation.
- 3) **Stability of Management:** Unnecessary alteration of organizations' managers due to political and social changes has a harmful effect on organizations and quality of their activities. Due to these alterations, managers pay attention to short-term planning and objectives instead of long-term planning and qualitative objectives and participation decreases.
- 4) **Educating Human Force:** Permanent education of managers and staffs is an essential necessity in enforcement of participative management system. Educating human force leads to participation, empowerment and reduction of the staffs' resistance against changes.

## 4.8 System of Education and Change

The word change means to improve, to make better, to complete, to amend, to progress and to grow. Change and amendment focus on improving social and human aspects of an organization. Arnold and Feldman define organizational change as: organizational change is a general guideline or approach to change the organization used to recognize and analyze organizational issues and resources and develop and enforce programs and their solutions. Organizational change is a participative process among organization members (Arnold 1998).

Organizational change is not a temporary short-term flow, but a permanent program to reform and improve organizational efficiency which deals with beliefs, values and organizational culture and generally with behavior of organization members. Its main objective is to create the necessary change to remove obstacles and troubles and to prepare factors of organization growth and self-renewing and to become consonant with different technological, cultural, social and economical changes and finally to get to organizational efficiency. Organizations and managers should understand that change would gradually become a fixed feature of their work life since in our age, changes have speeded up. Modern technology makes impossible, possible and normal. Change exists in everywhere around us and the ability to manage it in an efficient way is of the most important characteristics of successful managers and organizations in today's world. Nowadays, because of the speed of changes, social organizations and systems are called provisional systems. Today these organizations are not what they used to be yesterday, and tomorrow will not be the same as today. Changes do not take place in one subject or aspect, but in all aspects of social life of the societies. Educational systems use the most modern facilities of obtaining information and transferring knowledge and technology. The most recent scientific information in any part of the world is distributed worldwide simultaneously or during the least time possible and everybody is able to use it. Communication equipments have changed in a way that this enormous world has become a small village in which is informed about others and nothing can remain hidden. At this time a modern society not only uses positive changes practically in its social life, but also has a role in creating such changes. Here are some factors indicating the necessity of organizational change:

- Increasing comprehensive changes in societies' political, cultural, economical and social fields.
- Rapid rising progress in scopes of science, technology and communication.
- Change in types of needs and demands of different people and groups of society and increase in their needs and demands.
- Dissatisfaction of organizations' current situation and their irresponsibility to increasing demands.
- Inefficiency and effectiveness of organizations.

The responsibility of education regarding change and adaptability to new situations and conditions is more sensitive and critical than other social organizations, since education should adapt to the needs of the society and at the same time is in charge of preparing the opportunity and creating changes and innovations in the society. Though, there are some societies who have changed and transformed in various fields, but were not able to change their education properly and in consonance with the speed of changes around them. Traditional management is still being used in considerable portion of their education. In these societies' education system, the roles of managers, teachers, students and their parents in success, efficiency and persistence of programs of change, which are to be enforced in schools, are to some extent neglected.

## 4.9 Empowering Employees

In its basic meaning, empowerment refers to passing decision-making authority and responsibility from managers to group members. Almost any form of participative management, shared decision making, and delegation can be regarded as empowerment.

Numerous obstacles can stop employees from creating needed change. The purpose of empowering is to empower a broad base of people to take action by removing as many barriers to the implementation of the change vision as possible at this point in the process of the change. Environmental change demands organizational change. Internal transformation rarely happens unless many people assist. Yet employees generally won't help, or can't help, if they feel relatively powerless. Hence this refers to the relevance of empowerment. Four main barriers to empowerment are: 1) Lack of needed skills. 2) Formal structures. 3) Personnel and information system. 4) Managers' opposition against actions aimed at implementing the new vision (Kotter, 1996).

French and Bell (1999) believe that by empowerment process we mean those leadership behaviors and human resource that enable organization members to develop and use their talents as fully as possible toward individual growth and organizational success. By empowerment, we mean involving large numbers of people in building the vision of tomorrow, developing the strategy for getting there, and making it happen. For empowerment to become a fact of life, it must be built into the very fabric of the organization-its strategy, structure, processes, and culture.

## 4.10 Employees Participation

Employees' participation is a broad term that has been variously referred to as "empowerment," "participative management," "work design," and "quality of work life." Employee involvement seeks to increase members' input into decisions that affect organization performance and employee well-being. This increased employee involvement can lead to quicker, more responsive decisions, continuous performance improvements, and greater employee flexibility, commitment, and satisfaction. It can be described in terms of four key elements that promote worker involvement:

- I. **Power:** This element of employee participation includes providing people with enough authority to make work-related decisions covering various issues such as work methods, task assignments, performance outcomes, customer service, and employee selection.
- II. **Information:** Timely access to relevant information is vital to making effective decisions. Organizations can promote employee participation by ensuring that the necessary information flows freely to those with decision authority. This can include data about operating results, business plans, competitive conditions, new technologies and work methods, and ideas for organizational improvement.
- III. **Knowledge and skills:** Employee participation contributes to organizational effectiveness only to the extent that employees have the requisite skills and knowledge to make good decisions. Organizations can facilitate employee participation by providing training and development programs for improving members' knowledge and skills. Such learning can cover an array of expertise having to do with performing tasks, making decisions, solving problems, and understanding how the business operates.

- IV. **Rewards:** Because people generally do those things for which they are recognized, rewards can have a powerful effect on getting people involved in the organization. Meaningful opportunities for involvement can provide employees with internal rewards, such as feelings of self-worth and accomplishment. External rewards, such as pay and promotions, can reinforce employee participation when they are linked directly to performance outcomes that result from participation in decision making.

Those four elements contribute to employee participation success by determining how much employee participation in decision making is possible in organizations. The farther that all four elements are moved downward throughout the organization, the greater the employee involvement. Furthermore, because the four elements of employee participation are interdependent, they must be changed together to obtain positive results. For example, if organization members are given more power and authority to make decisions but do not have the information or knowledge and skill to make good decisions, then the value of involvement is likely to be negligible. Similarly, increasing employees' power, information, and knowledge and skills but not linking rewards to the performance consequences of changes gives members little incentive to improve organizational performance (Cummings and Worley, 2008).

Most people desire increased involvement and participation. Further, involvement and participation energize greater performance, produce better solutions to problems, and greatly enhance acceptance of decisions. Researchers have found that participation works to overcome resistance to change, increase commitment to the organization, reduce stress levels, and generally make people feel better about themselves and their worlds. Participation is a powerful elixir-it is good for people and performance. To empower is to give someone power, which is done by giving individuals the authority to make decisions, to contribute their ideas, to exert influence, and to be responsible. Participation is an especially effective form of empowerment. Participation enhances empowerment, and empowerment in turn enhances performance and individual well-being (French and Bell, 1999).

### **4.11 High-Involvement Organizations**

Over the past several years, an increasing number of employee projects have been aimed at creating high-involvement organizations. These interventions create organizational conditions that support high levels of employee participation. In these organizations employees have considerable influence over decisions. To support such a decentralized philosophy, members receive extensive training in problem-solving techniques, plant operation, and organizational policies. In addition, both operational and issue-oriented information is shared widely and is obtained easily by employees. Finally, rewards are tied closely to unit performance, as well as to knowledge and skill levels. These disparate aspects of the organization are mutually reinforcing and form a coherent pattern that contributes to employee involvement (Cummings and Worley, 2008).

### **4.12 High-Involvement Management in Schools**

School reform stressing greater collaboration in decision making as a means of improving organizational performance is based on the principles of high-involvement management-a systemic change model that creates an environment where employees are motivated and empowered to become active in improving organizational performance. The basic goal of high-involvement management applied to schools is to create an alternative to the traditional control-

oriented hierarchy in which school district superintendents and school principals at the top are responsible for strategy, direction, and organizational performance and in which teachers feel victimized and constrained by a bureaucracy they cannot influence. High-involvement management diffuses control throughout the organization such that all organizational stakeholders-including parents-can influence decisions, contribute to strategy and direction, and participate in improving organizational performance.

The high-involvement framework entails increasing the presence of four key organizational resources at the technical core of the organization: power, information, knowledge and skills, and rewards. These resources are believed to be closely linked to employees' capability and motivation to contribute to enhanced organizational performance. Ideally, a high-involvement approach in schools would enable parents and teachers to influence the content of the curriculum, the delivery of that content, and the evaluation of student performance; it would allow them to participate in the creating of school district strategy and mission and specific educational goals; it would enable them to develop the skills necessary to use cooperative decision-making structures and to collect and assess performance data; it would provide them with ongoing task feedback; and it would reward teachers based on the improved academic performance of their students as well as on the development of their individual capabilities.

High-involvement principles have been found to be particularly appropriate in settings where the work is no routine, where, organizational inputs are of a wide variety, and where the results of the task technologies are uncertain. Educational organizations fit these characteristics: work cannot be entirely preprogrammed, and teachers are called on to employ their judgment to tailor approaches to individual students. High involvement is also appropriate where interdependence among various task contributors is high and where their activities must be coordinated in a manner that cannot be fully anticipated. For example, the work of one high school teacher has a reciprocal on the work of another and vice versa.

Two broad-based trends in educational management incorporate the principles of high-involvement management: total quality management and school-based management. Successful examples of both frameworks focus not only on the creation of collaborative decision-making structures, which include teachers and parents in addition to administrators, but also on the development of the requisite skills necessary to use such structures (Cummings 2008).

Here are some important factors to create participative management in educational organizations:

- Culture of participation and group work should be enhanced in schools.
- School-based management should be taken into account and expanded.
- Educational structures and regulations should be transformed in accordance with participative management objectives.
- Bureaucracy in education organizations should be decreased.
- At all levels of education, human forces should be trained to become familiar with participative management.
- Innovations and inventions of the staffs should be taken into consideration at different levels of education, especially at school level.
- In division of labor more attention should be paid to qualification and specialization.
- Official education organizations should go toward decentralization more rapidly.
- There must be an exact scientific assessment system in official and educational organizations of education to assess all components of education organization permanently in order to improve quality and efficiency.
- Stability of management should be taken into account in appointing the managers.

### **4.13 Total Quality Management Concepts Applied to Educational Planning**

We discussed about TQM concepts in one of the previous sections and here we explain the application of TQM in educational situations. The following concepts are foundational beacons for those who wish to arrive at applications of TQM for their educational organizations, particularly in the planning function:

- The school district's and individual school's mission must focus on a vision, policies, and strategic goals that lead to the delivery of high-quality services and products to all customers.
- Educational customers include all internal (students and employees) as well as all external (parents, residents, and other agencies that interact with the schools) stakeholders.
- TQM should focus on the processes that are designed to continuously produce quality products at each step and to all customers.
- TQM has a value-added dimension, in that every step of the process will lead to an improved output, and quality is added to each step.
- Ultimately, customers define quality standards, and satisfaction of customers is only gained through meeting or exceeding these standards.
- Extensive two-way communications with all stakeholders is required to define the quality specifications to be used by the schools or school districts.
- TQM involves a systems approach, and TQM school districts' or school buildings' decision makers should constantly improve the quality of their systems or processes.
- Employees are empowered through communication, training, and encouraging leadership. Many times problem solving teams are utilized to remove glitches in the systems or processes.
- Training is continuously required for management, employees, and suppliers to make certain that they are constantly attentive to improvement in the quality of the products and services.
- Constancy of measurement, not just limited to standardized test scores, is crucial to quality assurance.
- TQM is about change, and change involves causing changes in behaviors.
- School districts and schools that implement TQM must realize that it will cause changes, and that these changes could be so dramatic as to ultimately change the culture of the school districts and schools that comprise them.
- To maintain this desired cultural state, school districts and schools will have to scan the external and internal environments to assess the potential impacts of internal and external variables that continuously keep changing. This must be done in order to effectively develop strategic and tactical plans to deal with these variables.
- For TQM to be seriously considered, transformational leadership must be present. Transformational leaders are those individuals who are visionaries driven by long-term goals to achieve the preferred future quality vision for their schools and school districts.
- TQM school districts and individual school buildings possess an environment—a learning climate—that emanates from a culture that speaks directly and constantly to the issue of quality. If this does not take place, the hoped-for quality school district or school building will become next year's major failure. If successfully done, quality will permeate every nook

and cranny, as well as the thoughts of every stakeholder within the schools and those who have direct dealings with the schools.

- Finally, it must be emphasized that TQM is not a quick fix. Rather, it is a long-term strategic goal that can be accomplished only by much hard and devoted labor by stakeholders who believe and accept ownership for a successful quality infusion into the schools (Herman, 1994).

## 4.14 Change and TQM

TQM involves change, and change comes hard to many individuals. There are three major types of change that affect the employees of a school district or a school building.

**Optional change** is the preferred method when groups of employees initiate and support the change. This type of change is not mandated by the principal, superintendent, or school board. This type of change is usually very successful because the employees who must manage it are the ones who initiated the change.

**Incremental change** is preferred when everything is working well but stakeholders agree that minor changes can be made to improve the educational quality.

**Transformational change** is the only rational choice when a school or a school district is not operating at a satisfactory level of quality of service, or it is not producing satisfactorily educated youngsters. Transformational change required when an organization must modify its structures and processes to meet its customers' expectations.

TQM involves transformational change, which, when completed, will redesign the current planning structure and processes utilize in the school district and or the school building. Ultimately, the successful implementation of TQM will lead to a new organizational culture that will produce high-quality results and a great degree of customer satisfaction (Herman, 1994).

## 4.15 School-Based Management (SBM)

This intervention, involves the formal alternation of school governance structures. It is a form of decentralization that identifies the individual school as the primary unit of improvement and relies on the redistribution of decision-making authority to achieve and sustain educational improvements. Some formal authority to make decisions regarding budget, personnel, and educational programs is commonly distributed among school-level participants so that they can become directly involved in school wide decision making. Power and its delegation are central to SBM. In typically centralized school districts, many administrative decisions are made at the central office. By contrast, school-based programs delegate decision-making authority to the school level, namely to principles, teachers, and parents, under the assumption that school-level actors are better positioned than district or state officials to make decisions for their organizations (Cummings and Worley, 2008).

Successful enforcement of school-based management depends on talent, capacity and abilities of school staff, teachers and especially managers. Global experiences have shown that enforcing school-based management, managers' roles have been changed and their duties have become more difficult. Thus, they must be equipped by knowledge, information, skills and capabilities essential for directing and leading schools, through creating and enforcing proper educational programs (Neil, 2000).

## 4.16 Effective Schools

An effective school is one in which the conditions are such that student achievement data show that all students evidence an acceptable minimum mastery of those essential basic skills that are prerequisite to success at the next level of schooling. The effective schools formula that was popularized by Edmonds in 1979 and other researchers consist of seven factors:

- 1) Sense of mission
- 2) Strong building leadership
- 3) High expectations for all students and staff
- 4) Frequent monitoring of student progress
- 5) A positive, orderly learning climate
- 6) Sufficient opportunity for learning
- 7) Parent and community involvement (Levine, 1991)

Most of the school improvement projects that have characterized the two last decades included elements of the body of effective schools research and common practice.

Hoff (1997) believes that effective schools are expected to open themselves to the needs of the community and attempt to implement today's problems into school life, and, of course, major changes need to be implemented based on the current situations in all schools in the general curriculum and in the materials and textbooks used. He has also expressed (1995) that a hiring system of teachers in which promotion is often the only way to get rid of unskilled employees, and a streaming system in secondary schools, where general educational affairs are ignored in favor of subject teaching, show that the educational system is in desperate need of major reform itself.

## 4.17 Priorities of Successful Management in Transformational Change in Education

If priorities of successful management in transformational change survey accurately before initiate change, it can assist the leader in ensuring that the change will be successfully implemented. These priority conditions are keys to success:

- There must be a commitment to the change by leaders and by a critical mass of stakeholders.
- There should exist a clear, preferred future vision of what the school or school district will look like when the change is completed.
- There should exist clear-cut strategic goals that are to be reached as the organization undergoes the change process, and milestones should be established to guide the path of change.
- Detail tactical plans must be decided upon and be made available in understandable language to all who are to participate in the change process.
- Training must be provided for those individuals who are to initiate and or manage the change.
- Adequate time, finances, material, and human resources must be provided in order to enhance the probability of successful change taking place.
- High-quality, comprehensive, and frequent two-way communications must take place



throughout the entire change process.

- The leader should provide recognition for all who do good work and must attend group celebrations every time an important milestone is reached (Herman, 1994).

#### **4.18 Determining the Readiness of the Educational Systems for Change**

Determining the schools, school districts, or individual's readiness for change can be accomplished by answering a few simple guide questions, such as the following:

- Does my school or school district have a clear vision of what should be or what could be in the future?
- Does my school or school district have a clear picture of both what is currently in existence and the qualitative level of what exists?
- Are inside forces or powerful outside sources clamoring for change?
- Does my school or school district constantly try to improve, and do the leaders encourage all of us to present changes that may improve the school or school district?
- Does my school or my school district collect data on the results of its programs and determine the impacts of our efforts?
- Does my school or school district look toward the future with a clear and positive vision, lay immediate and continuous plans to achieve this vision, and use the past and current accomplishments as baselines upon which to improve?
- As an individual, do I share in the vision for my school or school district?
- Do I enjoy new challenges and new ways of doing things, and am I willing to assist my school or school district in making positive changes?
- Do I look forward to taking part in new learning and working opportunities?
- Do I look toward the future, plan for it in the present, and use the past and present as baselines upon which to improve? (Herman, 1994).

#### **4.19 Overcoming Resistance against Change in Educational Organizations**

Assistance in overcoming resistance to change becomes very important when trying to initiate transformational change, because there will always be some employees or important stakeholders who will resist any suggested change. First, it is important to provide as much security as possible for those who are reluctant to change. The leaders (principals, superintendents, and change agents) should provide detailed information about what will be changed and what will remain as it always has been. They should also provide statements to reinforce the security needs of those who will be expected to initiate and maintain the desired change. Also, they should emphasize and widely communicated and sell, if you will, the expected positive benefits to be achieved for the school, the school district, the peoples, the employees, and the community as the change is implemented. Finally, the leaders should develop contingency plans to deal with the logical and emotional resistance of individuals and groups who form resistance to change.

## 4.20 A Change Model for Educational Systems

In educational systems and situations, leaders should develop a change model to guide the actions that will have to take place if transformational change is to result in success. Table 4- 1 can serve as a guide for managing the change process required for implementing the planning strategies (Herman, 1994).

**Table 4- 1** A Vertical Stages Change Model

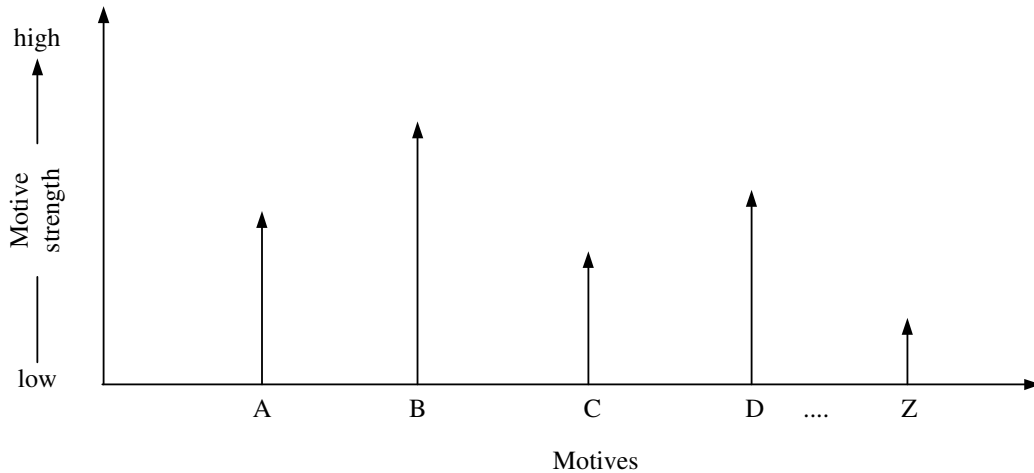
Current Stage	Maintenance of status quo
Stage One	Unfreezing the status quo
Stage Two	Awareness by individuals and or the school or school district decision makers or stakeholders of the for change
Stage Three	Acceptance of involvement by individuals and or groups
Stage Four	Action planning, which involves determining “what is” and “what Should be” and arriving at alternate routes to achieve what should be. Next, it involves selecting the best solutions from the alternatives and developing detailed tactical plans that respond to the questions: Why? When? Where? What? Who? and How?
Stage Five	Assessment and evaluation take place throughout the change process by collecting data, arraying data in an understandable and helpful manner, and analyzing the data as a basis for making operational decisions.
Stage Six	Decisions are made whether to modify the plans and try again or to implement the change because it has achieved the purposes it intended to achieve.
Stage Seven	Refreezing is important if the decision is that the change has achieved what it was intended to achieve. If the change is not refrozen and change is permitted to continue, the school or school district will not be able to stabilize the improvements that were effected by the planned change.
Stage eight	Status quo is reestablished and the resulting changes become the normal operating procedures; those, in turn, become part of the new organizational culture of the school and or the school district.
Stage Nine	Motivating and scanning of external and internal key variables are done continuously to determine if and when there is a requirement to once again refreeze the organization and begin anew the change process (Hermam, 1994).

## 4.21 Motivation and Motive Strength

Tackling the “impossible” happens only when you are able to tap people’s talents and deepest aspirations (Senge, 2006). People differ not only in their ability to do but also in their will to do, or motivation. The motivation of people depends on the strength of their motives. Motives are the “whys” of behavior. They arouse and maintain activity and determine the general direction

of the behavior of an individual. In essence, motives or needs are the mainsprings of action.

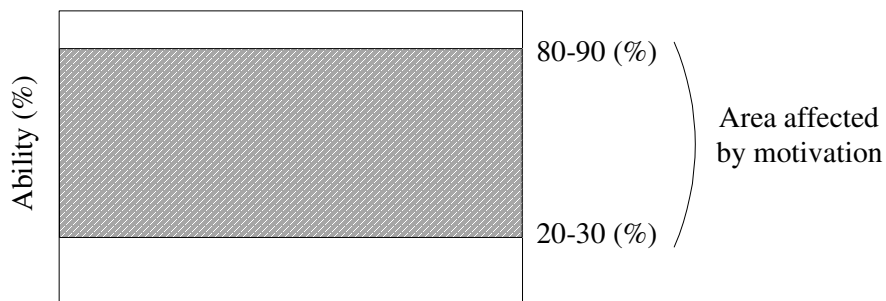
All individuals have many hundreds of needs. All of these needs compete for their behavior. What, then, determines which of these motives a person will attempt to satisfy through activity? The need with the greatest strength at a particular moment leads to activity, as illustrated in Figure 4- 1. Satisfied needs decrease in strength and normally do not motivate individuals to seek goals to satisfy them. In this Figure, Motive B is the highest strength needed and, therefore, it is this need that determines behavior.



**Figure 4- 1** The Most pre-Potent Motive Determines Behavior (Motive B in this illustration)

In organizations motivating plays a large part in determining the level of performance of employees, which, in turn, influences how effectively the organizational goals will be met. In his research on motivation, William James university professor of Harvard found that hourly employees could maintain their jobs (that is, not be fired) by working at approximately 20 to 30 percent of their ability. His study also showed that employees work at close to 80 to 90 percent of their ability if highly motivated. Both the minimum level at which employees might work and yet keep their jobs and the level at which they could be expected to perform with proper motivation are illustrated in Figure 4- 2.

This illustration shows us that if motivation is low, employees’ performance will suffer as much as if ability were low. For this reason, motivating is an extremely important function of management (Hersey and Blanchard, 2001).



**Figure 4- 2** The Potential Influence of Motivation on Performance

## **4.22 Controlling, Supervising and Assessing in Education**

It is evident that in today organizations, especially in educational ones, controlling, supervising and assessing are inevitable. They are important factors of development, progress and dynamism. However, all kinds of assessment and control cannot be useful and means of development, but a kind of assessment is of importance that: helps the organization reach its objectives and has defined philosophy, exact objectives, perfect theoretical principles, appropriate design and equipments and above all; correct enforcement.

If assessing and controlling is not done according to the organization's function or the judgment criteria is the manager's personal taste and his negative or positive mental image of his staff or organization, not only can it not amend the weak points and enhance the strong points and quantitative and qualitative progress, but also leads to discrimination, pessimism, dissatisfaction and quarrel in the organization.

By controlling, the predicted affairs are compared to the done activities, progress in reaching to organization's objectives is measured and any deviation from the plan can be diagnosed in time. Thus, individual and organizational function is assessed. Without controlling, there would be no on time amendment in affairs and organization would approach to disorder. It is why efficient and effective management is required for effective controlling. Controlling is in close relation to exact measurement of the results and comparing them to the expectations and adopting proper decision.

Controlling is effective only when it is exact, accepted by the members of the organization, uses correct and appropriate methods of measurement and is carried out by experts familiar with different aspects of the issue under control. Mary Parker Follett believes in a difference between controlling affairs and people. She declares that managers usually consider controlling equal to controlling people, but the desired matter is controlling affairs (Antony, 1995).

Evaluation methods should be determined before any action programs are put in place. The two basic types of evaluation that should be planned are formative and summative evaluations. Formative evaluations are those that are undertaken during the operation of the intervention program. Summative evaluations are those conducted after the program has been completed, at the end of a school year or of the end of some other predetermined time period. Formative evaluations are helpful in making important improvements during the intervention program's operation as errors or defects in the original plans are located. Summative evaluations are used to determine whether the intervention program has worked to a satisfactory level after the intervention has been completed or after a predetermined time period for measurement and evaluation (Herman, 1994).

## **4.23 A Glance to Transformations of Iran's Education System Before and After the Islamic Revolution**

### **4.23.1 Before the Islamic Revolution**

Before pre-revolutionary years, traditional system of education in Iran was not responsible for the increasing needs of transformed growing society of Iran. At those situations, the elites of the society had the main role in planning and enforcing education system and common people had no significant participation and role in teaching and training and ordering education system of country. Because of having no philosophy and no clear and defined objectives and principles

and hastily imitating education systems of western countries, especially France, without considering socio-cultural situations and requirements and dominant values of the society, Iran was chaotic and affected by transient policies and provisional objectives of the governments. For instance before Islamic revolution, secondary education of Iran had no particular desirable objectives and its real objective was to train individuals to be employed in governmental offices or at most to train individuals with theoretical information and knowledge to be engaged in higher education. Generally speaking, during some decades, official education was merely worthy for employment and issuing educational degree was of the real objectives of Iran's education system.

Due to incapability of traditional system of education in being responsible to real needs of the society, a new system was designed in 1966 and country's education system was accordingly divided into three educational stages including 5-year primary education, 3-year middle education and 4-year secondary education. The project was firstly started from the first grade of primary school and afterwards enforced in middle and secondary stages of education. Although the education system of that time had some shortages, it was continued until the victory of the Islamic revolution. Some shortages and weaknesses of the aforementioned system regarding education were the followings:

- There existed no educational guiding process for students during the stage of secondary education, no sufficient attention was paid to students' interests and talents and educational system lacked the required flexibility to respond to different interests and grow various talents.
- There was an emphasis and focus to prepare all students for entering universities and permanent increase of the volunteers who had not entered universities due to the incapability of some volunteers and limited capacity of country's universities.
- There was too much emphasis on theoretical studies and student's memorization, they had to study a large amount of lesson during a single week, no attention was paid to out-of-school educational programs and methods of adopting skills was not efficient in secondary education.
- The content of educational programs was not proper to the special needs and situations of different regions of country.
- Financial and human resources were wasted because of repetition of the education grade in annual education system (assessment of all or none) and its consequences i.e. precocious drop-out and lack of proper facilities to restart education.
- The general viewpoint of the society, especially education society, which regarded technical and professional trainings less valuable than theoretical trainings was intensified because of:
  - 1) Lack of appropriate educational guiding e.g. directing uninterested frustrated weak students to technical and professional trainings.
  - 2) Implementation of weak enforcement methods in technical and professional sector which led to solitude and worthlessness of such trainings.
  - 3) Lack of sufficient attention paid to environmental facilities and environmental needs in providing trainings and lack of interaction between the environment of the society and educational institutes.
- There was no appropriate relation between technical and professional trainings of secondary education and specialized trainings and university courses including BS and BA (Ministry of Education of Iran, 1991).

#### 4.23.2 After the Islamic Revolution

Since the education system of the country was inefficient and everybody confessed such issue, after the victory of the Islamic revolution in 1979, country's administrators of cultural affairs and authorities of education had great efforts to reform and change the country's education system and at last in 1986, the supreme council of Cultural Revolution started to study the education system and tried to prepare and to formulate the plan of fundamental change of the country's education system. At last in 1990, the generalities of the new system of Iran's education were approved by the council. This time due to some particular reasons, fundamental changes of the education system were begun from the secondary education. In 1993, ten percent of the students of the first grade of high school were covered by this new education system. Each year this percentage was increased and covered higher grades and finally in 1999, the whole of the students of secondary education were covered. Here are some main reasons mentioned to start the project of fundamental change of the education system from intermediate stage:

- Families gave special value to higher education and the level of secondary education was closely related to peoples' income and social altitudes.
- Economical structure had remained from the previous governmental regime and related to it and depended on oil income. So, it could not make vast changes in all educational levels.
- Governments organizations including education were intensely centralized and public participation institutions in different educational regions were not ready to enforce projects and innovations vastly and publicly in all educational levels.
- Country's previous experience in enforcing a new system for education starting from 1966 indicated that there existed no hope to succeed in vast educational projects of all levels without preparing experimental fields and enforcing them gradually.
- Other countries of the world had experiences explaining relative failure of the projects enforcing vast qualitative and quantitative changes simultaneously and in all educational levels (Ministry of Education of Iran, 1999).

## 4.24 Current Structure of Iran's Education System

Fundamental change in Iran's education system after Islamic revolution in 1979 was begun in 1993 from the secondary education. Table 4- 2 shows the general structure of Iran's education system.

**Table 4- 2** The General Structure of Educational System of Iran

Higher education: Universities, Teacher training centres and two-year colleges			
12	Pre-University	Mathematics Empirical sciences The humanities	18
11 10 9	<b>Secondary education</b>	<b>High schools</b> Technical-Vocational schools Dual training	17 16 15
8 7 6	Middle education	Middle schools (3 years)	14 13 12
5 4 3 2 1	Primary education	Elementary schools (5 years)	11 10 9 8 7
	Pre-school education	Kindergarten (optional)	6 5 4
grade	Levels of education	Subjects	age

## 4.25 General Objectives of Iran's Current System of Secondary Education

It is necessary to merely express general objectives of Iran's current system of secondary education. This system is divided into three branches of theoretical, technical and professional, and dual (practical and theoretical) secondary education. The general objectives of this system are in a better way and preparing the youth for useful employment or continuing education in higher educational levels (academic, practical and scientific education) during three school years. At the end of this stage and before entering university, those who have been awarded the degree of third grade of high school in any of the three branches have to pass the one-year course of pre-university.

#### **4.25.1 General Objectives of Branch of Theoretical Secondary Education**

Its general objectives include: improving the level of public knowledge and culture, better recognition of students' talents and interests and preparing appropriate fields in order to lead them into defined educational paths and obtaining relative readiness to continue their education in higher academic levels. This branch which starts after middle school stage lasts for three years. Its main subdivisions are physical and mathematical sciences, experimental sciences and literature and humanities.

#### **4.25.2 General Objectives of Branch of Technical and Professional Secondary Education**

Its general objectives include: improving the level of public knowledge and culture, better recognition of students' talents and interests and preparing appropriate fields in order to lead them into useful employment and obtaining relative readiness to continue their higher education in practical-scientific (technologic) majors. This branch which starts after middle school stage lasts for three years and its main subdivisions are industry, agriculture and services. Each of the subdivisions consists of some categories and each category consists of some educational majors.

#### **4.25.3 General Objectives of Branch of Dual (practical and theoretical) Secondary Education**

Its general objectives include: training human forces at semi-skilled, skilled and supervisor levels required for industry, agriculture and services sectors, based on country's needs for cultural, social and economical development. In this branch, those who apply for jobs in the society obtain required skills for the jobs they apply for. This branch also starts after middle school stage and lasts for three years. Students are rewarded first-class and second-class skill standards. This branch based on studies on German Dual System and is enforced similarly. At the moment, more than 700 skill standards are presented in this branch within the framework of educational specializations.

#### **4.25.4 General Objectives of Pre-University Course**

Its general objectives include: creating relative readiness in students to enter higher academic courses consisting scientific or practical-scientific courses. This educational stage which starts after three-year stage of theoretical secondary education lasts for one year. Since teaching and training administrators in education and higher education and universities believe in a gap and inconsonance between objectives and lessons of theoretical secondary education and academic education, this course is enforced in the current education system. It is designed and enforced to make consonance and coherence between school and academic education. The main majors of pre-university course are: physical and mathematical sciences, experimental sciences and literature and humanities.

With regard to the objectives of secondary education and its importance in providing and training country's human force to make it easy for students enter workplace and higher education and universities; it is expected to be of acceptable qualitative and quantitative efficiency in the country. Recent studies indicate the following problems in the last changes in Iran's secondary



education system which led to the current system:

- At the beginning of establishment of the current education system and during it, in coordination with the system, required trained specialized human force including school managers, teachers etc. have not been trained.
- Laboratory, workshop, professional and technical equipments and facilities in accordance with the needs of the new structures and majors have not been prepared.
- Volume and content of the text books are not in sufficient accordance with the structures of the new system.
- The process of directing students in occupational and educational paths is not done well in new system of secondary education.
- Educational specializations in two branches of technical and professional and dual education are not created based on real need assessment in accordance with situations and needs of different regions.
- At the beginning of enforcement of the new system of secondary education, students and their parents have not been properly and sufficiently informed about the characteristics of this system.

## **4.26 Dominant Principles of Iran's Current Education System**

There are 76 principles which are dominant in Iran's education system and are issued by the council of fundamental change in education system. They include:

### **The 14<sup>th</sup> Principle: Respecting Necessities of the Environment**

According to this principle, policy making and programming in education system must be done with regard to economical, social, cultural and ecological situations and necessities of different regions of the country and their development programs, because:

1. Iran is a vast country and its different regions differ from each other in several aspects. Therefore, education must be flexible enough to be in accordance with different situations. These are the main items which must be taken into great consideration while policy making and programming:
  - Cultural characteristics of different races that live in diverse geographical regions of the country.
  - Language, dialects and accents which are used by different regions of the country.
  - Religious minorities who are gathered or dispersed in some regions of the country.
  - Public culture, ceremonies and customs of different regions of the country.
  - Educational differences in country's rural regions, urban regions and nomads.
  - Weather conditions and working season in each region and hours of daytime to set educational calendar and hours.
2. Regarding social and economical development needs of each region for human force in technological and professional education of each region, majors and specializations which are in better accordance with the region's future development are given priority.
3. Regional characteristics and needs must be taken into account in education content and textbooks while preserving the consonance and respecting necessary minimums common all over the country.
4. Characteristics of each region must be taken into account in defining the type of assignment students should do along with educating.

5. Educational directing of the students should be carried out with regard to local development programs to meet the needs.
6. Architecture of educational places in future should be in accordance with art and culture of the region.

**The 30<sup>th</sup> Principle: Paying Attention to Technology and Educational Aiding Materials**

Along with educational technology transformations and progresses, proper materials, equipments and methods should be used in education and essential facilities should be provided for preparing better methods and producing some of these equipments and materials as much as possible.

**The 32<sup>nd</sup> Principle: Educational Directing**

In education system, occupational and educational directing should be carried out based on students' talents, interests and efforts and the capacity of different educational majors; The capacity which is determined with regard to the scientific, technical and professional needs of the society such as the need for specialization in higher education levels.

**The 36<sup>th</sup>, 38<sup>th</sup>, 39<sup>th</sup> and 40<sup>th</sup> Principles**

These principles emphasize on position of the teachers in education system and the necessity of their participation in different tasks such as providing textbooks and educational aiding materials. They also focus on teachers' social altitude and improvement of their virtual personality as well as providing their welfare and advancing them regarding their efficiency and potency.

**The 42<sup>nd</sup> Principle**

Regarding this principle in education system, permanent training of the staff, especially teachers is taken into intense consideration and it is emphasized to prepare facilities required accordingly.

**The 52<sup>nd</sup> and 53<sup>rd</sup> Principles**

Within the framework of country's general policies, ministry of education must submit related authorities needed for planning and administrative affairs to different regions and schools of the country while preserving its management and supervision. It must also pay close attention to the necessities of particular regions and groups and their needed activities.

**The 55<sup>th</sup> Principle**

In education system, all administrative and planning aspects should permanently be supervised through organizing and establishing proper methods to know the strong and weak points of the activities and lead them toward reaching defined objectives.

**The 56<sup>th</sup> Principle**

In education system, responsibilities should be submitted to the individuals after assessing their efficiency and they must be authorized in accordance with their level of responsibility.

**The 57<sup>th</sup> Principle**

Education system is in charge of paying attention to attracting, training, keeping and fixing managers of different levels, especially women, through organizing and establishing proper administrative methods. It is also in charge of easing their progress in all aspects in relation with cultural and scientific transformations of the society.

### **The 59<sup>th</sup>, 60<sup>th</sup>, 61<sup>st</sup>, 62<sup>nd</sup> and 63<sup>rd</sup> Principles**

These principles have emphasized on the necessity of preparing the field for vast participation of people in education, creating vast communication between ministry of education and higher education, participation of other institutes and institutions of the society and creating consonance with other cultural institutions in teaching and training and finally, using human force and physical and financial resources efficiently (Fundamental Change Council, 1987).

Paying attention to the content and structure of the aforementioned dominant principles of Iran's education system indicates that really rational, logical and appropriate principles are predicted and declared for this system. Though, most problems of Iran's education system are due to the improper function according to these planned and defined principles.

### **4.27 Article 52 of the 4th Program of Development (2005-2009)**

Government is in charge of guaranteeing everybody's access to equal educational opportunities, especially in less developed regions, expanding knowledge and skill, improving the function of human resources, especially girls, and qualitative and quantitative development of public education. Thus, it is required to:

- a) Develop required fields to enforce the program of education for all (EFA)
- b) Make education obligatory until the end of middle school i.e. 8 years of education.
- c) Provide general credits of education sector as well as taking proper actions in order to develop financial, management and administrative independence of educational units (schools). This would result in making the best use of resources and administrative capabilities of the non-public sector in developing capacities and improving their function.
- d) Carry out needed reforms in official and educational programs and deepen and improve the English, science and mathematics teaching processes.
- e) Improve teachers' capability and skill through preparing professional standards for teachers regarding their knowledge, behavior and function through using international experiences and country's native situations.
- f) Increase occupational motivation of teachers through supplying appropriate professional altitude and position for them and reform their payment system in accordance with the extent of their efficiency and quality of services.
- g) Formulation and implement assessment systems for teachers' scientific qualifications, rate them and promote their educational level.
- h) Plan educational programs for promotion of health and healthy methods of living.
- i) Formulation and implement strategic plans for the country's literacy system; considering cultural, social, biological and geographical situations of different regions of the country through employing an approach for gaining the participation of people and non-governmental organizations, so that people under the age of 30 would be all literate by the end of the forth program.
- j) Use information technology in preparing and implementing educational programs for all levels, and equip the schools with computers and internet.
- k) Update knowledge and skills of the staff of education ministry regarding communication and information technology.
- l) Predict necessary facilities and equipments to renovate, strengthen and standardize the educational environment, especially the schools for girls.

- m) Arrange and implement necessary regulations to attract and maintain the required human forces of under-developed regions of the country.
- n) Provide suitable facilities to resolve educational limitations through establishing rural day-and-night schools and central dormitories, media and distant learning, providing nutrition, students' transfer and health and other expenses relating to day-and-night schools, as well as preparing and expanding recreational, training and educational places in accordance with students' gender and preparing and enforcing required programs for expanding pre-school and preparatory education, especially in bilingual regions.

## 4.28 Previous Studies

In the present part, the results of the studies related to this research are analyzed and employed. In other words, results of other studies and viewpoints regarding obstacles and factors influencing successful establishment and enforcement of changes are reviewed:

According to Hamdhaidari et al. (2007) some of the bottlenecks in education of Iran are: high pupils to class ratio; lack of laboratory and workshop facilities; and lack of cooperation between schools and other organizations. They state that students usually start their higher education without adequate knowledge about their programs of study.

Sajadi (1989) in his research named "Analysis of Internal Efficiency of Secondary Education System in Kermanshah Province" came to the result that students' parents did not have sufficient information and knowledge about the new system of secondary education and students concerned about insufficient workshop and laboratory facilities in high schools.

Aziz Zadeh (1993) in his research concluded that educational regress in secondary education is an important issue which must be taken into greater consideration by programmers and decision-makers of the education. The research has indicated that Kermanshah Province is one of the weakest provinces of the country regarding its educational function and there are a large number of drop-outs in secondary education.

Regarding its studies, Executive Committee of Fundamental Change of Education System (1988) came to the result that intense centralization in official affairs and cultural methods of country's education does not suffice to meet the various complicated needs of today's world and Iran is in need of a new philosophy of education which is consonant with the time opportunities. Programs and their contents rely on theoretical memorizations instead of recognizing and reasoning and understanding regional and social experiences and facts. Due to the lack of required flexibility, these programs do not make any difference between girls and boys, rural and urban students, nomads and various races with different languages and diverse ecological situations. Hence, there is no place for emergence of the personalities and efflorescence of talents through criticism, innovations and inventions (e.g. more than 37% of Iran's population use languages and dialects other than Persian which are not taken into account in lesson planning and educational programming). Such situations lead to the enforcement of a limited inflexible program all over the country which is implemented similarly in all regions of the country with different characteristics, while it is possible to implement different programs in various regions and enable the regions to be active in their own mild seasons, even though other regions may not be active at the same time. Official education system relies on unessential bureaucracy and school managers and teachers and regional and social administrators cannot express or apply their opinions and innovations. Healthy and correct management in education depends on delegation of authority on one hand and agreement and consonance among programmers and executors on the other hand. Moving towards official decentralization reduces

government's problems in managing affairs of the regions and prepares the field for emergence of innovations and efflorescence of talents for achieving industrial and scientific progress and economical independence. In this study, the main management problems of education are the followings:

- Lack of delegation of authority to managers of schools and school districts in fields related to innovations and inventions
- Appointing school managers without attention to defined regulations
- Unattractiveness of management and official posts
- Appointing or dismissing managers without attention to required defined criteria
- Lack of coordination among authorities and responsibilities of different managers at different educational levels and official levels
- Self-centeredness and lack of teamwork in educational management
- Existence of bureaucratic system and complicated official procedures
- Lack of correct coherent statistical system which can inform about educational needs
- Lack of participation of student's parents in managing school affairs
- Multiplicity of decision-making centers which manage education

In this study methods of selecting and training teachers are criticized and conclusions indicate that most accepted people teacher training educational institutes are not capable and efficient enough to be teachers. In fact, among those who finish secondary education, the best talented ones enter universities and do not become teachers. Thus, the weakest ones enter teacher training educational institutes to bring up the new generation.

According to the study, while assessing the schools' administrative affairs, supervising is only ceremonial and there is no real assessment. There is no logical relation and required consonance between the two systems of education and higher education. Based on the results of the study, changing the viewpoints and methods of education and ways of managing this large system are the most important factors of fundamental change in education system. All authorities believe that changing management, administrative and official methods are prior to any other task and this is the way to prepare the appropriate field for other fundamental changes.

It is mentioned in the study that while analyzing the transformations of education throughout the world, reforming the structure and content of lesson plans of secondary education -more than any other stage- have always been asked for by common people and education scholars and authorities. Also secondary education in Iran has always been considered by authorities and critics of education system and is criticized more than other educational stages.

Goodini (2001) in his research came to this result that managers graduated in educational management and training sciences accept changes better than others. He has cited Pardakhtchi's research and declared that managers of educational organizations do not have enough proficiency and skill to make the proper change suitable for the necessities of the present century and must learn required and related issues. He has also mentioned Bazargan's study about the status of educational management in Iran and concluded that country's school managers allocate a large portion of their time in educational places to carrying out tasks which are not their main educational management duties. Hence, there must be some changes to make managers carry out their main duty i.e. educational leading.

Moradi (2002) in his study titled the "Analysis of Secondary Education Status in Kermanshah Province" concluded that about 71% of managers of high schools are graduated in majors other than educational management. It is expressed that since education has lost its position, capable human forces are not really interested to be teachers. Lack of sufficient financial resources allocated to schools is another reason of quality decrease in education. Allocating predicted per capita for secondary education in the given school year had been approximately 50%.

Alagheh Band (1998) in his study concluded that school managers in Iran do not have sufficient recognition of their management duties and are incapable of making effective relation with the students, their parents and teachers. On the other hand, current daily unimportant issues take their time so much that they do not notice critical and important issues.

Pardakhtchi (2002) in his study came to this result that there is practically a large distance between objectives of Iran's education system and its output.

Tavasoli (2000) in his research came to this result that 83% of teachers and managers believe assessors of function of education system do not have enough science, experience and specialization to do so.

Gisela (2002) quoted German Manager Magazine and expressed that in a study about development and research activities in three important industrial countries i.e. America, Japan and Germany this question is asked: "what motivates people?" Among all answers, "more information and participation in decision-making stage" was the most important and effective factor in motivation individuals.

Gisela (2002) by studying the answers to the question "how important is praise and appreciation?" concluded that 92% of the responders considered it important and highly important. However, in response to the question "how much you get the feed back (expected praise and appreciation) you deserved for?" only 43% of responders answered much or very much.

Safi (2000) in his research concluded that one of the main problems of education in Iran is the shortage of required and efficient attractions to attract experienced, capable and talented people to work as school managers. He expressed the following reasons:

- Inappropriate method of selecting, appointing and changing managers
- Lack of stability in management
- Limited and low authority of managers
- Official inflexible communications among school managers and higher levels of management in education
- Addressing secondary unimportant issues and forgetting main management duties
- Low financial benefits of management

Ahari (2004) in his research came to the result that any change within the organization entails changes in the staffs' behavior in order to be successful. Change is the requisite of any organization's survival and resistance against change is a normal reaction. Not only is resistance inevitable, but also it can be an effective factor in managing change and easing enforcement steps. Though, it must be managed and under control.

Karami (2007) has compared Iran's education to other countries' and reported Iran's education is not in an acceptable status regarding its providing financial resources. The portion of government's credits allocated to education in comparison to GNP in different years ranged between 3 to 4 percent. This number is lower than the average of the world i.e. 4.8% in the last decade. It is also much lower than the average of the developed countries which is 5.1%. In this comparison it must be noticed that Iran's under-15-year-old population dependency rate in 1996 was equal to 71% while it was 34% in developed countries. It means although mentioned countries had relatively less students, they allocated 5.1% of their GNP to education.

The portion of government's credits allocated to education in Iran has been decreasing in last two decades. These indicators show the importance of financing in human forces as the axis of development has not been taken into account. The portion of personnel's expenses in education is around 93% and the portion of non-personnel's credits was totally 7% of Iran's education

budget. However, in spite of insufficiency of allocated financial resources to education, they are not applied properly because of the following reasons:

- Capital loss due to the rate of dropping-outs and repetition of the grade. For example in 2004 and 2005 approximately more than 30% of the high school first-grade and 42% of high school third-grade students failed.
- Intense inequality and range in distribution of student expenses among country's provinces, among towns and regions of each province and among different schools of each region. This imbalance and inequality sometimes turns to be more than double. This status indicates inefficiency in allocating financial resources.

On the other hand, education's need for financial resources during future years would increase for the following reasons:

- Development of science and technology and necessity of permanent changes and transformations in educational systems entail allocation of more resources to meet the new needs
- Society's young age increase of peoples expectations from government causes educational systems to face vast demands for secondary education with higher quality
- Necessity of tendency toward decentralization and meeting diverse racial, language, cultural and geographical needs of the country requires more financial resources
- Creation of informational and communicative society globalization with its effects on economical situations and workplace requires increase of the resources to enable education meet the new needs

Comparing country's provinces with respect to budget distribution and student per capita indicated that the share of Kermanshah province is lower than the average of the country. Table 4- 3, Table 4- 4 and Table 4- 5 show the status. As shown in the tables, Kermanshah has 3% of the total number of students of country but only 2.8% of the expense budget of country is allocated to this province. This province is among Iran's deprived provinces and has been in the center of crisis during 8 years of Iran-Iraq imposed war. So, it is expected to be taken into consideration. Also, the share of province budget allocated to education is lower than the average of other provinces. In 2006 share of education from the total budget of the province was 59.7% and at the last place among 28 provinces. The average of the country was 66.5%.

**Table 4- 3** The educational allocated budget to the Kermanshah province

Year	The percentage of student in Kermanshah province	Educational allocated budget to Kermanshah province
2006	3 %	2.8 %

**Table 4- 4** The rank of the Kermanshah province in relation to per capita student

Year	Total number of provinces	The rank of Kermanshah province (per capita student)	The rank of Kermanshah province (total credit)
2002	28	15	24
2003	28	26	18
2004	28	9	18

**Table 4- 5** Educational allocated budget of current expenditure to the Kermanshah province

Educational allocated budget of current expenditure in Kermanshah province		
Year	Kemanshah province	Average of country
2005	54.3 %	67.4 %
2006	59.7 %	66.5 %

Ministry of Education of Iran (2004) believes in severe problems and shortcomings in the structure and management of country's education. These problems should be exactly determined and resolved in order to improve education system. These shortcomings are like chronic diseases infecting education system during last decades and affecting its efficiency clearly. These are the main problems in Iran's education system:

- Educational leading and management does not benefit from required scientific altitude and thoughts and viewpoints of scientific management are not used to resolve educational issues.
- Appointing managers and improving their occupational posts are not based on their professional qualifications and scientific credentials.
- There is no supervision, control and qualitative assessment in different levels of education.
- Authority-based management.
- Severe centralization and neglecting regional needs and situations.
- School managers are not given required authority.
- There is no participation of school teachers and managers in decision-making.
- Changes and innovations are not welcome.
- There is not enough human force in IT.
- Education is considered to serve and be consumed.
- New ideas and plans are not welcome in education.
- Teachers' social and occupational altitude is constantly decreasing.
- There are limited attractions for employment in education and specialized forces leave education permanently.
- Budget is not sufficient.
- Educational equipments and facilities are not sufficient. For instance, in 2006 there was only 1.13% and in 2007, 6.14% computer per 100 students in high schools of Kermanshah province.

Soleymani (2005) in his study compared educational achievement of the high school students in 7 provinces of Iran which have relatively similar social and economical situations. He concluded that Kermanshah province was the weakest one considering basic subjects such as mathematics, Physics, Chemistry, biology and geometry.

In Province Document of Education for All (2006), problems such as low income of teachers and other education staffs, insufficiency of educational places, insufficiency of teachers and insufficiency of workshop and laboratory administrators (more than 700 workshop and laboratory administrators are needed) and insufficiency of recreation centers in schools are mentioned.

Organization of Management and Programming of Kermanshah Province (2005) in document of the fourth program of cultural, social and economical development of Kermanshah, asserted that critical problems of education in this province includes insufficiency of specialized human force in education and low qualitative indicators of education.

Iran has set the vision document of Islamic Republic of Iran in the perspective 2025 (2005-2025)



which is divided into four 5-year programs. In 20-year perspective program, there are issues taken into account. Main ones include:

- In 20-year perspective, Iran is a developed country which holds the first economical, scientific and technological place in the region and has a constructive and effective interaction in international relations
- It is developed, in accordance with its historical, geographical and cultural necessities, relying on national, revolutionary and Islamic virtues and ethics, emphasizing on religious people-orientedness, social justice, legal freedom, preserving human rights and altitudes, and benefiting from juridical and social security
- It is benefiting from advanced knowledge, capable of producing science and technology, relying on the priority of human forces and social potentialities in national products
- It is benefiting from health, welfare, nutrition security, social safety, equal opportunities, proper distribution of income, stable structure of families, without poverty and corruption and discrimination, benefiting from desirable environment
- It has reached the first economical, scientific and technological place in south west Asia (including Middle Asia, Ghafghaz, Middle East and neighboring countries) through focus on science production and software movement, fast permanent ecological growth, relative improvement of per capita income and employment for everybody

One of the general policies of Islamic Republic of Iran's 4th program of development (2004) which is determined for a 5-year period (2005-2009) according to the program of 20-year perspective is reform of country's education system. Respectively, required reforms in education, professional and technological education and higher education and making them efficient in order to provide needed human force to reach perspective objectives are taken into account.

## **5 Methodology**

### **5.1 Research Method**

Selecting a research method depends on the research nature, objectives and the possibility of its accomplishment. This research has been conducted through a descriptive as well as survey approach. Selecting this method, the researcher usually intends to present a concrete, real and ordered description of characteristics of a situation or a subject and researcher deals with relationship between unchanged variables in natural situations. Since these facts and situations have already happened or exist now, researcher chooses the suitable variables to analyze their relationship (Spata, 2003).

In this study, the current situation of education in the process of planning and performing educational changes and programs have been surveyed. However, if various methods are used simultaneously in order to examine the same subject, it will add to its validity and if various methods reach to the same or similar results, the reliability of research is increased and researcher can be more certain about generalizability of research findings. On the same basis, Delphi Technique (DT) has been used in this research as complement and in order to increase the precision and scientific validity of the study. DT helps to investigate opinions of experts of education about the subject under the study.

Furthermore, different methods have been used in this research such as library method, method of examining documents of educational system in Iran, examining on-line sites and interviewing with school principals and experts of education. Above all, personal experiences of researcher with more than 20-year activities at different educational levels and universities as teacher, school principal, university dean, head of organization of education and conducting various researches about education have all been effective.

### **5.2 Statistical Population and Sample Size**

If researchers can examine all the statistical population in their research, they would have no difficulty generalizing the findings. Because the variables of the research would be examined about each and every member of the statistical population and all statistical population will affect the research. However, this is not usually possible due to limitations of factors such as time, expenses, human forces, facilities, etc. Thus, researchers are forced to choose a sample from the whole population (Thompson, 2006).

Public high schools of Kermanshah and their principals constitute the statistical population of this research. Kermanshah has 133 public high schools altogether (66 female and 67 male high schools). However, since 5 schools were located outside the urban areas, in suburbs and villages, were not homogeneous with other schools, they were eliminated and 112 high schools were

chosen by simple random sampling; i.e. 56 high schools for girls and 56 high schools for boys and their managers made up the sample size of the current research. Sample size was chosen according to Morgan Table. The needed size of the sample from the statistical population should be 97 people (<http://www.okstate.edu>, 20.03.2007).

Furthermore, regarding their experiences in secondary education and holding at least master's degree as well as complete recognition of the researcher with them, 30 experts of education in Kermanshah were chosen and considered as statistical population of experts of the study.

### 5.3 Data Collection

In order to collect data and achieve the research's objectives, basic studies were carried out on documents about literature of management, management of change and education of Iran, especially in Kermanshah. Then, a group of experts of education and school principals were interviewed about the current situation of education and obstacles of educational changes and programs. Then, according to the retrieved information and in order to identify the obstacles on successful accomplishment of educational changes and programs, a closed questionnaire, including 81 main questions, was designed and after determining its validity and reliability, it was distributed among school principals. They were supposed to respond to the questions on the basis of Likert spectrum scale (Thompson, 2006) which was made up 5 choices ranging from the lowest to the highest.

In this research, theories and viewpoints of some authorities were used as the basis and guide to the study in order to advance it in a correct scientific way and design the questions of the questionnaire. "The 8-stage process of creating change" which was presented by John P. Kotter, the outstanding researcher and professor of Harvard University as well as the "ADKAR Model" which was suggested by Research and Management Institute of Prosci for creating change were used in the section about transformational leadership.

The concept of "stages of change of behavior", which was presented by Paul Hersey and Kenneth Blanchard, was employed in the section about change of behavior. Theories of "motivation-hygiene theory" of Hertzberg and "hierarchy of motivation and needs" of Maslow were used in the section about motivation. Moreover, "change process theory" of Kurt Lewin was employed in the section about resistance against change (Hersey and Blanchard, 2001). Also, using Delphi Technique, opinions of experts of education were examined and used in different parts of the questionnaire which was distributed among school principals.

In order to examine the opinions of experts of education by Delphi technique, another questionnaire was designed and presented respectively in 2 and 3 stages. First an open questionnaire, including 13 questions about obstacles of change, was designed and given to 30 experts of education; they were asked to respond to the questions explanatorily and without any limitations. Each question included one of the main subjects or variables under the study; experts were also asked to mention other factors which could hinder the accomplishment of educational changes at schools or point out any necessary suggestions in the last question. Having collected this questionnaire, all retrieved information was extracted, listed and formed another closed questionnaire including 58 statements which was distributed to the same experts again. In this stage, 3 choices of "I agree", "I disagree" and "I have no idea" were considered for each statement and more than 90% agreed on the statements which were attained by the experts. Again the same closed questionnaire was distributed about the cases which were not agreed upon and the experts were asked to give any essential explanation for each statement; this way, the required information was collected.

## 5.4 Validity of Research

What is meant by validity is that the measuring tools can measure the characteristics under the study; thus, unsuitable tools will surely mislead other activities of the research as well. In other words, validity of measuring tools or the questionnaire means that its questions should be exactly related to the research hypotheses and objectives; so, the questions must measure what is supposed to be measured and not anything else (Spata, 2003). In order to be sure of the validity of this research, the questionnaire was first distributed among university instructors, experts of education and school principals, then some of the questions were eliminated due to their opinions and some other questions were added. In some cases, some of the questions underwent necessary changes.

## 5.5 Reliability of Research

What is meant by reliability is that if a measured characteristic is measured again with the same previous tools or similar and comparable tools under similar conditions, to what extent the findings will be similar and reliable. In other words, reliability means to what extent the measuring tools reach to the same or similar results under the similar conditions. In general, reliability refers to the accuracy and stability of measurement and a reliable and acceptable tool is the one with repetitiveness characteristic, i.e. it can be used in various cases and result in same or similar findings. If the measuring tool is not reliable, other activities of the researcher will be misled again (Bloor, 2006).

The questionnaire in this research was first distributed among 30 high school principals in order to determine its reliability coefficient and they completed it with the researcher's presences. They were also asked to point out the ambiguities and mistakes of the questions to the researcher or mention them in the questionnaire. Then, the retrieved information was analyzed through SPSS statistical software using Cronbach's alpha. The obtained alpha coefficient of 94% shows a high reliability coefficient in comparison with the least acceptable coefficient which is 70%.

Finally, performing the essential changes and revisions in the initial questionnaire and being certain of its reliability and validity, its final draft was prepared and distributed among high school principals and was collected for the final analysis.

## 5.6 Data Analysis

Scientific and statistical analysis of data is a process through which the information, which was achieved by collecting tools, will be summarized, coded, categorized and processed. Using the statistical analysis, the relationship between data is clarified and research hypotheses are examined. The following descriptive and inferential methods were used in the current research:

- Statistical measures such as percentage of frequency, drawing tables and graphs, measuring mean and standard deviation were used to describe data.
- One-variable t-test was used to compare the mean of the data from one group with their hypothetical mean. This test is used when we have only the data about one sample of the population. Comparing the achieved data with hypothetical mean clarifies if they are significant or not.

- Two-variable t-test was used in order to examine the equity and compare the means of two independent groups. This test is used when the data about the means of two independent groups are available and it is possible to clarify the significance of their real difference.
- Version 13 of SPSS statistical software was also used for data analysis in this study.

## 5.7 Process of Methodology

In order to show process of methodology easier, different methodological steps of the current research have been presented schematically in the following chart (Figure 5- 1).

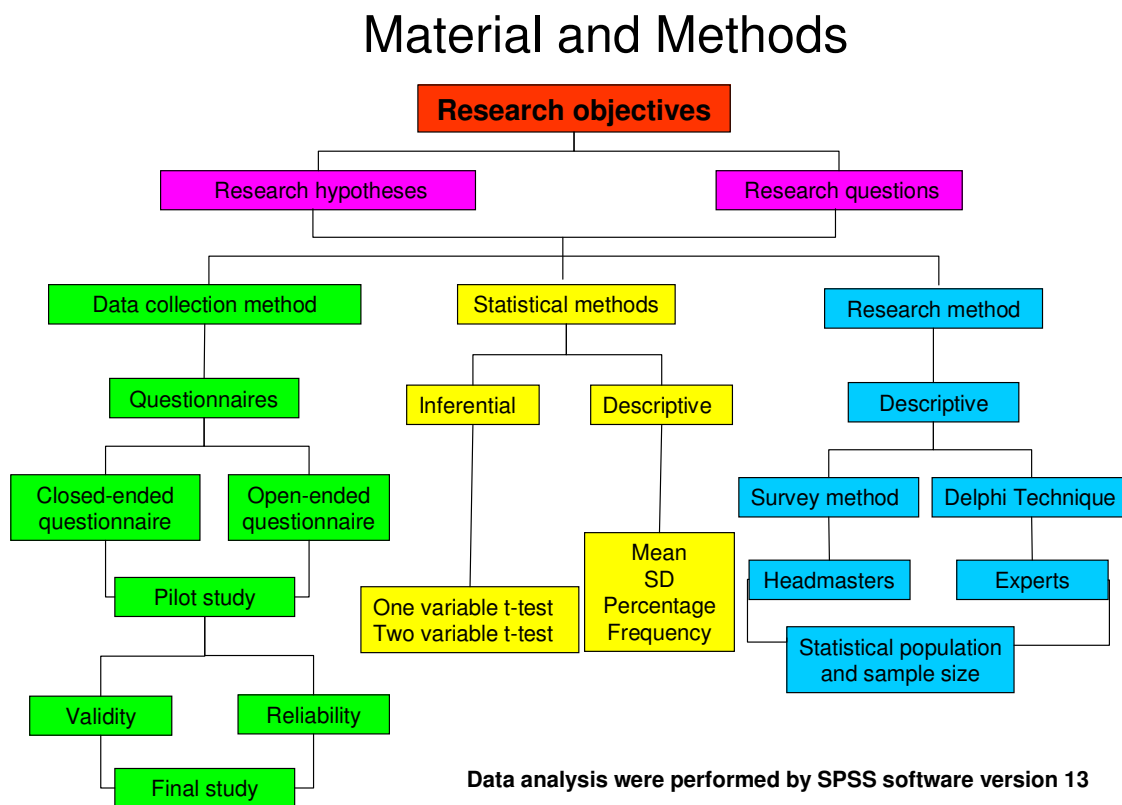


Figure 5- 1 Process of Methodology

## 6 Findings

### 6.1 Introduction

To survey and test the research hypotheses, a questionnaire consisting of a set of 81 main questions was designed to be answered by the headmasters. The data and information collected from the set of questions of the questionnaire concerning the variables about the obstacles of the successful implementation of the plans and educational changes in schools have been analyzed. In this regard, the following measures have been taken in the field of descriptive statistics:

First, based on Likert Scale, each of the choices of the questions has been valued and the values from 1 to 5 have been given to them, then the frequency of the given answers to all the questions have been calculated. Using descriptive statistics, we describe the headmasters' views on each question of the questionnaire by means of the frequency distribution table, percentage taking, and graph drawing. Then all the data intended for each variable have been combined and described together.

In the field of inferential statistics, the following measures have been taken:

Having one-variable hypothesis, we use one-variable “t-test” for analyzing them to determine the mean of the headmasters' views. This test is used when we have the data about a sample of society in hand. And based on this test the determined mean of the data is compared with the assumed one and the significance or insignificance of the means is determined. The assumed mean is the one which the researcher assumes it; in other words, the researcher determines how much the mean of the society data based on the hypotheses should be. In this research mean 3 indicates the moderate level of the society and the mean less than 3 indicates the low level of the society and the mean more than 3 indicates high level of the society. In other words, if the mean is less than 3, it shows that there are obstacles in the way of successful implementation of plans and educational changes concerning the intended variables. If the obtained mean is more than 3, it shows that there are no obstacles in the way of the successful implementation of the plans and educational changes, as far as the intended variables are concerned.

Based on data and evidence, our hypothesis in this research is that, there are obstacles in the way of plans and educational changes, therefore, we have considered the assumed mean less than moderate level 3 and is equal to (2.5). If the obtained mean of the data is more than (2.5), our research hypothesis will be rejected; that is, there are no obstacles in the way of the plans and educational changes, and if it is less than this number, our research hypothesis will be verified and it means there are obstacles in the way of plans and educational changes; provided that the obtained mean difference is statistically significant.

The computation of one variable t-test is done through the following formula:

(www.statisticssolutions.com, 20.02.2010)

$$t = \frac{\bar{x} - x}{s/\sqrt{n}}$$

$$\bar{x}_{ob} = \frac{\sum x}{n}$$

$$S = \sqrt{\frac{\sum (X - \bar{X})^2}{n-1}}$$

Where  $x$  is the data,  $n$  is the sample size,  $\bar{x}_{ob}$  is the observed mean,  $\mu_0$  is the assumed mean and  $s$  is observed standard deviation. So we compare the obtained value of  $t_{ob}$  with the value of  $t$  of the table with the degree of freedom  $n-1$ . If  $t_{ob}$ , that is, the observed  $t$  is less than  $t_{cr}$ , the  $t$  in the table ( $t_{ob} < t_{cr}$ ), we come into conclusion that the society mean is more than the assumed mean ( $\mu = 2.5$ ). Therefore our research hypothesis will be rejected and null hypothesis will be verified. But, if  $t_{ob}$  is more than  $t_{cr}$  ( $t_{ob} > t_{cr}$ ), that is, the society mean is less than (2.5) and our research hypothesis is verified and null hypothesis is rejected. The significance level of 0.05 has been considered to test of the research hypotheses.

Furthermore, to compare the means of the headmasters and headmistresses' views, the  $t$ -test of the two independent groups has been used. In other words, the aim of this test is to answer this question whether the difference between the obtained means results from chance or from the real difference between the society means. The  $t$ -test of the two independent groups with the equal variances is calculated by using the following formula: (www.itl.nist.gov, 20.02.2010).

$$T = \frac{\bar{X}_1 - \bar{X}_2}{s_p \sqrt{1/n_1 + 1/n_2}}$$

where

$$s_p^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

In this formula  $\bar{x}_1$ ,  $\bar{x}_2$  are the means of the two groups of men and women,  $n_1$  and  $n_2$  are the number of samples of each group. Where  $s_p^2$  is the pooled variance of two samples and  $s_1^2$ ,  $s_2^2$  are the variances of two samples. After computing  $t$ , the degree of freedom is calculated through this formula, ( $df = n_1 + n_2 - 2$ ), and by referring to the distribution table of  $t$ -Student, the amount of the observed  $t$  is compared with  $t$  of the table. If  $t_t$  (the  $t$  of the table) is less than  $t_o$  (the observed  $t$ ) null hypothesis is rejected, that is, the difference between the means of the two groups is significant and the existing difference results from the effect of the relations between the variables and research hypothesis, that is, the difference between the means of the two groups is verified. On the contrary, if  $t_t$  is more than  $t_o$  ( $t_t > t_o$ ), the null hypothesis is verified, meaning that the difference between the means is not significant and these differences come from the chance and accident. So, the research hypothesis, that is, the difference between the means of the two groups is rejected. The significance level of 0.05 has been considered to test the research hypotheses. To analyze the data, the SPSS software, version 13 has been used.

**Research hypothesis:** There is a difference between the male and female headmasters' views.

**Null hypothesis:** There is no significant difference between the male and female headmasters' views.

Also, by using the Delphi Technique, the views of the experts and the clear-sighted persons from system of education concerning the obstacles of successful execution of plans and educational changes have been studied at schools. Based on their views, 12 main variables have been identified and 58 items have been designed to study them. This technique has been used to reinforce this research qualitatively, to use various ways for testing the intended hypotheses to increase the accuracy of the research and to compare the headmasters' views with those of the educational experts.

## 6.2 Descriptive Analysis of the Data

### 6.2.1 Characteristics of the Headmasters

The characteristics of the headmasters of public high schools in Kermanshah who are considered as the statistical population of this study are examined from different aspects such as sex, educational degree, field of study, working experience and experience as headmaster or deputy headmaster of school. The obtained statistics show that the number of male (56) and female (56) principals are equal. Moreover, 96 headmasters which accounts for 85.71% hold bachelor's degree and 16 headmasters who accounts for 14.29% have master's degree. 32 of them (28.58%) hold a degree in education and Educational Planning and Management while 80 of them (71.42%) were educated in other fields. 41 principals (36.60%) with 16-20 years of experience made up the highest frequency and 2 principals (1.78%) with the experience of less than 10 years made up the lowest frequency. Regarding the experience of management of schools, 51 (45.54%) with 16-20 years of experience made up the highest frequency and 10 people (8.93%) with the experience of less than 10 years made up the lowest frequency (Table 6- 1).

### 6.2.2 Characteristics of Experts of Education

Characteristics of the experts of education, who were introduced as the population of experts in this research, are examined from different aspects such as sex, educational degree, field of study, working experience and experience as school principals and beyond the school level in Ministry of Education. Their total number is 30. The number of male experts equals to 29 people (96.66%) and only 1 (3.34%) female expert is among them (because at that time there were not more female's experts with both high educational degrees and high experiences at the different levels of work in administrative and educational affairs in education department). 27 people (90%) hold master's degree or higher levels and 3 people (10%) hold bachelor's degree. The field of study of 20 people (66.66%) is Educational Management and 10 others (33.34%) were educated in other fields. 18 people (60%) have 21-25 years of working experience. All of them have the experience of managing schools as well as management beyond school levels (Table 6- 2).



**Table 6- 1** Characteristics of statistical population of high school headmasters

		Number	Percentage	Total
<b>Sex</b>	Male	56	50%	112
	Female	56	50%	
<b>Educational Degree</b>	B.A.	96	85.71%	112
	M.A.	16	14.29%	
<b>Field of study</b>	Educational administration	32	28.57%	112
	Other fields	80	71.43%	
<b>Work experience</b>	26-30	19	16.97%	112
	21-25	34	30.36%	
	16-20	41	36.63%	
	10-15	16	14.29%	
	Less than 10	2	1.75%	
<b>Years of principal</b>	26-30	13	11.61%	112
	21-25	27	24.11%	
	16-20	51	45.54%	
	10 -15	11	9.82%	
	Less than 10	10	8.92%	

**Table 6- 2** Characteristics of statistical population of experts of education

		Number	Percentage	Total
<b>Sex</b>	Male	29	96.30%	30
	Female	1	3.30%	
<b>Educational degree</b>	B.A.	3	10%	30
	M.A.	27	90%	
<b>Field of study</b>	Educational administration	20	66.67%	30
	Other fields	10	33.33%	
<b>Work experience</b>	26-30	7	23.33%	30
	21-25	18	60%	
	16-24	5	16.67%	
<b>Years of principal</b>	6-10	14	46.67%	30
	2-5	16	53.33%	
<b>Other management experiences</b>	11-15	12	40%	30
	6-10	9	30%	
	1-5	9	30%	

### 6.2.3 Analysis of the Research Hypothesis 1

*“The transformational leadership does not occur efficiently for the successful execution of the plans of change.”*

Eight indexes have been taken into consideration for the study of this research hypothesis and for each index several questions have been identified. First we have described the questions concerned with each index using the table of the frequency distribution, percentage taking and graph drawing and then all the indexes have been analyzed in relation to the above research hypothesis.

#### 6.2.3.1 Index 1: Creating Necessity and Ergency among the Executives of Change Plans

Questions 2, 3, 4 and 5 have been taken into consideration for the evaluation of this index that has been dealt with in the following way.

**Question 2:** Before executing the plans, to what extent, have you been informed of their necessity and importance?

Table 6- 3 shows that 88 (78.6%) of the headmasters have said that before the execution of plans a little and very little information and knowledge has been transferred to them, and only 24 (21.4%) of them have said that they have been given the required information at the moderate level and none of them have expressed their ideas at the levels of much or very much. Overall, we can say that before the execution of the plans, necessary and required information has not been given to the headmasters.

**Table 6- 3** The frequency distribution of the headmasters’ ideas in relation to question 2

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	18	70	24	0	0	112
Percentage	16.1%	62.5%	21.4%	0%	0%	100.0%
Cumulative Percent	16.1%	78.6%	100.0%			

**Question 3:** Before executing the plans, to what extent have the teachers been given the useful and necessary information?

Table 6- 4 indicates that 98 (87.5%) of all the headmasters have said that before the execution of plans little and very little information has been given to school teachers, and only 14 (12.5%) of them have said that the teachers have been given the required information at the moderate level, and none of the headmasters have expressed their ideas at the levels of much or very much. On the whole, we can say that before the execution of the plans, the required and necessary information has not been given to the teachers.

**Table 6- 4** The frequency distribution of the headmasters' ideas in relation to question 3

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	37	61	14	0	0	112
Percentage	33.0%	54.5%	12.5%	0%	0%	100.0%
Cumulative Percent	33.0%	87.5%	100			

**Question 4:** Before executing the plans, how much information and required knowledge has been given to the students?

Table 6- 5 shows that 105 (93.7%) out of all respondents have said that the students have been provided with little and very little information before the execution of the plans. Only 7 (6.3%) headmasters have said that the students have been provided with required information and knowledge at the moderate level; however, none of them have expressed their ideas at the levels of much or very much.

Thus, the required information and knowledge has not been given to the students before the execution of the plans.

**Table 6- 5** The frequency distribution of the headmasters' ideas in relation to question 4

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	51	54	7	0	0	112
Percentage	45.5%	48.2%	6.3%	0%	0%	100.0%
Cumulative Percent	45.5%	93.7%	100.0%			

**Question 5:** Before executing the plans, to what extent have the students' parents been given the required and necessary information?

The data in Table 6- 6 indicate that 109 (97.3%) of all the headmasters have said that parents have been provided with little and very little information before the execution of the plans. Only 3 (2.7%) of them have said that the parents have been provided with information at the moderate level; however, none of them have expressed their ideas at the levels of much or very much. Therefore, we can say that the required knowledge and information has not been given to the parents before the execution of the plans.

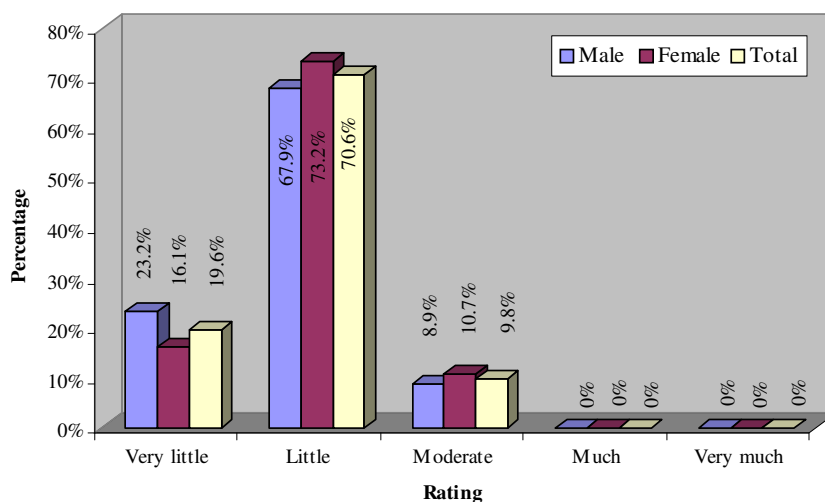
**Table 6- 6** The frequency distribution of the headmasters' ideas in relation to question 5

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	65	44	3	0	0	112
Percentage	58.0%	39.3%	2.7%	0%	0%	100.0%
Cumulative Percent	58.0%	97.3%	100.0%			

Table 6- 7 and Figure 6- 1 show that 51 (91.1%) of male headmasters and 50 (89.3%) of female headmasters have said that the necessity and urgency of the executives of plans before executing them has been transferred to their executives at the levels of very little and little. Only 11 (9.8%) out of all headmasters have said that the necessity and urgency of plans has been transferred to their executives at the moderate level however, none of the male and female headmasters have expressed their ideas at the levels of much or very much.

**Table 6- 7** The frequency distribution of headmasters' ideas about questions 2, 3, 4 and 5 in relation with index 1. "Creating the necessity and urgency among the executives of change plans"

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	13	38	5	0	0	56
	P	23.2%	67.9%	8.9%	0%	0%	100.0%
Female	F	9	41	6	0	0	56
	P	16.1%	73.2%	10.7%	0%	0%	100.0%
Total	F	22	79	11	0	0	112
	P	19.6%	70.6%	9.8%	0%	0%	100.0%



**Figure 6- 1** The ideas of headmasters in relation to index no 1

In general, the necessity and urgency of change plans before their executions has not been given to their executives, including the headmasters, teachers, students and parents at a desirable level. Moreover, the available data indicate that in addition to insufficiency of the knowledge transferred to the executors by transformational leadership and management, the lowest extent of knowledge transferred to stakeholders regarding the necessity and urgency of changes are respectively:

- Students' parents
- Students
- Teachers and
- Headmasters

However, female managers have had more positive attitude than male managers towards the attempts of transformational leadership and management for creating the necessity and urgency of transformation programs and providing managers, executors and teachers with sufficient knowledge and information.

### 6.2.3.2 Index 2: Forming a Guide Coalition with the Purpose of Guiding the Executives of the Change Plans

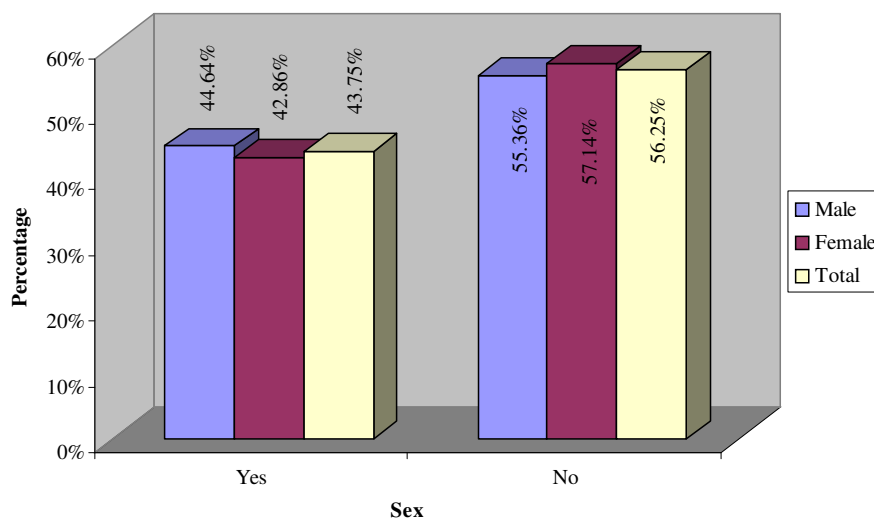
Questions 6, 6.1, 6.2, 6.3 and 6.4 have been considered for this purpose. We will study them in the following way.

**Question 6:** To guide the schools in implementing of plans circulated, has a team or a specific group been introduced to school?

Table 6- 8 and Figure 6- 2 show that 63 (56.25%) out of all headmasters both female and male have said that a certain team for guiding the executives of change plans has not been introduced or they have not been known to them. And 49 (43.75%) have pointed out that such a team has existed or has been known to them. Overall, more percentage of the headmasters have said that a guidance coalition has not been formed for the guidance of executives of change plans.

**Table 6- 8** The frequency distribution of the headmasters' ideas on question 6

Sex \ Rate		Yes	No	Total
Male	F	25	31	56
	P	44.64%	55.36%	100%
Female	F	24	32	56
	P	42.86%	57.14%	100.0%
Total	F	49	63	112
	P	43.75%	56.25%	100.0%



**Figure 6- 2** The ideas of the headmasters' on question 6

**Question 6.1:** To what extent, have there been competent people with necessary specialty in the group?

Table 6- 9 shows that 43 persons (87.75%) out of all the headmasters have said that there have been competent people with very little and a little and necessary specialty. And only 6 persons (12.25%) have said that the presence of competent people in the guide team have been at moderate level. However, none of the headmasters have expressed their ideas at the levels of much or very much. So, there have not been many people with necessary ability and specialty in the guide team.

**Table 6- 9** The frequency distribution of the headmasters' ideas in relation to question 6.1

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	13	30	6	0	0	49
<b>Percentage</b>	26.53%	61.22%	12.25%	0%	0%	100.0%
<b>Cumulative Percent</b>	26.53%	87.75%	100.0%			

**Question 6.2:** To what extent, have the introduced people in the guide team been famous and experienced enough?

Table 6- 10 indicates that 42 (85.71%) of all the respondents have said that fame and experience of the introduced people in the guide team has been at the levels of a little and very little and only 7 persons (14.29%) have expressed their ideas at the level of moderate but none of respondents have expressed their ideas at the levels of much and very much.

In general, we can say that the introduced people in the guide team have not enjoyed the necessary fame and experience.

**Table 6- 10** The frequency distribution of the headmasters' ideas in relation to question 6.2

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	10	32	7	0	0	49
<b>Percentage</b>	20.40%	65.31%	14.29%	0%	0%	100.0%
<b>Cumulative Percent</b>	20.40%	85.71%	100.0%			

**Question 6.3:** To what extent, has the leader of the team enjoyed the required qualifications?

Table 6- 11 shows that 39 (79.59%) of all the headmasters have said that the required qualifications of the leadership of the guide team have been at the levels of little and very little. And only 10 of them (20.41%) have said that the leadership's scientific qualifications have been at the levels of moderate; but none of the headmasters have expressed their ideas at the levels of much and very much.

On the whole, the leadership of the guide team has not enjoyed a high level of scientific qualifications.

**Table 6- 11** The frequency distribution of the headmasters' ideas in relation to question 6.3

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	9	30	10	0	0	49
Percentage	18.37%	61.22%	20.41%	0%	0%	100.0%
Cumulative Percent	18.37%	79.59%	100.0%			

**Question 6.4:** To what extent, has the guiding team been successful in solving the problems and executing the plans?

Table 6- 12 shows that 44 ( 89.80%) of the respondents have said that the ability of the guide team in solving the problems and paving the way for the execution of the plans has been at the levels of little and very little. And only 5 headmasters (10.20%) have said that guide team has been successful at the level of moderate. Therefore, we can say that the guide team has not been able to solve the problems and nor has it been able to pave the way for the execution of the plans.

**Table 6- 12** The frequency distribution of the headmasters' ideas in relation to question 6.4

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	11	33	5	0	0	49
Percentage	22.45%	67.35%	10.20%	0%	0%	100.0%
Cumulative Percent	22.45%	89.80%	100.0%			

Table 6- 13 and Figure 6- 3 show that 41 (83.7%) of all the respondents have said that the guide coalition for the guidance of the executives of the change plans has been created at the levels of little and very little. And only 8 headmasters (16.3%) have said that this coalition has been created at the moderate level. None of the respondents have expressed their ideas at the levels of much and very much.

In general, according to the both male and female headmasters, the guide coalition has not been formed at a high level for the guidance of the executives of change plans.

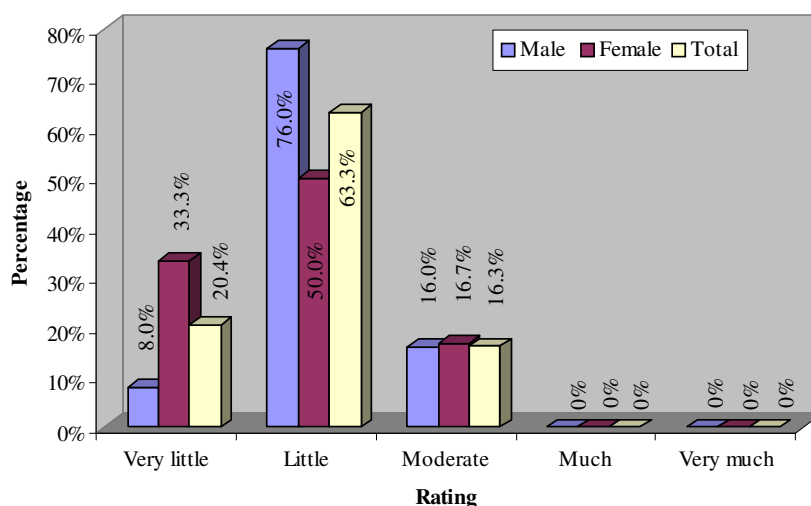
The available data show that the obstacles of transformational leadership and management in creating the guiding coalition for leading and guiding change programs are respectively:

- Lack of employing various specializations in the guiding coalition.
- Incapability of the guiding coalition in resolving obstacles of change programs and providing suitable grounds for their implementation.
- Insufficient experience and fame of members of the guiding coalition.
- Unacceptable scientific specializations and abilities of the guiding coalition.

However, considering the characteristics and abilities of the guiding coalition, male managers have had more positive attitude than female managers.

**Table 6- 13** The frequency distribution of the headmasters' ideas on questions 6.1, 6.2, 6.3 and 6.4 in relation to index 2. "Forming a guide coalition with the purpose of guiding the executives"

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	2	19	4	0	0	25
	P	8.0%	76.0%	16.0%	0%	0%	100.0%
Female	F	8	12	4	0	0	24
	P	33.3%	50.0%	16.7%	0%	0%	100.0%
Total	F	10	31	8	0	0	49
	P	20.4%	63.3%	16.3%	0%	0%	100.0%



**Figure 6- 3** The ideas of the headmasters on index2

### 6.2.3.3 Index 3: The Development of Vision and Strategy

Questions 7, 8 and 9 have been considered for the evaluation of this index. They have been studied in the following ways.

**Question 7:** To what extent, have the plans circulated to the schools had clear, specific and achievable objectives?

Table 6- 14 indicates that 55 (49.1%) of the headmasters have said that the objectives of the plans have been clear and achievable at the levels of little and very little and 55 of them (49.1%) have said that the objectives of the plans have been achievable at the level of moderate. But only 2 people (1.8%) have expressed their ideas at the level of much.

In general, according to the headmasters both male and female, the objectives of the circulated plans have been clear and achievable at the levels of moderate and lower.



**Table 6- 14** The frequency distribution of the headmasters' ideas in relation to question 7

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	12	43	55	2	0	112
Percentage	10.7%	38.4%	49.1%	1.8%	0%	100.0%
Cumulative Percent	10.7%	49.1%	98.2%	100.0%		

**Question 8:** To what extent, have the plans circulated to the schools had long-term objectives with clear pictures of the future?

Table 6- 15 shows that 62 (55.4%) of the respondents have said that the plans have had the long-term objectives at the levels of a little and very little and 50 (44.6%) of them have pressed their ideas at the level of moderate. But none of the male and female headmasters have expressed their ideas at the level of much and very much. Therefore, we can say that the plans have had the long-term objectives at the levels of moderate and lower.

**Table 6- 15** The frequency distribution of the headmasters' ideas in relation to question 8

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	21	41	50	0	0	112
Percentage	18.8%	36.6%	44.6%	0%	0%	100.0%
Cumulative Percent	18.8%	55.4%	100.0%			

**Question 9:** To what extent, have the specific, suitable and enforceable ways in achieving the objectives been included in the change plans?

Table 6- 16 shows that 60 (53.6%) of all the headmasters have said the suitable and enforceable ways for achieving the objectives of the change plans have been included in them at the levels of a little and very little and 52 (46.4%) of them have said that enforceable ways for the execution of plans have been at the level of moderate. But none of the headmasters both male and female have expressed their views at the levels much and very much. In general, the suggested ways for the execution of plans have been included in them at the levels of moderate and lower.

**Table 6- 16** The frequency distribution of the headmasters' ideas in relation to question 9

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	13	47	52	0	0	112
Percentage	11.6%	42.0%	46.4%	0%	0%	100.0%
Cumulative Percent	11.6%	53.6%	100.0%			

Table 6- 17 and Figure 6- 4 show that 59 (52.7%) of the headmasters both male and female have said that the leadership of the change plans has been able to take actions in relation to the development of vision and the strategy of the change plans at the levels of a little and very little. And 53 (47.3%) of them have expressed that actions have been taken at the level of moderate. None of the male and female headmasters have expressed their views at the levels of much and very much.

Therefore, the attempt of the change leadership concerning the development of vision and the strategy of the change plans has been at the levels of moderate and lower.

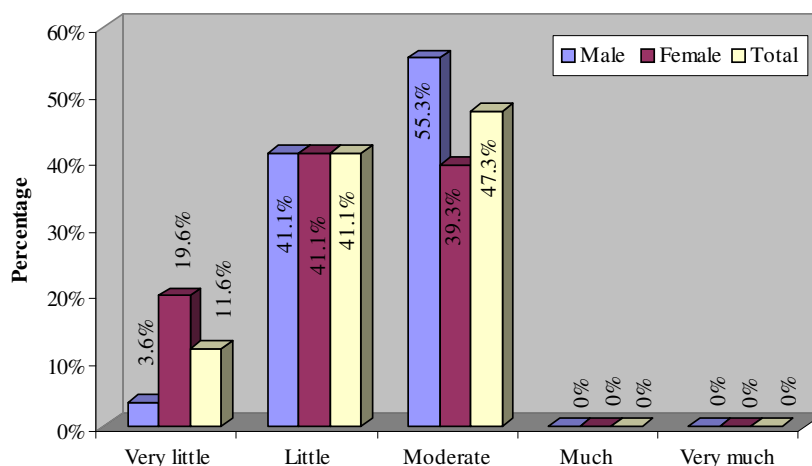
Furthermore, the problems of transformational leadership and management regarding developing a vision and strategy are respectively:

- Lack of long-term objectives with a clear vision of the future.
- Lack of specified and suitable predicted methods for implementing change plans.
- Organizing unclear, inaccessible and far-fetched objectives.

However, regarding the attention paid to developing a vision and strategy by transformational leadership and management, male managers have had more positive attitude than female managers.

**Table 6- 17** The frequency distribution of the headmasters' views on questions 7, 8 and 9 in relation to index 3 "The development of vision and strategy"

Rate Sex		Very little	Little	Moderate	Much	Very much	Total
Male	F	2	23	31	0	0	56
	P	3.6%	41.1%	55.3%	0%	0%	100.0%
Female	F	11	23	22	0	0	56
	P	19.6%	41.1%	39.3%	0%	0%	100.0%
Total	F	13	46	53	0	0	112
	P	11.6%	41.1%	47.3%	0%	0%	100.0%



**Figure 6- 4** The headmasters' views in relation to index 3

### 6.2.3.4 Index 4: The Transfer of Vision and Strategy

Items 11, 12, 13, 14 and 15 have been considered for the evaluation of this index and are dealt with in the following way.

**Question 11:** For transferring the information and introducing the plans better to you, to what extent have meetings and sessions been held?

Table 6- 18 shows that 74 (66.1%) of all the headmasters have said that meetings and sessions which have been held for introducing the plans have been at the levels of a little and very little. And 38 (33.9%) of them have said that these meetings have been held at the level of moderate. However, none of the headmasters have expressed their views at the levels of much and very much.

In general, meetings and sessions have not been held for the introducing of plans at higher levels.

**Table 6- 18** The frequency distribution of the headmasters' ideas in relation to question 11

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	25	49	38	0	0	112
Percentage	22.3%	43.8%	33.9%	0%	0%	100.0%
Cumulative Percent	22.3%	66.1%	100.0%			

**Question 12:** To what extent, have the meetings and sessions been effective in response to your ambiguities and questions?

Table 6- 19 shows that 65 (58.0%) of all the respondents have said that the meetings and sessions held in response to the ambiguities and the questions have been effective at the levels of a little and very little. 47 of them (42.0%) have said that the importance of these meetings have been at the level of moderate; however, none of the respondents have expressed their ideas at the levels of much and very much.

Overall, the meetings and sessions have not been effective in response to the ambiguities and related questions.

**Table 6- 19** The frequency distribution of the headmasters' ideas in relation to question 12

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	25	40	47	0	0	112
Percentage	22.3%	35.7%	42.0%	0%	0%	100.0%
Cumulative Percent	22.3%	58.0%	100.0%			

**Question 13:** In order to transfer the information and introduce the plans to you better, to what extent have the mass media such as pictures, films, posters, brochures, interviews, TV and radio panels and so on been used?

Table 6- 20 shows that 87 (77.7%) of the headmasters have said that the mass media such as

pictures, posters, films, TV and radio panels and so on have been used at the levels of little and very little for introducing the plans, and 24 (21.4%) of them have said that the mass media have been used at the moderate level. But only one (0.9%) of them has expressed his ideas at the level of much and very much.

Therefore, we can say that mass media have been used at moderate and lower levels to introduce the change plans.

**Table 6- 20** The frequency distribution of the headmasters' ideas in relation to question 13

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	40	47	24	1	0	49
Percentage	35.7%	42.0%	21.4%	0.9%	0%	100.0%
Cumulative Percent	35.7%	77.7%	99.1%			

**Question 14:** To what extent, has the usage of the above-mentioned media in the previous question, helped in the common understanding of the executives in the goals of the plans and in removing the existing ambiguities?

Table 6- 21 shows that 82 (73.2%) of the headmasters have said that the usage of the media has led to the common understanding of the executives of the plans of their goals, at the levels of little and very little and 29 (25.9%) of the headmasters have said that the influence of media on the common understanding of the executives has been at the level of moderate and only one headmaster has expressed his idea at the level of much. On the whole, the influence of media on the common understanding of the executives of the plans of their goals has not been at the high level.

**Table 6- 21** The frequency distribution of the headmasters' ideas in relation to question 14

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	32	50	29	1	0	112
Percentage	28.6%	44.6%	25.9%	0.9%	0%	100.0%
Cumulative Percent	28.6%	73.2%	99.1%	100.0%		

**Question 15:** To what extent, have the officials' behaviours and functions been an appropriate pattern in supporting of the executing the plans?

Table 6- 22 indicates that 65 (58%) of the respondents have said that the behaviours and performances of the authorities have been a pattern for them at the levels of little and very little and 46 (41.1%) of the headmasters have said that their behaviours have been a pattern for them at the level of moderate. And only one (0.9%) of them has expressed his idea at the level of very much. In general, the behaviours of the authorities have not been a suitable pattern for the executives of the plans.

**Table 6- 22** The frequency distribution of the headmasters’ ideas in relation to question 15

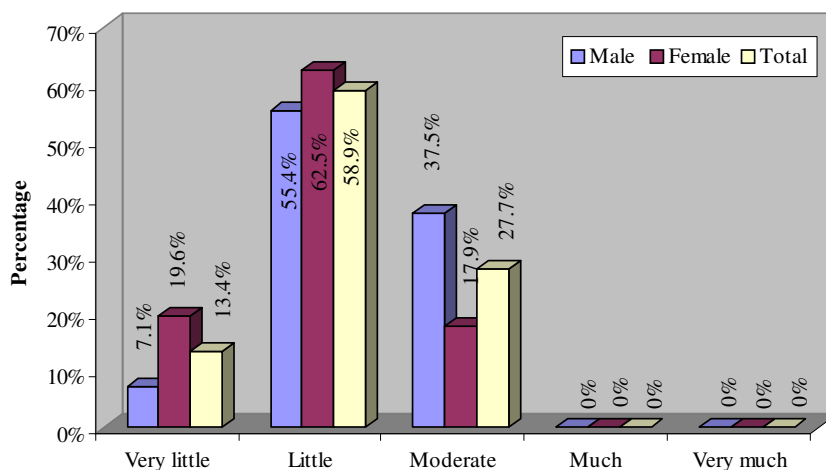
Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	23	42	46	1	0	112
Percentage	20.5%	37.5%	41.1%	0.9%	0%	100.0%
Cumulative Percent	20.5%	58.0%	99.1%	100.0%		

Table 6- 23 and Figure 6- 5 show that 81 (72.3%) of the male and female headmasters have said that the leadership of change plans has been able to transfer the vision and strategy at the level of a little and very little, and 31 (27.7%) of the headmasters have expressed the transfer of the perspective and strategy at the moderate level. None of the headmasters have expressed their ideas at the much and very much levels.

Therefore, the change leadership has not been able to transfer the vision and strategy of the plans to their executives at the high level.

**Table 6- 23** Is about the frequency distribution of the headmasters’ views on questions 11,12,13,14 and 15 in relation to index 4. “The transfer of vision and strategy.”

Rate		Very little	Little	Moderate	Much	Very much	Total
Sex							
Male	F	4	31	21	0	0	56
	P	7.1%	55.4%	37.5%	0%	0%	100.0%
Female	F	11	35	10	0	0	56
	P	19.6%	62.5%	17.9%	0%	0%	100.0%
Total	F	15	66	31	0	0	112
	P	13.4%	58.9%	27.7%	0%	0%	100.0%



**Figure 6- 5** The headmasters’ views in relation to index 4

The available data also indicate that most of the obstacles regarding the transferring the visions and strategies of change plans to the executors are respectively:

- Lack of using the mass media to transfer visions and strategies of change.
- Lack of organizing meetings, conferences, lectures and forums with the required quality.
- Weak modeling role of managers of higher levels for change executors.

However, regarding the attempts of transformational leadership and management for transferring visions and strategies of change to the executors, male managers have had more positive attitude than female managers.

### 6.2.3.5 Index 5: Empowerment

Questions 16, 17 and 19 have been assigned for evaluation of this index.

**Question 16:** To what extent, has the ground for the execution of plans and doing the school affairs and conditions of risking and welcoming the new thoughts without getting worried and the fear of their consequences or reprimanding existed?

Table 6- 24 shows that 74 (66%) of the respondents have said that the ground for risk-taking and welcoming new ideas has existed at the levels of little and very little. Also 35 (31.3%) respondents have said that these conditions have existed at a moderate level. Only 3 persons (2.7%) have expressed their ideas at the level of much.

In general, we can say that there has not been the ground for risking and welcoming the new ideas at the high level at schools.

**Table 6- 24** The frequency distribution of the headmasters' ideas in relation to question 16

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	36	38	35	3	0	112
<b>Percentage</b>	32.1%	33.9%	31.3%	2.7%	0%	100.0%
<b>Cumulative Percent</b>	32.1%	66.0%	97.3%	100.0%		

**Question 17:** To what extent, have you been given the authority of decision-making proportionate to your responsibilities?

Table 6- 25 indicates that 83 (74.1%) of the headmasters have said that authority has been given to them at the levels of a little and very little and 29 persons (25.9%) have said that the authority vested in them has been at the moderate level; however, none of the headmasters have expressed their ideas at the levels of much or very much. Therefore, authority vested on the headmasters has not been proportionate to their level of responsibilities.

**Table 6- 25** The frequency distribution of the headmasters' ideas in relation to question 17

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	38	45	29	0	0	112
<b>Percentage</b>	33.9%	40.2%	25.9%	0%	0%	100.0%
<b>Cumulative Percent</b>	33.9%	74.1%	100.0%			

**Question 19:** To what extent, has the education department been able to put an end to the obstacles in the way of executing the plans?

Table 6- 26 shows that 80 (71.4%) of the headmasters have said that the education department has been able to remove the obstacles in the way of the execution of plans at the levels of little and very little and 32 (28.6%) of them have considered the attempt of the education department in this way at a moderate level; however, none of the headmasters have expressed their ideas at the levels of much or very much.

In general, the education department has not been able to remove the obstacles in the way of the successful execution of the plans at a high level.

**Table 6- 26** The frequency distribution of the headmasters' ideas in relation to question 19

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	29	51	32	0	0	112
Percentage	25.9%	45.5%	28.6%	0%	0%	100.0%
Cumulative Percent	25.9%	71.4%	100.0%			

Table 6- 27 and Figure 6- 6 show that 89 (79.5%) of headmasters both male and female have said that the leadership of the change plans has been able to empower the employees and executives of change plans at schools at the levels of a little and very little and 23 (20.5%) of them have expressed their ideas that the success of the leadership of the change has been at the moderate level; however, none of the headmasters have expressed their ideas at the levels of much and very much.

**Table 6- 27** The frequency distribution of the headmasters' views on questions 16, 17 and 19 in relation to index 5. "Empowerment"

Rate		Very little	Little	Moderate	Much	Very much	Total
Sex							
Male	F	8	35	13	0	0	56
	P	14.3%	62.5%	23.2%	0%	0%	100.0%
Female	F	12	34	10	0	0	56
	P	21.4%	60.7%	17.9%	0%	0%	100.0%
Total	F	20	69	23	0	0	112
	P	17.9%	61.6%	20.5%	0%	0%	100.0%

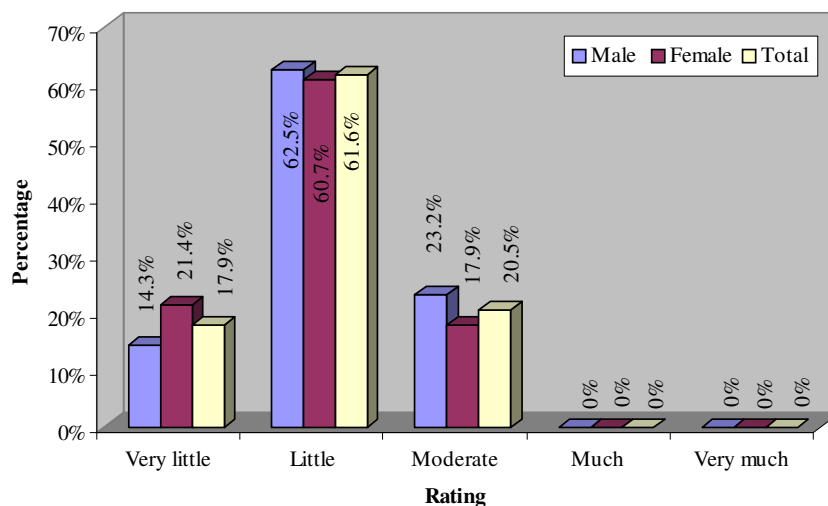
Therefore, the leadership of change has not been successful in the field of empowerment of the employees and the executives of plans at schools at high levels.

The available data also signify that most of the obstacles in empowering the employees and executors of transformation are respectively:

- Lack of serious attempts of transformational leadership and management for resolving the executive problems and obstacles.

- Lack of delegation of authority to managers and change executors according to their responsibilities.
- Lack of providing the necessary grounds for risk taking of employees and executors, and facing new ideas without fear from their outcome.

However, considering programs of transformational leadership and management in empowering the employees and executors of change, male managers have had more positive attitude than female managers.



**Figure 6- 6** The headmasters' views in relation to index 5

### 6.2.3.6 Index 6: The Creation of Short-term Victories

Questions 20, 20.1 and 20.2 have been considered for the evaluation of this index.

**Question 20:** Has the possibility of creating the short-term achievements during the execution of the plans been predicted?

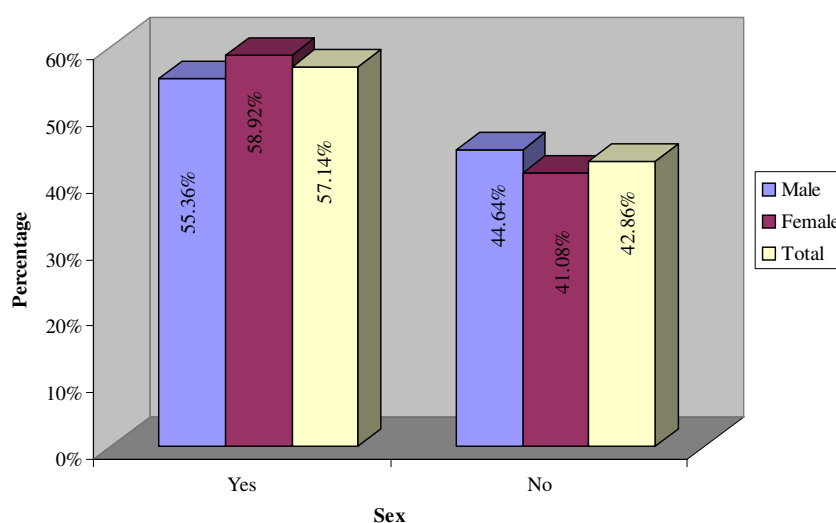
Table 6- 28 and Figure 6- 7 show that 64 (57.14%) of all the headmasters have said that the possibility of short-term victories has been created for the change plans and 48 (42.86 %) of them have expressed their ideas that such a possibility has not been provided.

On the whole, a great percentage of the headmasters have announced that the possibility of creating the short-term victories for change plans has been provided at the level of schools.



**Table 6- 28** The frequency distribution of the headmasters' ideas on question 20

Sex \ Rate		Rate		
		Yes	No	Total
Male	F	31	25	56
	P	55.36%	44.64%	100.0%
Female	F	33	23	56
	P	58.92%	41.08%	100.0%
Total	F	64	48	112
	P	57.14%	42.86%	100.0%

**Figure 6- 7** The headmasters' views in relation to index 4

**Question 20.1:** To what extent, have the achieved short-term objectives been introduced to others?

Table 6- 29 indicates that 58 (90.63%) of the respondents have said that short-term achievements have been introduced to others at the levels of a little and very little, and only 6 (9.37%) of them have said that this measure has been done at moderate level; however, none of the male and female headmasters have expressed their ideas at the level of very much and much. In general, we can say that the short-term achievements have not been introduced to others at high levels.

**Table 6- 29** The frequency distribution of the headmasters' ideas in relation to question 20.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	19	39	6	0	0	64
Percentage	29.69%	60.94%	9.37%	0%	0%	100.0%
Cumulative Percent	29.69%	90.63%	100.0%			

**Question 20.2:** To what extent, have the achieved short-term goals been made important and outstanding as an introduction to further achievements?

Table 6- 30 shows 52 (81.25%) of the respondents have said the achievements have been made outstanding as an introduction to subsequent achievements at the levels of little and very little; and only 12 (18.75%) of them have expressed their ideas at the moderate level; however, none of the male and female headmasters have expressed their ideas at the levels of much and very much. In general, the achievements have been made outstanding at the moderate and lower level.

**Table 6- 30** The frequency distribution of the headmasters' ideas in relation to question 20.2

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	11	41	12	0	0	64
Percentage	17.19%	64.06%	18.75%	0%	0%	100.0%
Cumulative Percent	17.19%	81.25%	100.0%			

Table 6- 31 and Figure 6- 8 indicate that 52 (81.3%) of the male and female headmasters have said that the creation of short-term victories has taken place at the levels of little and very little, and only 12 (18.7%) of the headmasters have expressed at the moderate level; however, none of the female and male headmasters have expressed at the levels of much or very much.

Therefore, the change leadership has not been able to create short-term victories at high levels.

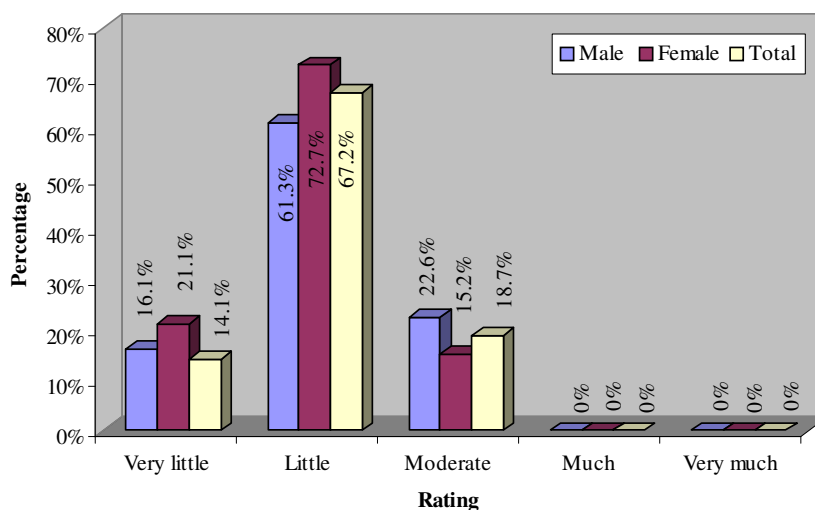
The available data also show that most of the obstacles regarding the generation of short-term wins are respectively:

- Lack of belief and serious emphasis on creating and generating short-term wins as a basic step in the process of transformation.
- Lack of prompt and precise introduction and transfer of achieved success to others as well as other sections.

However, regarding the attempts of transformational leadership and management for generating short-term wins, female managers have had more positive attitude than male managers.

**Table 6- 31** The frequency distribution of the headmasters' views on questions 20.1 & 20.2 in relation to index 6. "The creation of short-term victories."

Rate		Very little	Little	Moderate	Much	Very much	Total
Sex							
Male	F	5	19	7	0	0	31
	P	16.1%	61.3%	22.6%	0%	0%	100.0%
Female	F	4	24	5	0	0	33
	P	21.1%	72.7%	15.2%	0%	0%	100.0%
Total	F	9	43	12	0	0	64
	P	14.1%	67.2%	18.7%	0%	0%	100.0%



**Figure 6- 8** The headmasters' views in relation to index 6

### 6.2.3.7 Index 7: The Recap of Change and Creation of Further Changes

Questions 21, 22, 23 and 24 have been considered for the evaluation of this index.

**Questions 21:** To what extent, have the officials assigned on part of the education department been continuing their cooperation in the execution of the plans until their completion?

Table 6- 32 indicates that 73 (65.2%) of total headmasters have said that the authorities of the execution of the plans on part of the education department have been continuing their cooperation with schools at the levels of little and very little until the completion of the execution of the plans and 38 (33.9%) of them have evaluated the cooperation of the authorities at the moderate level. Only one (0.9%) of them has said that the authorities have had much cooperation. Therefore, the cooperation of the authorities with the schools in the execution of plans has been at the moderate and lower level.

**Table 6- 32** The frequency distribution of the headmasters' ideas in relation to question 21

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	19	54	38	1	0	112
<b>Percentage</b>	17.0%	48.2%	33.9%	0.9%	0%	100.0%
<b>Cumulative Percent</b>	17.0%	65.2%	99.1%	100.0%		

**Question 22:** To what extent, have the headmasters and the rest of the staff who have been successful in the execution of the plans been granted organizational and job promotion?

Table 6- 33 shows that 75 (67.0%) of the headmasters have said that the successful managers and employees in the execution of plans have been granted organizational and job promotion, at the levels of little and very little; and 37 (33%) of them have pressed their ideas at the level of moderate however, none of the headmasters have expressed their ideas at the levels of much and very much. Therefore, the job promotion and organizational growth of the successful executives of the change plans at schools has taken place at the levels of moderate and lower.

**Table 6- 33** The frequency distribution of the headmasters' ideas in relation to question 22

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	35	40	37	0	0	112
Percentage	31.3%	35.7%	33%	0%	0%	100.0%
Cumulative Percent	31.3%	67.0%	100.0%			

**Question 23:** To what extent, have the executed plans paved the way for the execution of the new plans?

Table 6- 34 shows that 75 (67.0%) of all the headmasters have said that the executed plans have paved the way for the better execution of the new plans at the levels of little and very little, and 36 (32.2%) of them have said that this planning has taken place at a moderate level. But one of the headmasters has expressed his ideas at the levels of much or very much. So, the executed plans have been able to pave the way for the execution of new plans at the levels of moderate and lower.

**Table 6- 34** The frequency distribution of the headmasters' ideas in relation to question 23

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	24	51	36	1	0	112
Percentage	21.4%	45.5%	32.2%	0.9%	0%	100.0%
Cumulative Percent	21.4%	67.0%	99.1%	100.0%		

**Question 24:** After the execution and completion of the plans, to what extent, has the education department taken actions to examine the results?

Table 6- 35 shows that 73 (65.2%) of all the respondents have said that the education department has to take action to recap and study the results of the executed plans, at the little and very little levels, and 38 (33.9%) of them have expressed their ideas at the moderate level, but only 1 person (0.9%) has pointed out that the education department has taken action at a high level in this regard. In general, the education department has taken action to recap and survey the results of the plans at the moderate and lower levels.

**Table 6- 35** The frequency distribution of the headmasters' ideas in relation to question 24

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	28	45	38	1	0	112
Percentage	25.0%	40.2%	33.9%	0.9%	0%	100.0%
Cumulative Percent	25.0%	65.2%	99.1%	100.0%		

Table 6- 36 and Figure 6- 9 show that 79 (70.5%) of the male and female headmasters have said that the success of education department regarding the recap of change plans and paving the way for further changes has been at the little and very little levels, and 33 (29.5%) of them have

evaluated the performance of the education department at a moderate level; however, none of the headmasters both male and female have expressed their ideas at the levels of much and very much. Therefore, the change leadership has not been able to recap and study the results of the change plans.

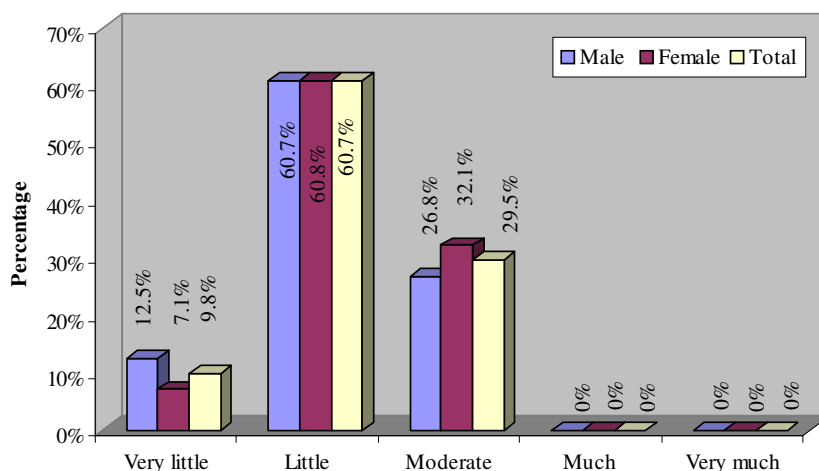
Furthermore, the available data indicate that most of the obstacles regarding consolidating gains and producing more change are respectively:

- Lack of occupational promotion of employees in accordance with their attempts regarding change.
- Lack of consolidating, evaluating and examining the results of implemented programs.
- Inconsistency of cooperation of managers of higher levels with managers and executors of change plans up to the end of their completion and getting the desired outcome.

However, regarding the attempts of transformational leadership and management in consolidating gains and producing more change female managers have had more positive attitude than male managers.

**Table 6- 36** The frequency distribution of the headmasters' views on question 21, 22, 23 and 24 in relation to index 7. "The recap of change and creation of further changes."

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	7	34	15	0	0	56
	P	12.5%	60.7%	26.8%	0%	0%	100.0%
Female	F	4	34	18	0	0	56
	P	7.1%	60.8%	32.1%	0%	0%	100.0%
Total	F	11	68	33	0	0	112
	P	9.8%	60.7%	29.5%	0%	0%	100.0%



**Figure 6- 9** The headmasters' views in relation to index 7

### 6.2.3.8 Index 8: Internalization of Change in Culture

Questions 26, 27, 28 and 44 have been taken into consideration for the evaluation of this index.

**Question 26:** To what extent, have the previous executed plans been continuing in schools?

Table 6- 37 indicates that 55 (49.1%) of the headmasters have said that the rate of the continuity of the previous executed plans at schools has been at the levels of a little and very little, and 56(50%) of them have evaluated the continuity of the plans at the moderate level. However, only 1 person (0. 9%) has said that the executed plans have been continuing at the level of very much.

Therefore, the change leadership has paved the way for the continuity of the executed plans at the moderate and lower levels.

**Table 6- 37** The frequency distribution of the headmasters' ideas in relation to question 26

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	17	38	56	1	0	112
Percentage	15.2%	33.9%	50.0%	0.9%	0%	100.0%
Cumulative Percent	15.2%	49.1%	99.1%	100.0%		

**Question 27:** To what extent, can the previous executed plans be considered as an integral part of the school's body so that without their existence in school they will cause a vacuum?

Table 6- 38 indicates that 62 (55.4%) of all the respondents have said that the executed plans have been able to be considered as the part of the schools' existing body at the levels of a little and very little and 50 (44.6%) of them have expressed their ideas at the moderate level; however, none of the headmasters have expressed their ideas at the much and very much levels.

In general, the change leadership at the moderate and lower levels has caused the executed plans to be considered as the integral part of the schools' existing body.

**Table 6- 38** The frequency distribution of the headmasters' ideas in relation to question 27

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	30	32	50	0	0	112
Percentage	26.8%	28.6%	44.6%	0%	0%	100.0%
Cumulative Percent	26.8%	55.4%	100.0%			

**Question 28:** To what extent, have the previous executed plans become a part of your management and administrative behaviour?

Table 6- 39 indicates that 46 (41.1%) of all the headmasters have said that the previous executed plans have been able to become as part of their management and administrative behaviour and 66 (58.9%) of them have expressed their ideas at moderate level; however, none of the headmasters have expressed at the much and very much levels. Therefore, the executed plans have become as part of the management and administrative behaviour of the headmasters at the moderate and lower levels.

**Table 6- 39** The frequency distribution of the headmasters' ideas in relation to question 28

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	15	31	66	0	0	112
Percentage	13.4%	27.7%	58.9%	0%	0%	100.0%
Cumulative Percent	13.4%	41.1%	100.0%			

**Question 44:** To what extent, have the school teachers welcomed the execution of the circulated plans and cooperated in their execution voluntarily?

Table 6- 40 indicates that 68 (60.8%) of all the respondents have said that the teachers have welcomed the execution of the plans and cooperated at the a little and very little levels, and 43 (38.3%) of them have evaluated the teachers' cooperation at a moderate level. However, only one (0.9%) person has announced the teachers' cooperation at high level.

In general, we can say that the teachers' cooperation in the execution of plans has been at moderate and lower levels.

**Table 6- 40** The frequency distribution of the headmasters' ideas in relation to question 44

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	21	47	43	1	0	112
Percentage	18.8%	42.0%	38.3%	0.9%	0%	100.0%
Cumulative Percent	18.8%	60.8%	99.1%	100.0%		

Table 6- 41 and Figure 6- 10 show that 55 (49.1%) of all the headmasters have said that the execution of the change plans has been internalized at a little and very little levels in the culture of schools and the executives and 57 (50.9%) of them have evaluated the internalization of the plans in culture at a moderate level. But none of male and female headmasters have expressed their ideas at the levels of much and very much.

Therefore, the change management and leadership have been able to internalize the change plans at the moderate and lower levels in the culture of schools and the executives.

The existing data also reveal that most of the obstacles in anchoring new approaches in the culture are respectively:

- Inconsistency of previous implemented programs at schools.
- Lack of courage of teachers to implement newly established programs.
- Lack of anchoring previously implemented programs in the behavior of executors and managers of schools.

Male and female managers have had the same attitude towards the attempts of transformational leadership and management in anchoring new approaches in the culture.

**Table 6- 41** The frequency distribution of the headmasters' views on questions 26, 27, 28 and 44 in relation to index 8

Rate Sex		Very little	Little	Moderate	Much	Very much	Total
		<b>Male</b>	F	5	21	30	0
	P	8.9%	37.5%	53.6%	0%	0%	100.0%
<b>Female</b>	F	3	26	27	0	0	56
	P	5.4%	46.4%	48.2%	0%	0%	100.0%
<b>Total</b>	F	8	47	57	0	0	112
	P	7.1%	42.0%	50.9%	0%	0%	100.0%

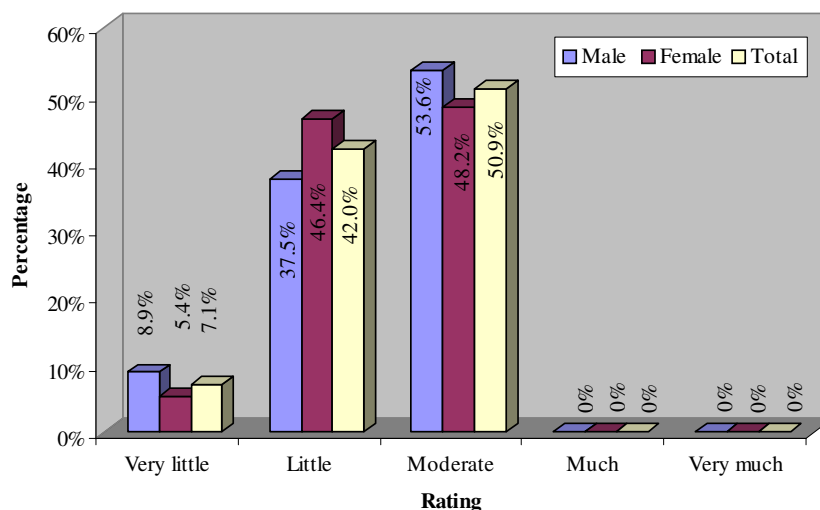
**Figure 6- 10** The headmasters' views in relation to index 8

Table 6- 42 and Figure 6- 11 show that 105 (93.7%) of the male and female headmasters have said that change leadership has been successful at little and very little levels in the 8-fold indexes and only 7 (6.3%) of them have evaluated the success of the change leadership at the moderate level; however, none of the headmasters have considered the change leadership as a successful one at much or very much levels. Overall, it can be said that the transformational leadership has not been successful in the field of 8-fold indexes. Most of the insufficiencies and shortcomings are connect to:

- Creating the necessity and urgency among the executives of change plans such as headmasters, teachers, students and their parents.
- Forming a successful guide coalition in order to guiding the administrators of the change

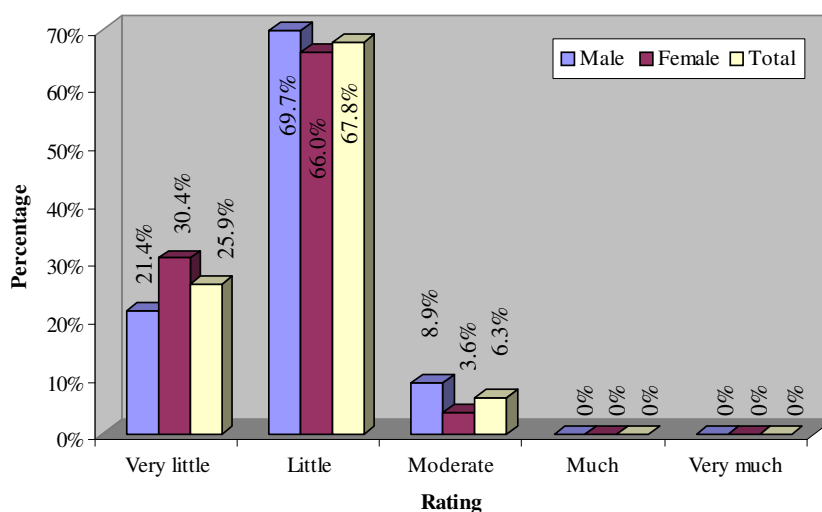


plans.

- Development of achievable vision and strategy in order to achieve the change objectives and as well as transfer of vision and strategy to the change executives.
- Empowering the employees and delegation of authority to the change executives proportionate to their responsibilities.
- Creation of short-term victories during the execution of the change plans.
- Completion of change plans and their continuity.
- Internalization of changes in the culture of educational organizations and behavior of administrators.

**Table 6- 42** The frequency distribution of the headmasters' views on the 8-fold indexes of transformational leadership

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	12	39	5	0	0	56
	P	21.4%	69.7%	8.9%	0%	0%	100.0%
Female	F	17	37	2	0	0	56
	P	30.4%	66.0%	3.6%	0%	0%	100.0%
Total	F	29	76	7	0	0	112
	P	25.9%	67.8%	6.3%	0%	0%	100.0%



**Figure 6- 11** The ideas of the headmasters on the 8-fold indexes of transformational leadership

Table 6- 43 indicates the shortcomings and weaknesses of transformational leadership and management respectively regarding the indices or the 8 levels of transformation on the basis of managers' attitudes by their gender and also in combination of both genders.

**Table 6- 43** The weaknesses of transformational leadership and management respectively

Male Managers Views	Female Managers Views	Male & Female Managers Views
Forming a guide coalition	Forming a guide coalition	Forming a guide coalition
Creation of short-term wins	Creation of short-term wins	Creation of short-term wins
Creating necessity and urgency	Creating necessity and urgency	Creating necessity and urgency
Empowerment	Empowerment	Empowerment
Transfer of vision and strategy	Transfer of vision and strategy	Recap of change and creation of future changes
Recap of change and creation of future changes	Development of vision and strategy	Transfer of vision and strategy
Development of vision and strategy	Recap of change and creation of future changes	Internalization of change in culture
Internalization of change in culture	Internalization of change in culture	Development of vision and strategy

#### 6.2.4 Analysis of the Research Hypothesis 2

*“The required planning for the behaviour modification of the executives of the plans of change does not occur.”*

In order to study and analyze this research hypothesis, questions 1, 2, 15, 28 and 45 have been taken into consideration. First we describe each of these questions by using frequency distribution table, percentage taking, and graph drawing. Then we analyze all the data concerning these 5 questions in relation to this research hypothesis, and we analyze the significant level difference between both male and female headmasters' views.

**Question 1:** Before executing the plans, to what extent, have you been given the necessary information and knowledge about them?

Table 6- 44 shows that 94 (83.9%) of all the headmasters have said that the information given to them in relation to change plans has been at the levels of little and very little and 18 (16.1%) of them have said that they have been given the information at the moderate level. But none of the headmasters have commented on this at the levels of much and very much. In general, the knowledge and information given to the headmasters has not been at a high level.

**Table 6- 44** The frequency distribution of the headmasters' ideas in relation to question 1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	36	58	18	0	0	112
Percentage	32.1%	51.8%	16.1%	0%	0%	100.0%
Cumulative Percent	32.1%	83.9%	100.0%			

**Question 2:** Before executing the plans, to what extent, have you been informed of their necessity and importance?

Based on Table 6- 45, it can be said that 88 (78.6%) of the headmasters have said that before the execution of plans little and very little information and knowledge has been transferred to them, and only 24 (21.4%) of them have said that they have been given the required information at the moderate level and none of them have expressed their ideas at the levels of much or very much. Overall, before the execution of the plans, necessary and required information has not been given to the headmasters.

**Table 6- 45** The frequency distribution of the headmasters' ideas in relation to question 2

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	18	70	24	0	0	112
Percentage	16.1%	62.5%	21.4%	0%	0%	100.0%
Cumulative Percent	16.1%	78.6%	100.0%			

**Question 15:** To what extent, have the officials' behaviours and functions been an appropriate pattern in supporting of the executing the plans?

Table 6- 46 shows that 65 (58%) of the respondents have said that the behaviours and performances of the authorities have been a pattern for them at the levels of little and very little and 46 (41.1%) of the headmasters have said that their behaviours have been a pattern for them at the level of moderate. And only one (0.9%) of them has expressed his idea at the level of very much. Therefore, the behaviours of the authorities have not been a suitable pattern for the executives of the plans.

**Table 6- 46** The frequency distribution of the headmasters' ideas in relation to question 15

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	23	42	46	1	0	112
Percentage	20.5%	37.5%	41.1%	0.9%	0%	100.0%
Cumulative Percent	20.5%	58.0%	99.1%	100.0%		

**Question 28:** To what extent, have the previous executed plans become a part of your management and administrative behaviour?

Table 6- 47 indicates that 46 (41.1%) of all the headmasters have said that the previous executed plans have been able to become as part of their management and administrative behaviour and 66 (58.9%) of them have expressed their ideas at moderate level; however, none of the headmasters have expressed at the much and very much levels. Therefore, the executed plans have become as part of the management and administrative behaviour of the headmasters at the moderate and lower levels.

**Table 6- 47** The frequency distribution of the headmasters' ideas in relation to question 28

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	15	31	66	0	0	112
Percentage	13.4%	27.7%	58.9%	0%	0%	100.0%
Cumulative Percent	13.4%	41.1%	100.0%			

**Question 45:** To what extent, is there sympathy and coordinated group attempt among the managers in different administrative and educational levels for the successful execution of the plans?

Table 6- 48 shows that 64 (57.1%) of all the headmasters have said that there is a coordinated group attempt at little and very little levels among managers in different administrative and educational levels, and 47 (42.%) of them have rated this at moderate level. But only 1 (0.9%) of the headmaster has rated much.

On the whole, there is a coordinated group attempt, at the levels of moderate and lower, among managers in different administrative and educational levels.

**Table 6- 48** The frequency distribution of the headmasters' ideas in relation to question 45

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	16	48	47	1	0	112
Percentage	14.3%	42.9%	42.0%	0.9%	0%	100.0%
Cumulative Percent	14.3%	57.1%	99.1%	100.0%		

Table 6- 49 and Figure 6- 12 show that 38 (67.9%) of the headmasters and 41 (73.2%) of the headmistresses have said that necessary planning has been made, at the levels of little and very little, to change the behaviour of the executives. And only 18 (32.1%) of headmasters and 15 (26.8%) of the headmistresses have rated planning to change the executives' behaviour at the moderate level. But none of them have expressed their ideas at the levels of much and very much.

Thus, we can say that necessary planning to change the behaviour of the executives on part of department of education has not taken place at the high level.

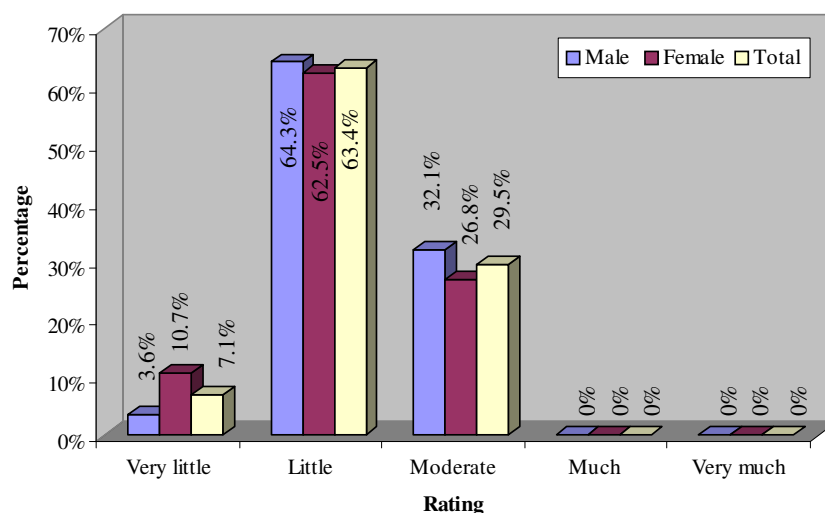
The available data also indicate that most of the obstacles in creating change in the behavior of managers and executors of transformation programs are respectively:

- Lack of change in the information and knowledge of managers and executors of change plans before their implementation.
- Lack of change in the beliefs and attitudes of managers and executors of change plans.
- Lack of change in individual, group or organizational behavior for acceptance and implementation of change.

However, male managers have had more positive attitude than female managers towards the performed actions for creating change in the behavior of managers and executors.

**Table 6- 49** The frequency distribution of headmasters' views on questions 1, 2, 15, 28 and 45 in relation to research hypothesis 2

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	2	36	18	0	0	56
	P	3.6%	64.3%	32.1%	0%	0%	100.0%
Female	F	6	35	15	0	0	56
	P	10.7%	62.5%	26.8%	0%	0%	100.0%
Total	F	8	71	33	0	0	112
	P	7.1%	63.4%	29.5%	0%	0%	100.0%



**Figure 6- 12** The headmasters' views in relation to questions concerning research hypothesis 2.

### 6.2.5 Analysis of the Research Hypothesis 3

*“The designing of the plans of change does not take place based on the scientific needs assessment.”*

To study and analyze this research hypothesis, questions 7, 10, 29, 31 and 46 have been designed. First, we describe each of these questions by means of frequency distribution table, percentage taking, graph drawing and then we analyze all the data concerning these 5 questions

in relation to this research hypothesis. Finally, the significant level difference between the ideas of headmasters and headmistresses is studied.

**Question 7:** To what extent, have the plans circulated to the schools had clear, specific and achievable objectives?

Table 6- 50 indicates that 55 (49.1%) of the headmasters have said that the objectives of the plans have been clear and achievable at the levels of little and very little and 55 of them (49.1%) have said that the objectives of the plans have been achievable at the level of moderate. 2 people (1.8%) have expressed their ideas at the level of much. In general, according to the headmasters both male and female, the objectives of the circulated plans have been clear and achievable at the levels of moderate and lower.

**Table 6- 50** The frequency distribution of the headmasters' ideas in relation to question 7

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	12	43	55	2	0	112
Percentage	10.7%	38.4%	49.1%	1.8%	0%	100.0%
Cumulative Percent	10.7%	49.1%	98.2%	100.0%		

**Question 10:** To what extent, has the use of ways and other procedures other than the introduced ways been necessary to materialize the goals of the plans?

Table 6- 51 shows that 63 (56.2%) of all the respondents have said that the use of other ways other than the introduced ones has been necessary to materialize the goals of the plans at the levels of much and very much and 49 (43.8%) of them have rated this necessity at the moderate level. But none of them have expressed their ideas at the little and very little levels. In general, the use of other ways other than the introduced ones to materialize the objectives of the plans has become necessary at the high level.

**Table 6- 51** The frequency distribution of the headmasters' ideas in relation to question 10

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	0	49	49	14	112
Percentage	0%	0%	43.8%	43.8%	12.4%	100.0%
Cumulative Percent			100.0%	56.2%	12.4%	

**Question 29:** To what extent, have the objectives and the ways of execution of the plans been made in such a way that the headmasters and other executives have got the same and coordinated understanding?

Table 6- 52 shows that 65 (58%) of all the headmasters have said that the goals of the plans have been designed in such a way that the school headmasters and the other executives have been able to have the same understanding about them at the levels of a little and very little, and 47 (42%) of them have commented on this at the moderate level. But none of the headmasters have expressed their ideas at the levels of much and very much. Therefore, the objectives of the plans have not been designed in such a way that the headmasters and the executives of the plans have the same understanding of them at a high level.

**Table 6- 52** The frequency distribution of the headmasters' ideas in relation to question 29

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	12	53	47	0	0	112
Percentage	10.7%	47.3%	42.0%	0%	0%	100.0%
Cumulative Percent	10.7%	58.0%	100.0%			

**Question 31:** To what extent, has the allocated time been useful in executing the plans?

Table 6- 53 shows that 64 (57.1%) of all the respondents have said that the time allocated to execute the plans has been useful at the a little and very little levels and 47 (42%) of them have evaluated the allocated time at the moderate level, and only 1 (0.9%) person has rated this at the much level. Therefore, we can say that the usefulness of the allocated time to execute the plans has been at the moderate and lower level.

**Table 6- 53** The frequency distribution of the headmasters' ideas in relation to question 31

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	14	50	47	1	0	112
Percentage	12.5%	44.6%	42.0%	0.9%	0%	100.0%
Cumulative Percent	12.5%	57.1%	99.1%	100.0%		

**Question 46:** To what extent, have the executed plans been effective in resolving the needs and problems of students and schools?

Table 6- 54 shows that 71 (63.4%) of the headmasters have said that the executed plans have been effective at a little and very little levels in meeting the needs and real problems of both schools and students. And 41 (36.6%) of them have evaluated the effectiveness of the executed plans at the moderate level. However, none of them have commented on the levels of much and very much. Therefore, the formerly executed plans have not been able to meet the real needs and problems of schools and students at high level.

**Table 6- 54** The frequency distribution of the headmasters' ideas in relation to question 46

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	27	44	41	0	0	112
Percentage	24.1%	39.3%	36.6%	0%	0%	100.0%
Cumulative Percent	24.1%	63.4%	100.0%			

Table 6- 55 and Figure 6- 13 indicate that 33 (58.9%) of the headmasters and 37 (66.1%) of the headmistresses have said that the change plans have been designed based on scientific needs assessment at the little and very little levels. And 42 (37.5%) of all the headmasters have evaluated the designing of the plans at the moderate level; however, none of them have commented on much and very much levels.

Therefore, the designing of the plans have been carried out based on the scientific needs assessment at the moderate and lower level.

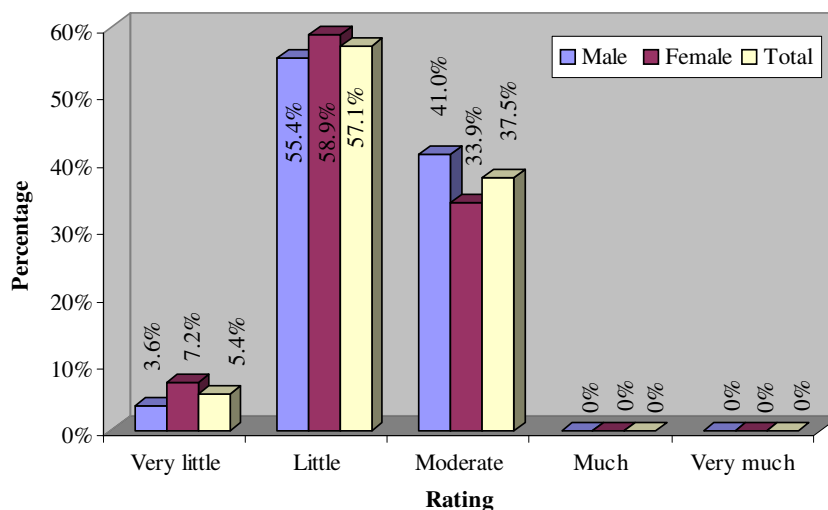
The available data also indicate that most of the obstacles regarding the design of change plans are respectively:

- Lack of reliance of change plans on the real and scientific need assessment.
- Little influence of implemented programs in resolving real obstacles and needs of schools.
- Different and uncoordinated interpretations of managers and executors from the granted programs to schools due to their ambiguity.
- Inappropriate announced time for implementing programs in the view of their managers and executors.
- Ambiguity of the objectives of programs and low capability of their fulfillment.

However, male managers have had more positive attitude than female managers towards the attempts done for an appropriate design of programs and their compliance with scientific need assessment.

**Table 6- 55** The frequency distribution of the headmasters’ views on questions 7, 10, 29, 31 and 46 in relation to research hypothesis 3. “ Designing of the Change Plans”

Rate Sex		Very little	Little	Moderate	Much	Very much	Total
		<b>Male</b>	F 2	31	23	0	0
	P	3.6%	55.4%	41.0%	0%	0%	100.0%
<b>Female</b>	F	4	33	19	0	0	56
	P	7.2%	58.9%	33.9%	0%	0%	100.0%
<b>Total</b>	F	6	64	42	0	0	112
	P	5.4%	57.1%	37.5%	0%	0%	100.0%



**Figure 6- 13** The headmasters’ views in relation to questions concerning research hypothesis 3



### 6.2.6 Analysis of the Research Hypothesis 4

*“Necessary planning for creating motivation among the executives of the plans of change does not take place.”*

To analyze and study this research hypothesis, questions 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 62 and 63 have been designed. First, we describe each of these questions by using the frequency distribution table, percentage taking graph-drawing and then all the data concerning these 14 questions in relation to this research hypothesis are analyzed. Then the significant level of difference between the views of the headmasters and the headmistresses is analyzed in relation to this hypothesis.

**Question 32:** To what extent, do you emotionally and spiritually feel comfortable at work?

Table 6- 56 indicates that 47 (42.0%) of all the headmasters have expressed their spiritual and emotional tranquillity at the little and very little and 52 (46.4%) of them have rated this feeling at the moderate level and only 13 persons (11.6%) have expressed their ideas at the much level.

**Table 6- 56** The frequency distribution of the headmasters' ideas in relation to question 32

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	27	20	52	13	0	112
Percentage	24.1%	17.9%	46.4%	11.6%	0%	100.0%
Cumulative Percent	24.1%	42.0%	88.4%	100.0%		

**Question 33:** To what extent, are you worried about your future job security?

Table 6- 57 shows that 61 (54.5%) of all the respondents have said that they are worried about their future job at the levels of much and very much and 48 (42.9) of them have rated their worry at the moderate level. But only 3 persons (2.7%) have expressed their ideas at the little level. Therefore, the headmasters have been worried about their job security at the moderate and higher levels.

**Table 6- 57** The frequency distribution of the headmasters' ideas in relation to question 33

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	3	48	44	17	112
Percentage	0%	2.7%	42.9%	39.3%	15.2%	100.0%
Cumulative Percent		100.0%	97.3%	54.5%	15.2%	

**Question 34:** To what extent, do the salary and fringe benefits that you receive meet your real life needs?

Table 6- 58 indicates that 92 (82.1%) of all the headmasters have said that the salary and the fringe benefits that they receive meet their real life needs at the little and very little and only 20 (17.9%) of them have rated their salary and fringe benefits at the moderate level. But none of the headmasters have expressed their ideas at the much and very much level. Therefore, the salary and the fringe benefits of the school headmasters do not meet their real life needs.

**Table 6- 58** The frequency distribution of the headmasters' ideas in relation to question 34

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	55	37	20	0	0	112
Percentage	49.1%	33.0%	17.9%	0%	0%	100.0%
Cumulative Percent	49.1%	82.1%	100.0%			

**Question 35:** In your current job, to what extent, do you enjoy social esteem?

Table 6- 59 indicates that 45 (40.2%) of all the headmasters have said that in their present jobs they have enjoyed social esteem at the little and very little levels and 56 (50%) of them have rated their social esteem at the moderate level. But only 11 (9.8%) of them have expressed their ideas at the much level. Therefore, it can be said that the social esteem of the headmasters in their present jobs has been stated at the moderate or lower level.

**Table 6- 59** The frequency distribution of the headmasters' ideas in relation to question 35

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	14	31	56	11	0	112
Percentage	12.5%	27.7%	50.0%	9.8%	0%	100.0%
Cumulative Percent	12.5%	40.2%	90.2%	100.0%		

**Question 36:** How much are the teachers and school staff attached to each other?

Table 6- 60 shows that 25 (22.3%) of all the respondents have said that the teachers and school staff are attached to each other at the little and very little levels and 64 (57.1%) of them have expressed their ideas about being attached to each other at the moderate level. But 23 (20.5%) of them have expressed their ideas in this regard at the level of much, but none of the respondents have expressed their ideas at the level of very much.

Therefore, we can say that the headmasters and teachers' attachment to each other has been stated at much, moderate and lower levels.

**Table 6- 60** The frequency distribution of the headmasters' ideas in relation to question 36

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	8	17	64	23	0	112
Percentage	7.1%	15.2%	57.1%	20.5%	0%	100.0%
Cumulative Percent	7.1%	22.3%	79.5%	100.0%		

**Question 37:** To what extent, are the headmasters respected on part of teachers and employees in school?

Table 6- 61 shows that 69 (61.6%) of the headmasters have said that they are respected on part of teachers and employees in school at the moderate level, and 29 (25.9%) of them have said that they are respected much by the above mentioned ones; however, 14 (12.5%) of the headmasters have commented on at the levels of a little and very little. In general, the headmasters have been respected at the moderate and much level by school teachers and employees.

**Table 6- 61** The frequency distribution of the headmasters' ideas in relation to question 37

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	14	69	29	0	112
Percentage	0%	12.5%	61.6%	25.9%	0%	100.0%
Cumulative Percent		12.5%	74.1%	100.0%		

**Question 38:** To what extent, are the headmasters respected by the authorities of education?

Table 6- 62 indicates that 46 (41.1%) of all the schoolmasters have pointed out that they have been respected at the little and very little levels on part of the authorities of the education, and 54 (48.2%) of them have said that they have been respected at the moderate level, but only 12 (10.7%) of the schoolmasters have expressed their ideas that they have been respected at the much level. In general, we can say that the schoolmasters have been respected at the moderate and lower levels on part of the authorities of education department.

**Table 6- 62** The frequency distribution of the headmasters' ideas in relation to question 38

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	18	28	54	12	0	112
Percentage	16.1%	25.0%	48.2%	10.7%	0%	100.0%
Cumulative Percent	16.1%	41.1%	89.3%	100.0%		

**Question 39:** To what extent, have materials benefits such as fringe benefits, allowance been allocated to the executives in return for the execution of the plans?

Table 6- 63 indicates that 96 (85.7%) of all the respondents have said that the material benefits allocated to the executives of the plans has been at the little and very little levels and 15 (13.4%) of them have rated the material benefits given to the executives at the moderate level, but only one (0.9%) of them has commented on the much level. In general, the benefits allocated to the executives of the plans have been at the low level.

**Table 6- 63** The frequency distribution of the headmasters' ideas in relation to question 39

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	49	47	15	1	0	112
Percentage	43.8%	42.0%	13.4%	0.9%	0%	100.0%
Cumulative Percent	43.8%	85.7%	99.1%	100.0%		

**Question 40:** How much have the executives of the plans been Appreciated in written form and other non-material ways?

Table 6- 64 indicates that 86 (76.8%) of all the schoolmasters have said that the executives of the plans have been appreciated in written forms and other non-material ways at the little and very little levels and only 26 (23.2%) persons have rated these kinds of appreciation at the moderate level; however, none of the schoolmasters have expressed their ideas at the much and very much levels.

Therefore, we can say that the executives of the plans have been appreciated at the moderate and lower levels.

**Table 6- 64** The frequency distribution of the headmasters' ideas in relation to question 40

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	32	54	26	0	0	112
Percentage	28.6%	48.2%	23.2%	0%	0%	100.0%
Cumulative Percent	28.6%	76.8%	100.0%			

**Question 41:** To what extent, have the appreciations expressed or the rewards given to the people been proportionate to actions taken by them?

Table 6- 65 shows that 83 (74.1%) of the respondents have said that the appreciation expressed for the executives of change plans has been proportionate to actions taken by them at the little and very little levels. And 29 (25.9%) of them have rated this proportion at the moderate level, but none of the respondents have commented on the much and very much levels.

In general, the appreciation expressed for the executives of plans has been proportionate to actions taken by them at the moderate and lower levels.

**Table 6- 65** The frequency distribution of the headmasters' ideas in relation to question 41

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	39	44	29	0	0	112
Percentage	34.8%	39.3%	25.9%	0%	0%	100.0%
Cumulative Percent	34.8%	74.1%	100.0%			

**Question 42:** In the event that you have done suitable and Effective services, expecting reward and appreciation in return, to what extent, have you been rewarded for your services?

Table 6- 66 shows that 91 (81.3%) of all the headmasters have said that they have been appreciated at the little and very little levels, in return of the effective services, expecting reward. And only 21 (18.8%) of them have rated this appreciation at the moderate level. However, none of the headmasters have expressed their ideas at the much and very much levels. Therefore, we can say that the appreciation expressed for the executives of plans has not been proportional to their expectations.

**Table 6- 66** The frequency distribution of the headmasters' ideas in relation to question 42

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	40	51	21	0	0	112
Percentage	35.7%	45.5%	18.8%	0%	0%	100.0%
Cumulative Percent	35.7%	81.3%	100.0%			

**Question 43:** To what extent, has the education department taken legal and administrative punitive measures against the nonchalant, idle employees?

Table 6- 67 indicates that 96 (85.7%) of all the respondents have said that legal and administrative punitive measures have been taken against the nonchalant, idle employees at the level of little and very little and only 16 (14.3%) of them have commented on such measures at the moderate level, but none of the respondents have expressed their ideas at the much and very much levels. Therefore, the education department has not taken necessary legal and administrative punitive measures against the nonchalant, idle employees.

**Table 6- 67** The frequency distribution of the headmasters' ideas in relation to question 43

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	45	51	16	0	0	112
Percentage	40.2%	45.5%	14.3%	0%	0%	100.0%
Cumulative Percent	40.2%	85.7%	100.0%			

**Question 62:** To what extent, have the headmasters been ready to accept the new extra-responsibilities beyond their assigned organizational duties?

Table 6- 68 shows that 46 (41.1%) of all the headmasters have said that they have been ready to accept the new extra-responsibilities beyond their assigned organizational duties at the little and very little levels and 57 (50.9%) have commented on this at moderate level; however, only 9 (8%) of them have been ready to accept the above mentioned responsibilities at the much and very much levels. Therefore, we can say that the headmasters have been ready to accept new extra responsibilities beyond their assigned organizational duties at the moderate and lower levels.

**Table 6- 68** The frequency distribution of the headmasters' ideas in relation to question 62

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	10	36	57	9	0	112
Percentage	8.9%	32.2%	50.9%	8.0%	0%	100.0%
Cumulative Percent	8.9%	41.1%	92.0%	100.0%		

**Question 63:** To what extent, do the teachers and other employees in school accept the extra-responsibilities voluntarily in addition to the organizational duties without any compulsion?

Table 6- 69 shows that 66 (58.9%) of the headmasters have said that the teachers and their other colleagues have been ready to accept new responsibilities in addition to their organizational duties at the levels of "little" and very little and 44 (39.2%) of them have commented on moderate level, but only 2 (1.8%) of them have commented on much level.

In general, we can say that teachers and other employees have been ready to accept new responsibilities in addition to their organizational duties at the levels of moderate and lower.

**Table 6- 69** The frequency distribution of the headmasters' ideas in relation to question 63

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	20	46	44	2	0	112
Percentage	17.9%	41.1%	39.2%	1.8%	0%	100.0%
Cumulative Percent	17.9%	58.9%	98.2%	100.0%		

Table 6- 70 and Figure 6- 14 indicate that 39 (69.6%) of the headmasters and 38 (67.9%) of headmistresses have said that educational planning has been rated at the level of little in creation of motivation among the executives of change plans, and 35 (31.21%) of all the headmasters have rated the educational planning at the level of moderate however, none of them have expressed their ideas at the much and very much levels.

**Table 6- 70** The frequency distribution of the headmasters' ideas in relation to questions 32-43, 62 and 63 concerning the hypothesis 4. "Motivation"

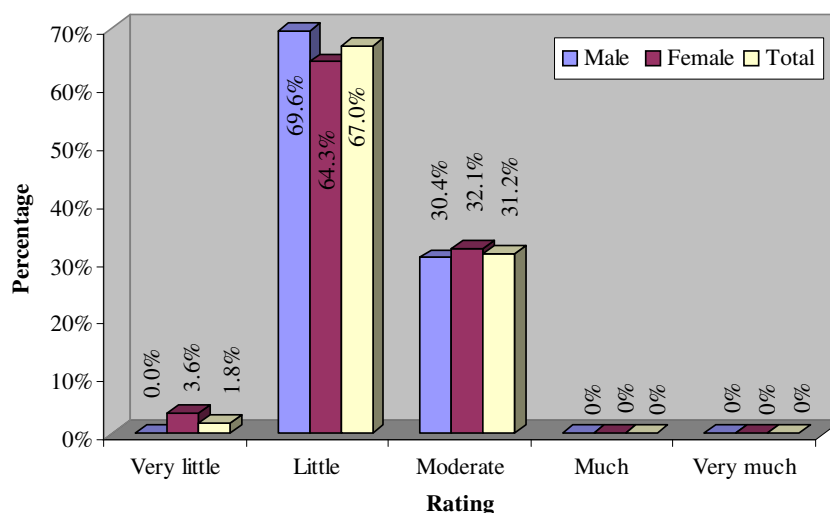
Rate Sex		Very little	Little	Moderate	Much	Very much	Total
Male	F	0	39	17	0	0	56
	P	0%	69.6%	30.4%	0%	0%	100.0%
Female	F	2	36	18	0	0	56
	P	3.6%	64.3%	32.1%	0%	0%	100.0%
Total	F	2	75	35	0	0	112
	P	1.8%	67.0%	31.2%	0%	0%	100.0%

Therefore, the educational planning to create motivation among the executives of change plans has been at the moderate or lower levels.

The available data also point out that most of the motivational obstacles in the successful implementation of transformation programs are respectively:

- Inadequate amount of rewards, salary and benefits allocated to the employees.
- Insufficiency of praise and punishment system and prompt appreciation from the employees.
- Inadequate job security of employees.
- Inadequate attention to the social status and esteem of the employees.

Male and female managers have had the same opinion about the motivational obstacles in the successful implementation of transformation programs.



**Figure 6- 14** The headmasters' ideas in relation to hypothesis no.4. "motivation variable"

### 6.2.7 Analysis of the Research Hypothesis 5

*"The organizational structure of the system of education has not paved the way for the successful implementation of the plans of change."*

To analyze this hypothesis the questions 17, 30, 53, 54, 55, 56 and 61 have been designed. First we describe each question by means of frequency distribution table, percentage taking and graph drawing. Then all the data concerning these questions are analyzed in relation to this research hypothesis. The significant level of difference between the ideas of the headmasters and headmistresses has been analyzed.

**Question 17:** To what extent, have you been given the authority of decision-making proportionate to your responsibilities?

Table 6- 71 indicates that 83 (74.1%) of the headmasters have said that authority has been given to them at the levels of a little and very little and 29 persons (25.9%) have said that the authority vested in them has been at the moderate level; however, none of the headmasters have expressed their ideas at the levels of much or very much. Therefore, authority vested on the headmasters has not been proportionate to their level of responsibilities.

**Table 6- 71** The frequency distribution of the headmasters' ideas in relation to question 17

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	38	45	29	0	0	112
<b>Percentage</b>	33.9%	40.2%	25.9%	0%	0%	100.0%
<b>Cumulative Percent</b>	33.9%	74.1%	100.0%			

**Question 30:** To what extent, have the circulated plans been made according to the vernacular and geographical conditions as well as regional requirements?

Table 6- 72 indicates that 82 (72.3%) of all the schoolmasters have said that the circulated plans to the schools have been designed at the little and very little levels taking into consideration the regional conditions and needs, and only 31 (27.7%) of them have stated the fitness of the plans with the regional need at the moderate level. But, none of the schoolmasters have expressed their ideas at the much and very much levels. Therefore, we can say that the circulated plans to the schools for the execution have not been designed proportionate to the regional conditions at the high levels.

**Table 6- 72** The frequency distribution of the headmasters' ideas in relation to question 30

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	38	43	31	0	0	112
<b>Percentage</b>	33.9%	38.4%	27.7%	0%	0%	100.0%
<b>Cumulative Percent</b>	33.9%	72.3%	100%			

**Question 53:** To what extent, have the administrative and educational communications and instructions circulated to schools been necessary and effective in improving the educational quality?

Table 6- 73 shows that 73 (65.2%) of all the respondents have said that the volume of communications with the schools have been necessary at the levels of little and very little and 39 (34.8%) of them have considered the performed communications at the moderate level. But none of the headmasters have expressed their ideas at the much and very much levels. In general, the communications carried out with the schools have not enjoyed the high level of importance.

**Table 6- 73** The frequency distribution of the headmasters' ideas in relation to question 53

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	26	47	39	0	0	112
<b>Percentage</b>	23.2%	42.0%	34.8%	0%	0%	100.0%
<b>Cumulative Percent</b>	23.2%	65.2%	100%			



**Question 54:** To what extent, does carrying out the affairs of school depend on the decisions made beyond the school level?

Based on Table 6- 74, it can be said that 59 (52.7%) of all the schoolmasters have said that the carrying out of the school affairs has been at the levels of much and very much according to the decisions made beyond the school level and 53 (47.3%) of them have commented at the moderate level. But none of the schoolmasters have commented on them at the levels of little and very little. Therefore, the execution of the school affairs has been, at the levels of moderate and lower, based on the decisions made beyond the school level.

**Table 6- 74** The frequency distribution of the headmasters' ideas in relation to question 54

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	0	53	41	18	112
Percentage	0%	0%	47.3%	36.6%	16.1%	100.0%
Cumulative Percent			100%	52.7%	16.1%	

**Question 55:** To what extent, do the laws and regulations made in higher levels suffice to answer the different problems?

Table 6- 75 indicates that 57 (50.9%) of all the schoolmasters have said that the laws and regulations made in levels higher than schools have been able to answer the problems of schools at the little and very little levels. And 53 (47.3%) of them have rated the response of regulations to the school problems at the moderate level and only 2 persons (1.8%) have expressed their ideas at the level of much. Therefore, the laws and regulations of department of education have met the school problems at the moderate and lower level.

**Table 6- 75** The frequency distribution of the headmasters' ideas in relation to question 55

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	17	40	53	2	0	112
Percentage	15.2%	35.7%	47.3%	1.8%	0%	100.0%
Cumulative Percent	15.2%	50.9%	98.2%	100%		

**Question 56:** To what extent, have doing the peripheral and service affairs of school prevented you from performing your main role as an educational manager?

Table 6- 76 indicates that 93 (83.0%) of all the schoolmasters have said that doing the peripheral and service affairs of schools has prevented them from performing their main role as educational managers, at the much and very much levels and 19 (17.0%) of them have commented at the moderate level; However, none of them have expressed their ideas at the little and very little. Therefore, performing of the peripheral and service affairs of schools have prevented the schoolmasters' main role as educational managers.

**Table 6- 76** The frequency distribution of the headmasters' ideas in relation to question 56

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	0	0	19	47	46	112
<b>Percentage</b>	0%	0%	17%	42%	41%	100.0%
<b>Cumulative Percent</b>			19	47	46	

**Question 61:** To what extent, have various administration levels in education tried to update the educational school activities in line with creating qualitative changes?

Table 6- 77 indicates that 55 (49.1%) of all the respondents have said that the attempts of the schoolmasters of different levels of education department have been at little and very little levels in line with creating qualitative changes and 54 (48.2%) of them have rated these attempts at the moderate level, but only 3 persons (2.7%) have expressed their ideas at the level of much. In general, the schoolmasters' attempts at different levels of education have been in line with creating qualitative changes at the moderate and lower level.

**Table 6- 77** The frequency distribution of the headmasters' ideas in relation to question 61

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	16	39	54	3	0	112
<b>Percentage</b>	14.3%	34.8%	48.2%	2.7%	0%	100.0%
<b>Cumulative Percent</b>	14.3%	49.1%	97.3%	100%		

Table 6- 78 and Figure 6- 15 indicate that 41 (73.2%) of headmasters and 46 (82.1%) of headmistresses have said that the organizational structure of education department has been able to pave the way for the execution of the change plans at the little and very little level and only 25 (22.3%) of all the headmasters have rated the success of the organizational structure at the moderate level. Therefore, we can say that the organizational structure of education department has not been able to pave the way for the successful execution of the change plans.

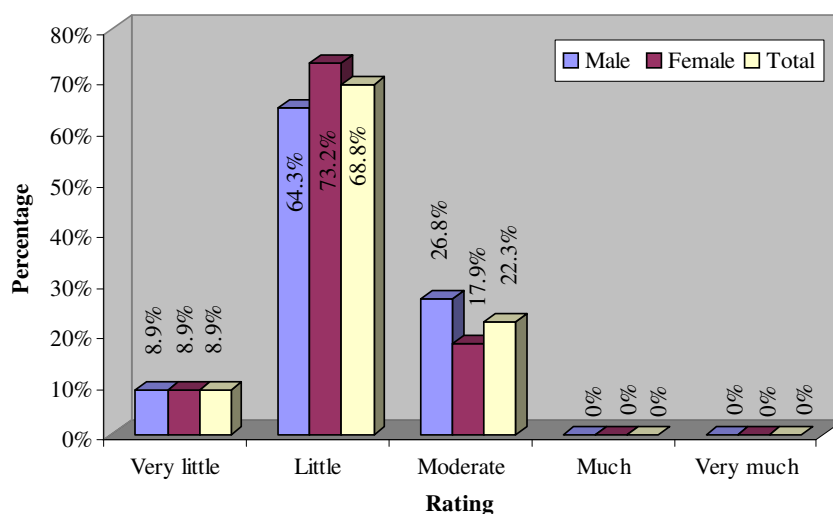
The available data also indicate that most of the problems regarding the organizational structure which hinder the successful implementation of change plans are respectively:

- Emphasis of organizational structure on performing bureaucracy affairs; subordinated services done by school managers instead of their primary role as educational leaders and managers.
- Lack of delegation of authority to school managers in accordance with the level of their responsibility.
- Ignorance of regional and geographical conditions and needs in the current organizational structure.
- Concentration and severe official bureaucracy and lack of attempts of the current organizational structure for creating transformation.

However, male managers have had a slightly more positive attitude towards the current organizational structure than female managers.

**Table 6- 78** The frequency distribution of schoolmasters' views on questions 17, 30, 53, 54, 88, 56 & 61 in relation to research hypothesis 5. "Organizational Structure"

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	5	36	15	0	0	56
	P	8.9%	64.3%	26.8%	0%	0%	100.0%
Female	F	5	41	10	0	0	56
	P	8.9%	73.2%	17.9%	0%	0%	100.0%
Total	F	10	77	25	0	0	112
	P	8.9%	68.8%	22.3%	0%	0%	100.0%



**Figure 6- 15** The schoolmasters' ideas in relation to questions concerning the research hypothesis 5

### 6.2.8 Analysis of the Research Hypothesis 6

*“Required planning does not take place to adjust the executives’ resistance against the plans of change.”*

To analyze and study this research hypothesis questions 25, 39, 64, 65, 66, 67 and 68 have been designed. First we describe each question by means of frequency distribution table, percentage taking, graph-drawing, and then all the data concerning the 7 questions are analyzed in relation to above research hypothesis. The significant level of difference between the headmasters and headmistresses’ ideas about this research hypothesis is analyzed.

**Question 25:** Due to your own previous experiences concerning the executed plans, to what extent are you sure that by executing the new plans the situations will become better than before?

Table 6- 79 indicates that 57 (50.9%) of all the headmasters have said that by executing the new plans the situations of the schools in comparison to the past will not change, and 54 (48.2%) have expressed their views at the moderate level. But only 1 (0.9%) has expressed his ideas at the much level. Therefore, it can be said that by executing the new plans the situations of the

schools in comparison to the past will not change much.

**Table 6- 79** The frequency distribution of the headmasters' ideas in relation to question 25

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	21	36	54	1	0	112
Percentage	18.8%	32.1%	48.2%	0.9%	0%	100.0%
Cumulative Percent	18.8%	50.9%	99.1%	100%		

**Question 39:** To what extent, have materials benefits such as fringe benefits, allowance been allocated to the executives in return for the execution of the plans?

Table 6- 80 indicates that 96 (85.7%) of all the respondents have said that the material benefits allocated to the executives of the plans has been at the little and very little levels and 15 (13.4%) of them have rated the material benefits given to the executives at the moderate level, but only one (0.9%) of them has commented on the much level. Therefore, the benefits allocated to the executives of the plans have been at the low level.

**Table 6- 80** The frequency distribution of the headmasters' ideas in relation to question 39

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	49	47	15	1	0	112
Percentage	43.8%	42.0%	13.4%	0.9%	0%	100.0%
Cumulative Percent	43.8%	85.7%	99.1%	100.0%		

**Question 64:** When circulating the new plans to school for execution, to what extent do school teachers consider them in line with and in agreement with their own opinions?

Table 6- 81 indicates that 62 (55.4%) of all the headmasters have said that the teachers have considered the circulated plans to schools at the levels of little and very little and 49 (43.8%) of them have agreed on the circulated plans and only 1 person (0.9%) has commented on the much level.

Therefore, the teachers have considered the plans in agreement with their own ideas at the moderate and lower level.

**Table 6- 81** The frequency distribution of the headmasters' ideas in relation to question 64

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	18	44	49	1	0	112
Percentage	16.1%	39.2%	43.8%	0.9%	0%	100.0%
Cumulative Percent	16.1%	55.4%	99.1%	100%		

**Question 65:** To what extent, in designing the plans, have the interests and needs of the employees and executives been taken into consideration?

Table 6- 82 indicates that 93 (83%) of all the respondents have said that in designing of the plans the interests and needs of the employees and executives, have been taken into consideration at the little and very little. And only 19 (17%) of them have rated the attention to the requirements of the employees at the moderate level. But none of the respondents have expressed their views at the much and very much levels. Therefore, we can say that in designing of the plans the needs and interests of the employees have been taken into consideration at the low level.

**Table 6- 82** The frequency distribution of the headmasters' ideas in relation to question 65

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	33	60	19	0	0	112
Percentage	29.5%	53.5%	17%	0%	0%	100.0%
Cumulative Percent	29.5%	83%	100%			

**Question 66:** To what extent, have you been aware of the plans before being circulated to school?

Table 6- 83 indicates that 94 (83.9%) of all the schoolmasters have said that they have been aware of the plans before being circulated at low level. And 17 (15.2%) have expressed their ideas at the moderate level and only one of them has expressed his ideas at the much level.

Therefore, we can say that the rate of the schoolmasters' awareness of the plans before their circulation has been at the low level.

**Table 6- 83** The frequency distribution of the headmasters' ideas in relation to question 66

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	53	41	17	1	0	112
Percentage	47.3%	36.6%	15.2%	0.9%	0%	100.0%
Cumulative Percent	47.3%	83.9%	99.1%	100%		

**Question 67:** To what extent, do you consider the plans circulated to school in line with your own contemplative wishes?

Table 6- 84 indicates that 53 (47.3%) of all the schoolmasters have said that the circulated plans have been at the low level in line with their own contemplative wishes. And 58 (51.8%) persons have considered the plans in line with their ideas at the moderate level, but only 1 of them has expressed his ideas at the much level. Therefore, the schoolmasters have seen the circulated plans to schools in line with their ideas at the moderate and lower levels.

**Table 6- 84** The frequency distribution of the headmasters' ideas in relation to question 67

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	22	31	58	1	0	112
<b>Percentage</b>	19.6%	27.7%	51.8%	0.9%	0%	100.0%
<b>Cumulative Percent</b>	19.6%	47.3%	99.1%	100%		

**Question 68:** When circulating new plans to school for execution, to what extent, have the school headmasters disagreed with them?

Table 6- 85 shows that 39 (34.8%) of all the schoolmasters have said that they have been opposed to the plans circulated to the schools at the high level and 73 (65.2%) have been opposed to these plans at the moderate level. But none of the schoolmasters have expressed their ideas at the little and very little levels. Therefore, the schoolmasters have been opposed to the execution of the plans circulated to the schools at the moderate and higher levels.

**Table 6- 85** The frequency distribution of the headmasters' ideas in relation to question 68

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	0	0	73	35	4	112
<b>Percentage</b>	0%	0%	65.2%	31.3%	3.5%	100.0%
<b>Cumulative Percent</b>			100%	34.8%	3.6%	

Table 6- 86 and Figure 6- 16 indicate that 48 (85.7%) of all the headmasters and 50 (89.3%) of all the headmistresses have said that the planning made in order to adjust the executives' resistance to change plans have been at the low level and only 14 (12.5%) of all the schoolmasters have evaluated the planning made in this field at the moderate level.

On the whole, the necessary planning to adjust the executives' resistance to change plans has been at the low level.

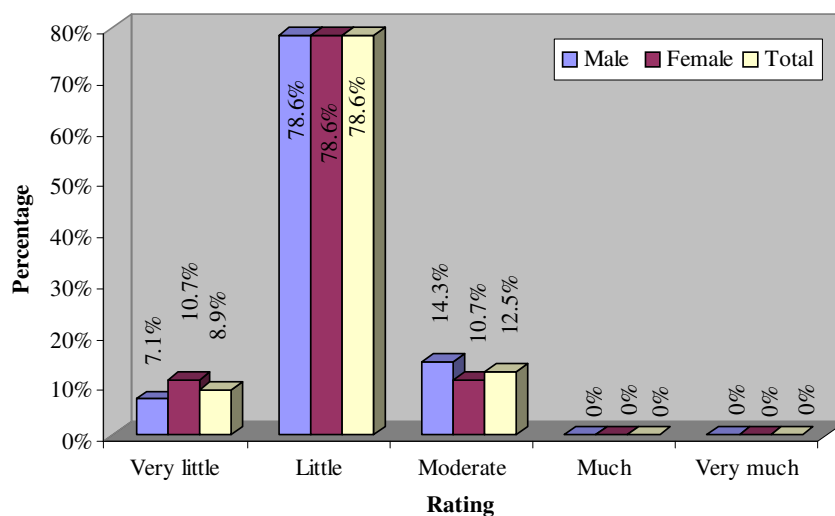
The available data also show that the most important reasons for resistance of executors against educational transformation are respectively:

- Lack of adequate knowledge and information of managers and executives of change plans before their implementation.
- Lack of attention to the needs and benefits of managers and executors of the transformation programs.
- Lack of correspondence between change plans and the attitude of their executors.
- Disagreement of school managers with implementing transformation programs due to previous unsuccessful experiences.

However, there is no considerable difference between male and female managers regarding the reasons of resistance against transformation.

**Table 6- 86** The frequency distribution of the schoolmasters' ideas concerning the questions 25, 39, 64, 65, 66, 67 and 68 in relation to the research hypothesis 6. "Resistance to Change"

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	4	44	8	0	0	56
	P	7.1%	78.6%	14.3%	0%	0%	100.0%
Female	F	6	44	6	0	0	56
	P	10.7%	78.6%	10.7%	0%	0%	100.0%
Total	F	10	88	14	0	0	112
	P	8.9%	78.6%	12.5%	0%	0%	100.0%



**Figure 6- 16** The schoolmasters' views concerning the questions on the research hypothesis 6

### 6.2.9 Analysis of the Research Hypothesis 7

*"The necessary socio-cultural backgrounds to execute successful plans of change have not been provided."*

Questions 57, 58, 59 and 60 have been designed to analyze this research hypothesis. First, we describe each question by means of the frequency distribution table, percentage taking and graph drawing. Then all the data concerning the 4 questions in relation to above- mentioned research hypothesis are analyzed. And the significant level of difference between the headmasters and headmistresses in relation to this research hypothesis is analyzed, too.

**Question 57:** To what extent, have the various organizations cooperated voluntarily, if necessary, with school in executing the plans appropriately?

Table 6- 87 shows that 100 (89.3%) of all the headmasters have said that the rate of the cooperation of different organizations with schools to execute the change plans has been at the low level, and only 12 persons (10.7%) have rated this cooperation at the moderate level. So, the rate of cooperation of different organizations in the execution of change plans has not been remarkable.

**Table 6- 87** The frequency distribution of the headmasters' ideas in relation to question 57

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	38	62	12	0	0	112
<b>Percentage</b>	33.9%	55.4%	10.7%	0%	0%	100.0%
<b>Cumulative Percent</b>	33.9%	89.3%	100%			

**Question 58:** To what extent, have the students' parents cooperated with school in executing the plans?

Table 6- 88 indicates that 96 (85.7%) of all the schoolmasters have said that the rate of parents' cooperation with schools to execute the change plans has been at the low level and only 16 persons (14.3%) have rated the parents' cooperation at the moderate level, but none of the schoolmasters have expressed their ideas at the high levels. In general, we can say that the rate of the parents' cooperation to execute the change plans has not been remarkable.

**Table 6- 88** The frequency distribution of the headmasters' ideas in relation to question 58

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	53	43	16	0	0	112
<b>Percentage</b>	47.3%	38.4%	14.3%	0%	0%	100.0%
<b>Cumulative Percent</b>	47.3%	85.7%	100%			

**Question 59:** To what extent, has the change of managers higher than school levels caused to abandon the plans or made them less important?

Table 6- 89 indicates that 69 (61.6%) of all the respondents have said that the change of managers of higher levels than school levels, in other words, lack of consistency in management, in "high" level has caused to abandon the plans, and 43 (38.4%) of them have considered the change of management effective at the moderate level. But none of them have commented at the low level. Therefore, lack of consistency of management at the levels of higher than schools has caused to abandon the plans.

**Table 6- 89** The frequency distribution of the headmasters' ideas in relation to question 59

Rate	Very little	Little	Moderate	Much	Very much	Total
<b>Frequency</b>	0	0	43	45	24	112
<b>Percentage</b>	0%	0%	38.4%	40.2%	21.4%	100.0%
<b>Cumulative Percent</b>			100%	61.6%	21.4%	



**Question 60:** To what extent, does the replacement of school headmasters prevent the plans from being executed successfully and cause them to be less important?

Table 6- 90 shows that 67 (59.8%) of all the schoolmasters have said that the replacement of headmasters at the high level has prevented the successful execution of the plans and 45 (40.2%) of them have considered this replacement effective at the moderate level. But none of the schoolmasters have expressed their ideas at the little and very little levels.

Therefore, the replacement of schoolmasters has prevented the successful execution of the plans and has caused these plans to be less important.

**Table 6- 90** The frequency distribution of the headmasters' ideas in relation to question 60

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	0	45	45	22	112
Percentage	0%	0%	40.2%	40.2%	19.6%	100.0%
Cumulative Percent			100%	59.8%	19.6%	

Table 6- 91 and Figure 6- 17 show that 43 (76.8%) of all the headmasters and 45 (80.4%) of all the headmistresses have said that the social and cultural fields have been provided at the low level for the successful execution of the plans, and only 24 (21.4%) of all the schoolmasters have considered these provided fields at the moderate level. But none of them have expressed their ideas at high levels.

On the whole, the necessary social and cultural fields for the execution of the change plans have not been provided at the high level. The available data also show that the main social and cultural obstacles regarding the implementation of change plans are respectively:

- Lack of essential cooperation of students' parents with schools.
- Lack of essential cooperation between other organizations with the department of education and schools.
- Inconsistency of management due to various reasons, including political changes and influential references. Previous programs are usually left behind because of the substitution of managers.

**Table 6- 91** The frequency distribution of the schoolmasters' views on questions 57 to 60 concerning the research hypothesis 7. "Socio-Cultural Background"

Rate Sex		Very little	Little	Moderate	Much	Very much	Total
		<b>Male</b>	F	6	37	13	0
	P	10.7%	66.1%	23.2%	0%	0%	100.0%
<b>Female</b>	F	9	36	11	0	0	56
	P	16.1%	64.3%	19.6%	0%	0%	100.0%
<b>Total</b>	F	15	73	24	0	0	112
	P	13.4%	65.2%	21.4%	0%	0%	100.0%

In comparison with male managers, female managers have considered the current social and cultural conditions as more important obstacles for successful implementation of transformation programs.

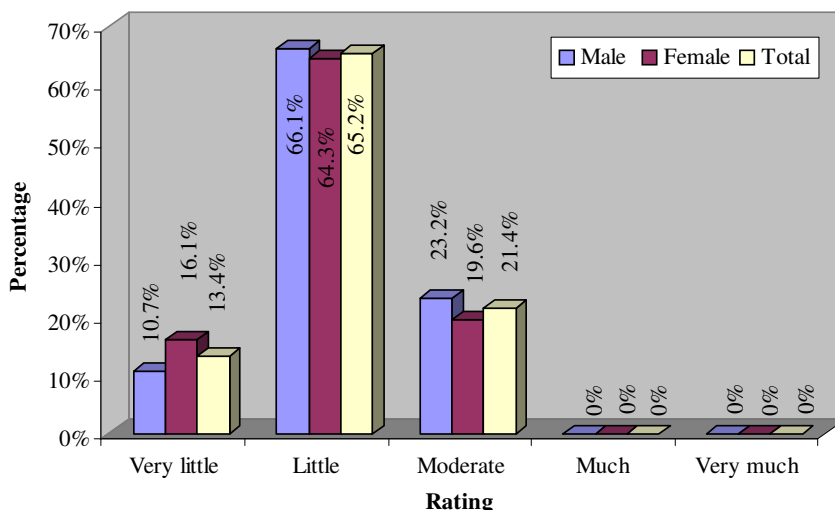


Figure 6- 17 The views of the schoolmasters concerning the questions on research hypothesis 7

### 6.2.10 Analysis of the Research Hypothesis 8

*“The financial conditions and possibilities required for the successful implementation of the plans of change have not been provided.”*

The questions 47 to 52 have been designed to analyze this research question. First we describe each question by means of the frequency distribution table, percentage taking, graph drawing. Then all the data concerning these six questions are analyzed in relation to this research hypothesis. The significant level of difference between the headmasters and headmistresses’ views is analyzed in relation to this research hypothesis too.

**Question 47:** To what extent, have the necessary equipment and possibilities been provided to your school and been proportionate to the execution of the plans?

Table 6- 92 shows that 85 (75.9%) of all the schoolmasters have said that the education department has been able to provide schools with equipment and facilities proportionate to necessity of plans at the low level. And only 27 (24.1%) of them have rated this measure taken by education department at the moderate level. But none of the schoolmasters have expressed their ideas at the high level. Therefore, the education department has not been able to provide the required equipment and facilities proportionate to the execution of the plans.

Table 6- 92 he frequency distribution of the headmasters’ ideas in relation to question 47

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	32	53	27	45	0	112
Percentage	28.6%	47.3%	24.1%	40.2%	0%	100.0%
Cumulative Percent	28.6%	75.9%	100%	59.8%		

**Question 48.** To what extent, have lack of equipment and possibilities prevented the successful execution of the plans in schools?

Table 6- 93 indicates that 93 (83%) of all the headmasters have said that lack of equipment and possibilities at the high level have prevented the successful execution of the plans in schools. And 19 (17%) of them have said that such shortages at the moderate level have prevented the execution of the plans. But none of the schoolmasters have expressed their ideas at the little and very little levels. Therefore, we can say that the shortages of possibilities and equipment have prevented the successful execution of the change plans.

**Table 6- 93** The frequency distribution of the headmasters' ideas in relation to question 48

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	0	19	50	43	112
Percentage	0%	0%	17%	44.6%	38.4%	100.0%
Cumulative Percent			100%	83%	38.4%	

**Question 49.** To what extent, has the lack of appropriate physical and educational spaces necessary for the plans prevented the successful execution of them?

Table 6- 94 shows that 97 (86.6%) of all the schoolmasters have said that lack of appropriate physical and educational space necessary for the plans at the high level has prevented the successful execution of the plans and only 15 (13.4%) of them have rated these obstacles at the moderate level; however, none of the schoolmasters have expressed their views at the little and very little levels. In general, lack of appropriate physical and educational space necessary for the plans has been an obstacle for the successful execution of the change plans.

**Table 6- 94** The frequency distribution of the headmasters' ideas in relation to question 49

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	0	15	60	37	112
Percentage	0%	0%	13.4%	53.6%	33%	100.0%
Cumulative Percent			100%	86.6%	33%	

**Question 50:** To what extent, has your school been provided with financial aid when needed for the execution of the plans?

Table 6- 95 indicates that 92 (82.1%) of all the respondents have said that the necessary budget and credit for the plans has been provided, at the low level, for the schools, and only 20 (17.9%) of them have rated the budget given to the schools at the moderate level. But none of the respondents have expressed their ideas at the high level. Therefore, we can say that the necessary budget and credit proportionate to the successful execution of the change plans has not been provided for the schools.

**Table 6- 95** The frequency distribution of the headmasters' ideas in relation to question 50

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	37	55	20	0	0	112
Percentage	33%	49.1%	17.9%	0%	0%	100.0%
Cumulative Percent	33%	82.1%	100%			

**Question 51:** To what extent, has the shortage of budget and financial credit prevented the execution of the plans?

Table 6- 96 indicates that 99 (88.4%) of all the schoolmasters have said that the shortage of budget and financial credit at the high level have prevented the successful execution of the plans and only 13 (11.6%) of them have rated these obstacles at the moderate level, however, none of the schoolmasters have commented on this at low level. Overall, the shortage of budget and financial credit at the high level has prevented the successful execution of plans.

**Table 6- 96** The frequency distribution of the headmasters' ideas in relation to question 51

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	0	0	13	47	52	112
Percentage	0%	0%	11.6%	42%	46.4%	100.0%
Cumulative Percent			100%	88.4%	46.4%	

**Question 52:** To what extent, has the per-capita income allocated to your school during a school year has met the real needs of school?

Table 6- 97 shows that 90 (80.4%) of all the schoolmasters have said that the budget allocated to schools during a school year can meet the real needs of school at the low level and 22 (19.6%) of them have evaluated the allocated budget to school at the moderate level; but none of them have expressed their ideas on this case at the high level. Therefore, we can say that the budget allocated to schools has not met the real needs of schools at the high level for the successful execution of the plans.

**Table 6- 97** The frequency distribution of the headmasters' ideas in relation to question 52

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	55	35	22	0	0	112
Percentage	49.1%	31.3%	19.6%	0%	0%	100.0%
Cumulative Percent	49.1%	80.4%	100%			

Table 6- 98 and Figure 6- 18 show that 50 (89.3%) of all the headmasters and 52 (92.8%) of the headmistresses have said that the conditions and necessary material and financial possibilities have been provided at low level in execution of plans for schools. And only 10(8.9%) of all the schoolmasters have rated the allocated budget and possibilities to schools at moderate level. But none of the schoolmasters have expressed their views on this at high levels.

So, it can be said that the education department has not been able to provide the schools with enough budget and possibilities for the successful execution of the plans.

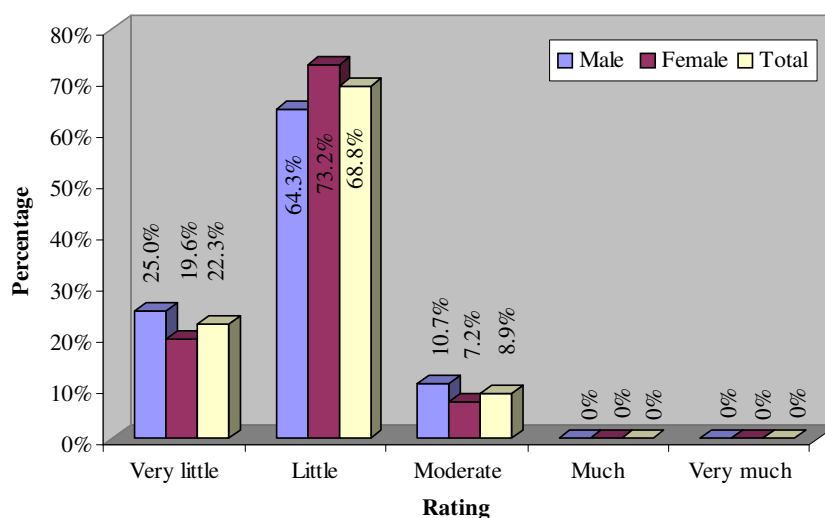
The available data also indicate that material and financial problems and obstacles for successful implementation of change plans are respectively:

- Shortage of budget. The annual budget that has been deposited to schools' accounts during the recent years hasn't fulfilled the real needs of schools.
- Shortage of educational, laboratory and workshop equipments and facilities of schools.

However, there has been no difference between the attitude of male and female managers about the financial problems and obstacles.

**Table 6- 98** The frequency distribution of the schoolmasters' views concerning questions 47 to 52 in relation to research hypothesis 8. "Financial Conditions and Possibilities"

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	14	36	6	0	0	56
	P	25.0%	64.3%	10.7%	0%	0%	100.0%
Female	F	11	41	4	0	0	56
	P	19.6%	73.2%	7.2%	0%	0%	100.0%
Total	F	25	77	10	0	0	112
	P	22.3%	68.8%	8.9%	0%	0%	100.0%



**Figure 6- 18** The schoolmasters' views in relation to the questions on research Hypothesis 8

### 6.2.11 Analysis of the Research Hypothesis 9

*“The backgrounds necessary for the participation of the executives in designing and the manner of execution of the plans of change have not been provided.”*

To analyze this research hypothesis, questions 69 to 72 have been designed. First, we describe each question through the frequency distribution table, percentage taking and graph drawing. Then, all the data concerning these 4 questions in relation to this research hypothesis are analyzed. The significant level of difference between the headmasters’ and headmistresses’ views in relation to this hypothesis is analyzed scientifically.

**Question 69:** In designing and decision-making about the plans which have been circulated to schools to what extent, have your participation and sympathy been used?

Table 6- 99 shows that 104 (92.9%) of all the schoolmasters have said that they have participated at the low level in designing and deciding about the execution of the plans. And only 8 (7.1%) of them have rated their participation in this regard at the moderate level. But none of them have expressed their ideas at the high levels. Therefore, in designing the plans and deciding about the manner of their execution, the schoolmasters and other executives’ necessary participation has not been used.

**Table 6- 99** The frequency distribution of the headmasters’ ideas in relation to question 69

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	48	56	8	0	0	112
Percentage	42.9%	50%	7.1%	0%	0%	100.0%
Cumulative Percent	42.9%	92.9%	100%			

**Question 70:** In designing and decision-making about the plans circulated to schools, to what extent have the teachers’ participation and sympathy been used?

Table 6- 100 shows that 101 (90.2%) of all the schoolmasters have said that the teachers’ participation and sympathy have been used at the low level in designing and deciding of the plans and only 11 (9.8%) of them have rated the teachers’ participation in this regard at the moderate level. But none of them have expressed their views at the high level. On the whole, in designing the plans and decision-making about the manner of the execution of them, the teachers’ participation has not been used.

**Table 6- 100** The frequency distribution of the headmasters’ ideas in relation to question 70

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	47	54	11	0	0	112
Percentage	42%	48.2%	9.8%	0%	0%	100.0%
Cumulative Percent	42%	90.2%	100%			

**Question 71:** In designing and decision-making about the plans circulated to schools, to what extent have the parents' participation and sympathy been used?

Table 6- 101 indicates that 108 (96.4%) of all the schoolmasters have said that the parents' participation in designing and decision-making about the execution of the plans has not been used at the low level. And only 4 (3.6%) of them have rated the parents' participation at the moderate level in this regard. But, none of them have commented on this at the high levels. Therefore, the parents' participation in designing the plans and decision-making concerning the manner of their execution has not been used.

**Table 6- 101** The frequency distribution of the headmasters' ideas in relation to question 71

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	76	32	4	0	0	112
Percentage	67.8%	28.6%	3.6%	0%	0%	100.0%
Cumulative Percent	67.8%	96.4%	100%			

**Question 72:** In designing and decision-making about the plans circulated to schools, to what extent, have the students' participation and sympathy been used?

Table 6- 102 indicates that 106 (94.6%) of all the schoolmasters have said that the students' participation in designing and decision-making about the execution of the plans has been used at low level. And only 6 (5.4%) of them have rated the students' participation at the moderate level. However, none of them have expressed their views on this at the high level. Overall, the students' participation in designing the plans and decision-making concerning the manner of their execution has not been used.

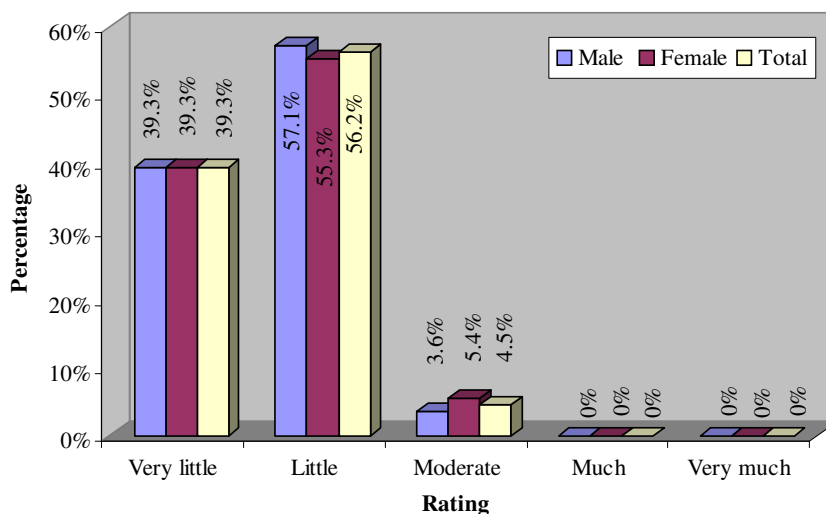
**Table 6- 102** The frequency distribution of the headmasters' ideas in relation to question 72

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	66	40	6	0	0	112
Percentage	58.9%	35.7%	5.4%	0%	0%	100.0%
Cumulative Percent	58.9%	94.6%	100%			

Table 6- 103 and Figure 6- 19 indicate that 54 (96.4%) of all the headmasters and 53 (94.6%) of all the headmistresses have said that the authorities have paved they way for the executives' participation in designing and the manner of execution of plans at the low level. And only 5 (4.5%) of all the schoolmasters have rated the executives' participation at the moderate level. But none of the schoolmasters have commented about this participation at the high level.

**Table 6- 103** The frequency distribution of headmasters’ views concerning questions 69 to 72 in relation to research hypothesis 9. “Participation”

Rate Sex		Very little	Little	Moderate	Much	Very much	Total
		<b>Male</b>	F	22	32	2	0
	P	39.3%	57.1%	3.6%	0%	0%	100.0%
<b>Female</b>	F	22	31	3	0	0	56
	P	39.3%	55.3%	5.4%	0%	0%	100.0%
<b>Total</b>	F	44	63	5	0	0	112
	P	39.3%	56.2%	4.5%	0%	0%	100.0%



**Figure 6- 19** The headmasters’ views in relation to questions concerning research hypothesis 9

### 6.2.12 Analysis of the Research Hypothesis 10

*“The system of education has not achieved the intended goals in the successful execution of the plans of change”.*

To analyze and examine this research hypothesis, questions 18 and 78 have been designed. First, we describe each of these two questions by means of the frequency distribution table, percentage taking, and graph-drawing. Then, all the data concerning these questions are analyzed, and the significant level of the difference between the male and female schoolmasters in relation to this research hypothesis is analyzed, as well.

**Question 18:** To what extent, have the schools been successful in executing the plans circulated to them?

Table 6- 104 shows that 56 (50%) of all the schoolmasters have said that the schools have been successful in executing the plans circulated to them at the low level and 56 (50%) of them have rated the success of the schools in the execution of the circulated plans at the moderate level. But



none of the schoolmasters have expressed their ideas at the high levels.

Therefore, we can say that the rate of the schools' success in executing the plans circulated to them has been at the moderate and lower levels.

**Table 6- 104** The frequency distribution of the headmasters' ideas in relation to question 18

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	21	35	56	0	0	112
Percentage	18.8%	31.2%	50.0%	0%	0%	100.0%
Cumulative Percent	18.8%	50.0%	100.0%			

**Question 78:** On the whole, to what extent, have schools reached the predetermined goals of the plans?

Table 6- 105 indicates that 65 (58%) of all the schoolmasters have said that the schools have reached the predetermined goals of plans at the low level, and 47 (42%) of them have said that the schools have reached the predetermined goals of plans at the moderate level. However, none of them have expressed their ideas on this at the high level. Therefore, the schools have not reached the predetermined goals of the plans at the high level.

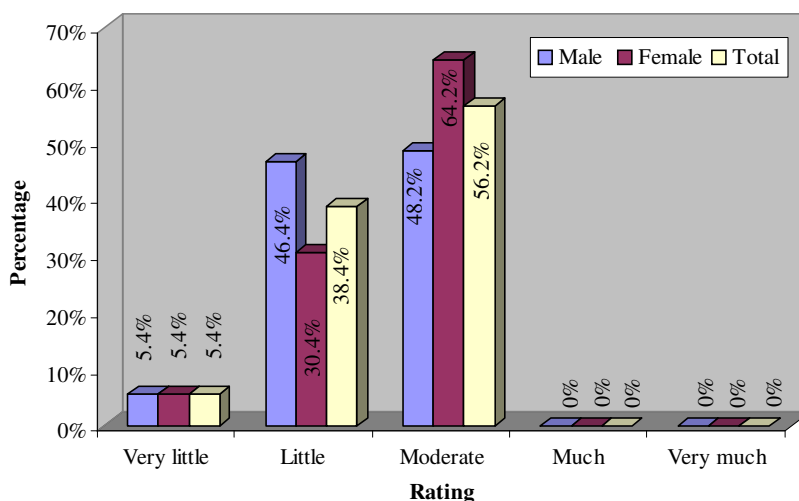
**Table 6- 105** The frequency distribution of the headmasters' ideas in relation to question 78

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	14	51	47	0	0	112
Percentage	12.5%	45.5%	42.0%	0%	0%	100.0%
Cumulative Percent	12.5%	58.0%	100.0%			

Table 6- 106 and Figure 6- 20 show that 29 (51.8%) of all the headmasters and 20 (35.8%) of all the headmistresses have said that the education department has been able to reach the predetermined goals of the change plans at the low level, and 63 (56.2%) of all the schoolmasters have rated the success of education department in reaching the goals of the change plans at the moderate level. But none of them have expressed their views at the high level. Therefore, the education department has not been able to reach the predetermined goals at the high level in line with the successful execution of the change plans. Female managers have had more positive attitude towards the extent of fulfillment of objectives of change plans in education than male managers.

**Table 6- 106** The frequency distribution of the schoolmasters’ views concerning the questions on research hypothesis no.10. “Desired Goals”

Sex \ Rate		Rate					Total
		Very little	Little	Moderate	Much	Very much	
Male	F	3	26	27	0	0	56
	P	5.4%	46.4%	48.2%	0%	0%	100.0%
Female	F	3	17	36	0	0	56
	P	5.4%	30.4%	64.2%	0%	0%	100.0%
Total	F	6	43	63	0	0	112
	P	5.4%	38.4%	56.2%	0%	0%	100.0%



**Figure 6- 20** The headmasters’ views concerning the research hypothesis 10

### 6.2.13 Analysis of the Research Hypothesis 11

*“Enough scientific control and supervision over the implementation of the plans of change does not take place.”*

In order to analyze and examine this research hypothesis, questions 73, 73.1, 74, 74.1, 74.2, 75, 76, 76.1, 76.2, 77 and 77.1 have been designed. First, each question is described by means of the frequency distribution table, percentage taking, graph drawing and then all the data concerning these questions are analyzed. The significant level of difference between headmasters and headmistresses' views in relation to this research hypothesis is analyzed scientifically too.

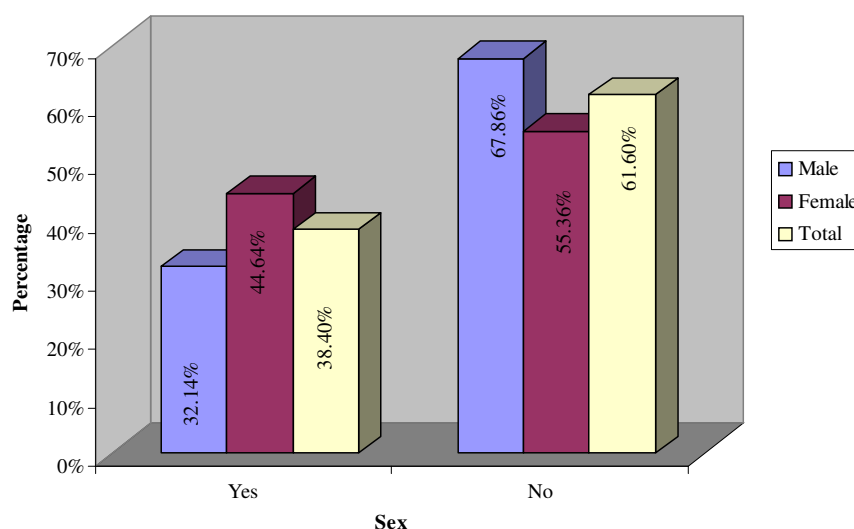
**Question 73.** During the execution of the plans, have they been evaluated in written form or through a questionnaire?

Table 6- 107 and Figure 6- 21 show that 69 (61.60%) of all the schoolmasters have said the plans have not been evaluated in written form or through a questionnaire during their execution,

whereas 43 (38.40%) have said that this evaluation has been carried out during the execution of the plans. Therefore, a great percentage of the schoolmasters believe that the plans have not been evaluated in written form or through a questionnaire during the execution.

**Table 6- 107** The frequency distribution of the schoolmasters' views on question 73

Sex \ Rate		Rate		Total
		Yes	No	
Male	F	18	38	56
	P	32.14%	67.86%	100.0%
Female	F	25	31	56
	P	44.64%	55.36%	100.0%
Total	F	43	69	112
	P	38.40%	61.60%	100.0%



**Figure 6- 21** The schoolmasters' views on question 73

**Question 73.1:** To what extent, has the evaluation given rise to consolidating the strengths and removing the weaknesses of the plans?

Table 6- 108 shows that 40 (93%) of all the schoolmasters have said that the evaluations done during the execution of the plans have given rise to consolidating the strengths and removing the weaknesses of the plans at the low level and only 3 (7%) of them have rated the effectiveness of these evaluations at the moderate level; however, none of the schoolmasters have expressed their ideas in this regard at the high level.

So, the evaluations done during the execution of the plans have not necessarily given rise to consolidating the strengths and removing the weaknesses of the plans.

**Table 6- 108** The frequency distribution of the headmasters' ideas in relation to question 73.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	16	24	3	0	0	43
Percentage	37.2%	55.8%	7.0%	0%	0%	100.0%
Cumulative Percent	37.2%	93.0%	100.0%			

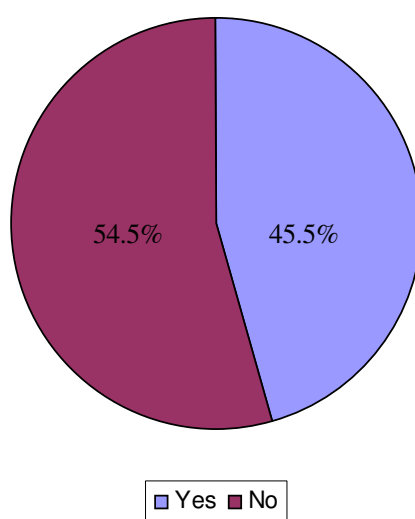
**Question 74:** During the implementation of the plans have any certain people come to your school to evaluate them?

Table 6- 109 and Figure 6- 22 show that 51 ( 45.5%) of all the schoolmasters have said that during the execution of the plans certain people have come to school to evaluate these plans, whereas 61 (54.5%) of them have said that such people have not referred to school to evaluate the plans.

In general, a great percentage of the schoolmasters have said that certain people have not referred to school for the evaluation of plans during their execution.

**Table 6- 109** The frequency distribution of the schoolmasters' views in relation to question 74

F & P	Frequency	Percent
Yes	51	45.5 %
No	61	54.5 %
Total	112	100 %

**Figure 6- 22** The schoolmasters' views on question 74

**Question 74.1:** To what extent, have they referred to school for the evaluation of the plans?

Table 6- 110 shows that 48 (94.1%) of all the schoolmasters have said that the rate of the reference of the plan evaluators to schools has been at the low level and only 3 (5.9%) of them have reported the rate of the evaluators' reference at the moderate level. But none of them have expressed their ideas at the high level.

Therefore, we can say that the rate of plan evaluators' reference to schools has not been enough for the execution of the plans.

**Table 6- 110** The frequency distribution of the headmasters' ideas in relation to question 74.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	25	23	3	0	0	51
Percentage	49.0%	45.1%	5.9%	0%	0%	100.0%
Cumulative Percent	49.0%	94.1%	100.0%			

**Question 74.2:** To what extent, have the evaluators' reference helped to consolidate the strengths and to correct the weaknesses of the plans?

Table 6- 111 shows that 47 (92.2%) of all the schoolmasters have said that the reference of the evaluators to schools has given rise to consolidating the strengths and correcting the weaknesses of the plans at low level and only 4 (7.8%) of them have considered the evaluators' reference effective at the moderate level. But none of the schoolmasters have expressed their ideas at the high level in this regard. Therefore we can say that the reference of the plan evaluators to school has not led to consolidating the strengths and correcting the weaknesses of the plans at the high level.

**Table 6- 111** The frequency distribution of the headmasters' ideas in relation to question 74.2

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	22	25	4	0	0	51
Percentage	43.1%	49.1%	7.8%	0%	0%	100.0%
Cumulative Percent	43.1%	92.2%	100.0%			

**Question 75:** To what extent, has after the evaluation of the plans their feedback been announced to schools?

Table 6- 112 indicates that 91 (81.2%) of all the schoolmasters have said that after the evaluations done from the execution of the plans, their feedback has been announced to schools at the low levels. And only 21 (18.8%) of them have reported the feedback of the evaluation of the plans at the moderate level. But none of them have expressed their ideas at the high level.

Therefore, we can say that after the evaluation of the execution of the plans, the feedback of them has not been reflected to schools at high levels.

**Table 6- 112** The frequency distribution of the headmasters' ideas in relation to question 75

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	39	52	21	0	0	112
Percentage	34.8%	46.4%	18.8%	0%	0%	100.0%
Cumulative Percent	34.8%	81.2%	100.0%			

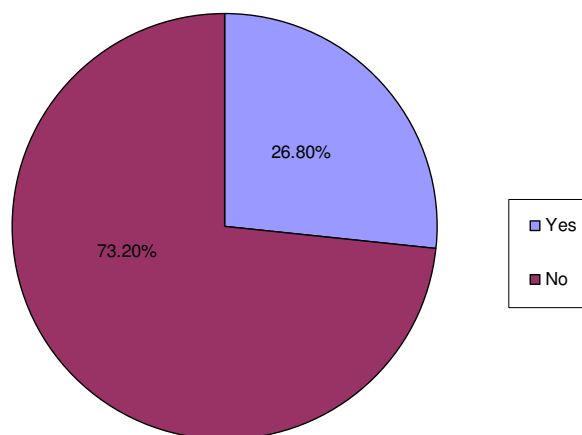
**Question 76:** After complete execution of the plans has the summative evaluation been done from them?

Table 6- 113 and Figure 6- 23 show that 30 (26.8%) of all the headmasters have said that after the complete execution of the plans, the final evaluation has been done from them, while 82 (73.2%) of them have said that the final evaluation of the plans has not been carried out.

In general a great percentage of the schoolmasters have said that the final evaluation of the plans has not been carried out.

**Table 6- 113** The frequency distribution of the schoolmasters' views in relation to question 76

F & P	Frequency	Percent
Yes	30	26.8 %
No	82	73.2 %
<b>Total</b>	112	100 %

**Figure 6- 23** The schoolmasters' views on question 76

**Question 76.1:** To what extent, has accurate, real and scientific evaluation been carried out from the executed plans?

Table 6- 114 shows that 29 (96.7%) of schoolmasters have said that the accurate, real and scientific evaluation carried out from the execution of the plans has been at the low levels and only 1 (3.3%) of them have rated these evaluations at the moderate level, but none of the schoolmasters has expressed their ideas at the high levels. Therefore, final scientific evaluation has not been carried out from the executed plans at the high level.

**Table 6- 114** The frequency distribution of the headmasters' ideas in relation to question 76.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	11	18	1	0	0	30
Percentage	36.7%	60.0%	3.3%	0%	0%	100.0%
Cumulative Percent	36.7%	96.7%	100.0%			

**Question 76.2:** To what extent, has the education department asked for the regular feedback of the problems concerning the execution of the plans in schools?

Table 6- 115 shows 28 (93.3%) of respondents have said the education department has asked for the regular feedback of the problems concerning the execution of the plans in schools at the low level and only 2 (6.7%) of them have evaluated this measure on part of the education department at the moderate level, but none of them have expressed their ideas at the high levels. Therefore, the education department has not been pursuing the regular feedback of the execution of the plans at the high levels.

**Table 6- 115** The frequency distribution of the headmasters' ideas in relation to question 76.2

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	12	16	2	0	0	30
Percentage	40.0%	53.3%	6.7%	0%	0%	100.0%
Cumulative Percent	40.0%	93.3%	100.0%			

**Question 76.3:** To what extent, has the evaluation done created required feedback for the improvement and consolidation of the plans?

Table 6- 116 indicates that 27 (90%) of the answering schoolmasters have said that the summative evaluations done have managed to give rise to the consolidation of the strengths and improvement of the weaknesses of the plans at the low level. And only 3 (10%) of them have reported the success of the summative evaluation at the moderate level. But none of the schools masters have commented on this at the high levels.

So, the summative evaluations carried out have not given rise to the consolidation of the strengths and improvement of the weaknesses of the plans.

**Table 6- 116** The frequency distribution of the headmasters' ideas in relation to question 76.3

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	11	16	3	0	0	30
Percentage	36.6%	53.4%	10.0%	0%	0%	100.0%
Cumulative Percent	36.6%	90.0%	100.0%			

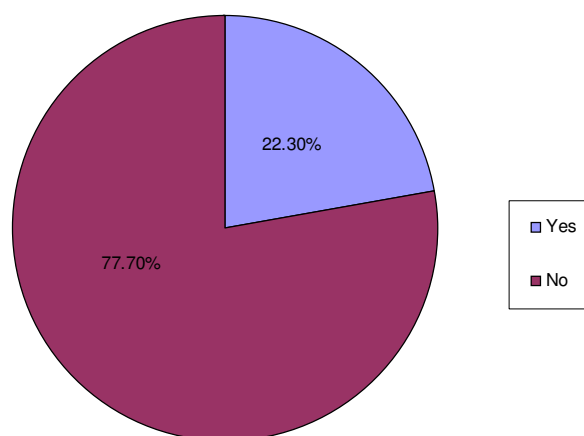
**Question 77:** Have any plans for experimental or pilot execution been circulated to your school?

Table 6- 117 and Figure 6- 24 show that 25 (22.3%) of the schoolmasters have said that plans have been circulated to their schools for experimental execution, whereas 87 (77.7%) of them have said that no plans have been circulated to their schools for the experimental execution.

In general, we can say that majority of the schools have not been the executives of experimental plans.

**Table 6- 117** The frequency distribution of the schoolmasters' views in relation to question 77

<b>F &amp; P</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	25	22.3 %
<b>No</b>	87	77.7 %
<b>Total</b>	112	100 %



**Figure 6- 24** The schoolmasters' views on question 77

**Question 77.1:** After the experimental execution, to what extent, have the plans been corrected?

Table 6- 118 shows that 24 (96%) of all the headmasters answering the questions have said that after the experimental execution, the change plans have been revised and corrected at the low levels and only 1 (4%) of them has said that this measure has taken place at the moderate level, but none of the schoolmasters have reported the improvement of the plans at the high level. Thus, after the experimental or pilot execution, the change plans have not been improved and corrected seriously.

Therefore, we can say that the schoolmasters who have said that the change plans have been controlled and evaluated, have reported these control and evaluations at the low level.



**Table 6- 118** The frequency distribution of the headmasters' ideas in relation to question 77.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	7	17	1	0	0	25
Percentage	28.0%	68.0%	4.0%	0%	0%	100.0%
Cumulative Percent	28.0%	96.0%	100.0%			

### 6.2.14 Analysis of the Research Hypothesis 12

*“The conditions and grounds required to use Information Technology (IT) for successful implementation of the plans of change have not been provided.”*

Questions 79 to 81.1 have been designed to analyze this research hypothesis. First, we describe each question by means of frequency distribution table, percentage taking and graph-drawing and then, all the data concerning these questions are analyzed, and the significant level of difference between the headmasters and headmistresses' views in relation to this research hypothesis is analyzed as well.

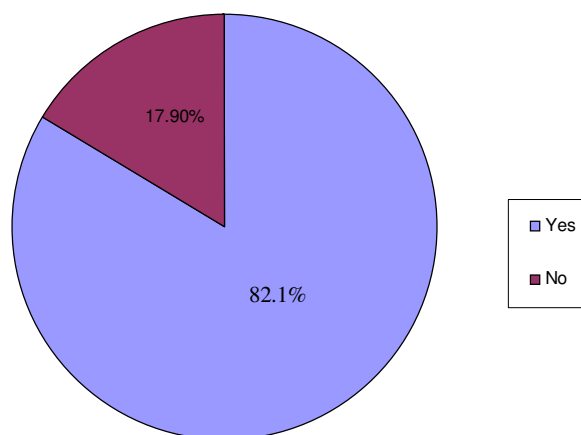
**Question 79:** Has your school been connected to the Internet?

Table 6- 119 and Figure 6- 25 show that 92 (82.1%) of all the schoolmasters have said that their schools have been connected to the Internet, whereas 20 (17.9%) of them have said that their schools have not been connected to the Internet yet.

In general, a high percentage of the schools have been connected to the Internet.

**Table 6- 119** The frequency distribution of the schoolmasters' views in relation to question 79

F & P	Frequency	Percent
Yes	92	82.1 %
No	20	17.9 %
Total	112	100 %

**Figure 6- 25** The schoolmasters' views on question 79

**Question 79.1:** To what extent, do the teachers and employees at school have access to the Internet?

Table 6- 120 shows that 40 (43.5%) of all the schoolmasters have said that the Internet access and the Internet usage has been provided at the low level for the teachers and other employees at schools, and 51 (55.4%) have rated this at the moderate level and only 1 (1.1%) has expressed his ideas at the high level. Therefore, the access to the Internet and its usage for the teachers and the employees at schools has been provided at the moderate level.

**Table 6- 120** The frequency distribution of the headmasters' ideas in relation to question 79.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	11	29	51	1	0	92
Percentage	12.0%	31.5%	55.4%	1.1%	0%	100.0%
Cumulative Percent	12.0%	43.5%	98.9%	100.0%		

**Question 79.2:** To what extent, do the teachers and employees have the ability and skill to use the Internet?

Table 6- 121 shows that 74 (80.5%) of all the schoolmasters have said that the teachers and school employees have the ability and skills to use the Internet at the "low" level, and 18 (19.5%) of them have rated the teachers and employees' ability and skills to use the Internet at moderate level; however, none of the schoolmasters have expressed their ideas at the high level in this regard. Therefore, the ability and skill of the teachers and other employees in using the Internet at schools have not been at the high level.

**Table 6- 121** The frequency distribution of the headmasters' ideas in relation to question 79.2

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	19	55	18	0	0	92
Percentage	20.7%	59.8%	19.5%	0%	0%	100.0%
Cumulative Percent	20.7%	80.5%	100.0%			

**Question 79.3:** To what extent, do the teachers and employees at school use the Internet scientifically during the day?

Table 6- 122 shows that 79 (85.9%) of all the schoolmasters responding the questions have said that the teachers and the employees use the Internet at the low level during the day, and only 13 (14.1%) of them have rated their use from the Internet at the moderate level, but none of them have referred to the high use of the Internet by the teachers and the employees. So, the rate of the teachers and the employees' use of the Internet have not been at the high level during the day.

**Table 6- 122** The frequency distribution of the headmasters' ideas in relation to question 79.3

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	33	46	13	0	0	92
Percentage	35.9%	50.0%	14.1%	0%	0%	100.0%
Cumulative Percent	35.9%	85.9.0%	100.0%			

**Question 79.4:** To what extent, do the students have access to the Internet at school?

Table 6- 123 indicates that 61 (66.3%) of all the responding schoolmasters have said that the possibility of access to the Internet for the students has been provided at the low level, and 30 (32.6%) of them have rated this possibility of access for the students at the moderate level, and only 1 (1.1%) of the schoolmasters has expressed his ideas about this at the high level. In general, the possibility of the Internet access and its use for the students has not been provided at the high level.

**Table 6- 123** The frequency distribution of the headmasters' ideas in relation to question 79.4

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	27	34	30	1	0	92
Percentage	29.3%	37.0%	32.6%	1.1%	0%	100.0%
Cumulative Percent	29.3%	66.3%	98.9%	100.0%		

**Question 79.5:** To what extent, do the students have the necessary skill and ability in using the Internet?

Table 6- 124 shows that 62 (67.4%) of all the respondents have said that the students have the ability and the skill of using the Internet at the low level, and 30 (32.6%) of them have rated the students' abilities and skills of using the Internet at the moderate level, but none of the respondents have expressed their ideas at the high levels in this regard. Therefore, we can say that the students' abilities and skills to use the Internet have not been at the high level.

**Table 6- 124** The frequency distribution of the headmasters' ideas in relation to question 79.5

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	23	39	30	0	0	92
Percentage	25.0%	42.4%	32.6%	0%	0%	100.0%
Cumulative Percent	25.0%	67.4%	100.0%			

**Question 79.6:** To what extent, do the students use the Internet daily?

Table 6- 125 shows that 74 (80.4%) of all the schoolmasters responding have said that the students use the Internet at the low level and only 18 (19.6%) of them have rated the students' use of the Internet at the moderate level. But none of the schoolmasters have referred to the students' use of the Internet at the high level. Therefore, the students' use of the Internet during the day has not been at the high level.

**Table 6- 125** The frequency distribution of the headmasters' ideas in relation to question 79.6

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	35	39	18	0	0	92
Percentage	38.0%	42.4%	19.6%	0%	0%	100.0%
Cumulative Percent	38.0%	80.4%	100.0%			

**Question 79.7:** To what extent, are there personal computer systems at school for using the Internet?

Table 6- 126 shows that 65 (70.6%) of all the respondents have said that the number of the allocated computers to schools to use the Internet has been at the low level and 27 (29.4%) of them have said that the number of the computers has been at the moderate level, but none of the respondents have expressed their ideas at the high level in this regard. Therefore, the number of the computers allocated to schools to use the Internet has not been at the high level.

**Table 6- 126** The frequency distribution of the headmasters' ideas in relation to question 79.7

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	21	44	27	0	0	92
Percentage	22.8%	47.8%	29.4%	0%	0%	100.0%
Cumulative Percent	22.8%	70.6%	100.0%			

**Question 79.8:** To what extent, is there physical room at school to set up the computer systems so that people can use them?

Table 6- 127 shows that 41 (44.5%) of all the schoolmasters responding have said that the physical space for setting up the computers and the operators' use at schools has been at the low level, and 49 (53.3%) of them have rated the allocated physical space in this regard at moderate level, and only 2 (2.2%) of them have expressed their ideas at the much level. Therefore, the allocated physical space to set up the computers for the operators' use at schools has not been at the high level.

**Table 6- 127** The frequency distribution of the headmasters' ideas in relation to question 79.8

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	17	24	49	2	0	92
Percentage	18.5%	26.0%	53.3%	2.2%	0%	100.0%
Cumulative Percent	18.5%	44.5%	97.8%	100.0%		

**Question 80:** Is there an Internet connection between your school and the other schools in the district?

Table 6- 128 shows that so far the Internet connection has not been made among the schools.

**Table 6- 128** The frequency distribution of the schoolmasters' views in relation to question 80

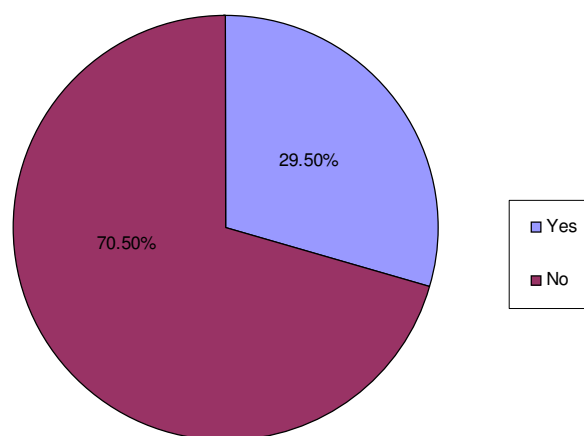
F & P	Frequency	Percent
Yes	0	0 %
No	112	100 %
<b>Total</b>	112	100 %

**Question 81:** Is there an internet connection between your school and education department in district?

Table 6- 129 and Figure 6- 26 show that 33 (29.5%) of all the schoolmasters have said that the net connection through the Internet has been made between their schools and the region's education department and 79 (70.5%) of them have said that so far this Internet connection has not been made between their schools and the education department. Therefore, the net connection through the Internet has not been made between majority of the schools and the education department.

**Table 6- 129** The frequency distribution of the schoolmasters' views in relation to question 81

F & P	Frequency	Percent
Yes	33	29.5 %
No	79	70.5 %
<b>Total</b>	112	100 %

**Figure 6- 26** The schoolmasters' views on question 81

**Question 81.1:** By using this network, to what extent, is there an effective bilateral connection between your school and the education department?

Table 6- 130 shows that all of the 33 (100%) schoolmasters who have said that the net connection through the Internet has been made between their schools and the area's education department have rated this connection at low level. Therefore, the suitable, effective and bilateral Internet connection between schools and the education departments of the areas has not been made as it is necessary.

**Table 6- 130** The frequency distribution of the headmasters' ideas in relation to question 81.1

Rate	Very little	Little	Moderate	Much	Very much	Total
Frequency	12	21	0	0	0	33
Percentage	36.4%	63.6%	0%	0%	0%	100.0%
Cumulative Percent	36.4%	100.0%				

Table 6- 131 and Figure 6- 27 show that 10 (22.22%) of the headmasters and 15 (31.92%) of the headmistresses have said that the conditions and opportunities for the use of the Information Technology have been provided at the low level and 66 (71.74%) of all the headmasters have said that these conditions and opportunities have been provided at the moderate level and only 1 (1.09%) of them has expressed his ideas at the much level. Therefore, we can say that the conditions and opportunities to use the Information Technology (IT) for the successful execution of the change plans in schools have been provided at the moderate and lower levels.

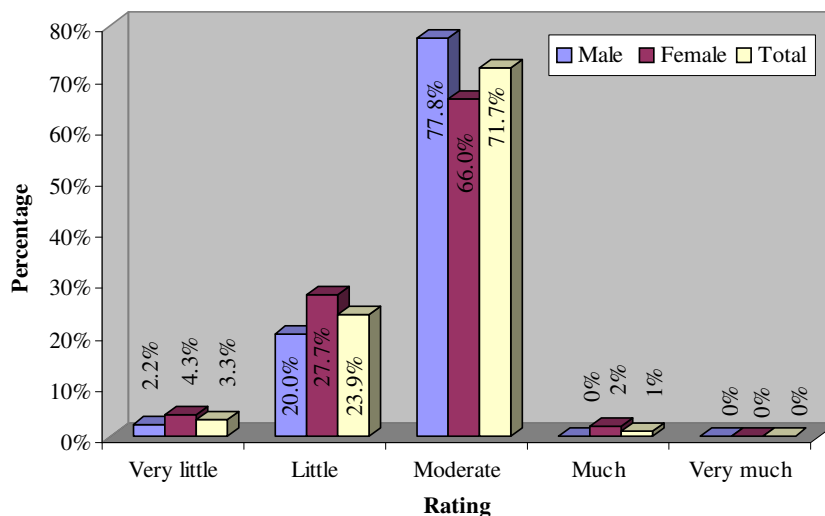
The available data also show that the most important obstacles regarding using information technology at schools are respectively:

- Little scientific use of information technology and internet by teachers and staff at schools.
- Little scientific use of information technology and internet by students at schools.
- Insufficient skills of teachers and school staff in practical use of information technology.
- Little accessibility of students to information technology and internet for the purpose of scientific usage at schools.
- Shortage of computers and educational equipments at school level.
- Little capability of students in using information technology and internet.
- Inappropriate physical environment and lack of standard educational workshops at schools.
- Little accessibility of school staff and teachers to internet.

However, there has been no difference between the attitude of male and female managers regarding the problems related to information technology at schools.

**Table 6- 131** The frequency distribution of the schoolmasters' views concerning the questions on the research hypothesis no.12. "Information Technology"

Rate		Very little	Little	Moderate	Much	Very much	Total
Sex							
Male	F	1	9	35	0	0	45
	P	2.22%	20%	77.78%	0%	0%	100.0%
Female	F	2	13	31	1	0	47
	P	4.26%	27.66%	65.95%	2.13%	0%	100.0%
Total	F	3	22	66	1	0	92
	P	3.26%	23.91%	71.74%	1.09%	0%	100.0%



**Figure 6- 27** The headmasters views in relation to questions on the research hypothesis no.12

### 6.3 Inferential Analysis of the Data

Using inferential analysis (one variable t-test and two variable t-test) in this section on the one hand, significance of obtained means from the analysis of each research hypothesis about headmasters' opinions (male and female) as one group is examined and compared to the assumed mean. On the other hand, significance or insignificance of difference between opinions of the two independent groups of male and female headmasters is statistically analyzed. But in order to shorten the explanations, tables and some data in relation with one variable t-test have been ceded and only are pointed to their results briefly.

#### 6.3.1 Inferential Analysis of the Research Hypothesis 1

*The transformational leadership does not occur efficiently for the successful implementation of the plans of change.*

The obtained mean from the analysis of the data (1.79) is less than the assumed mean (2.50) and observed  $t$  is more than the  $t$  of the table and they indicate inefficiency of transformational leadership for the successful implementation of the plans and educational changes. As a result, the research hypothesis is verified and null hypothesis is rejected.

But, to compare the views of the both male and female schoolmasters, the mean of each group has been calculated separately and has been given in the following table. Table 6- 132 shows the obtained means from each group of schoolmasters (both male and female) which apparently show that there is no great difference between the mean of the men's views and that of the women's. Therefore, the rate of the significant difference between their opinions is studied.

**Table 6- 132** The mean of the data concerning the headmasters' views for the variable of "transformational leadership"

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Transformational Leadership	Male	56	1.7708	.48363	.06463
	Female	56	1.7733	.44502	.05947

Table 6- 133 shows that the significance level of the equality variances is more than 0.05. Therefore, equal variances assumed are accepted and the computation of  $t$  with equal variances will be followed. The calculated  $t$  for 2 independent groups headmasters including male and female with equal variances has been (0.890) that with the degree of freedom (110) in comparison with  $t$  of the table show that the mean difference of the 2 groups is not significant ( $\alpha = 0.375$ ). Therefore the research hypothesis saying that there is a significant difference between male and female schoolmasters' views on the "transformational leadership" is rejected and null hypothesis which says there is no significant difference between their views is verified.

**Table 6- 133** The data concerning the computation of "t" the variable of "transformational leadership" for 2 independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Transformational Leadership	Equal variances assumed	.203	.654	.890	110	.375	.07005	.07871	-.08593	.22603
	Equal variances not assumed			.890	109.524	.375	.07005	.07871	-.08593	.22604

### 6.3.2 Inferential Analysis of the Research Hypothesis 2

*The required planning for the behaviour modification of the executives of the plans of change does not occur.*

The obtained mean of the society (2.17) is less than assumed mean (2.50) and observed  $t$  is more than the  $t$  of the table and they indicate that required planning for the behaviour change of the executives of the change plans does not take place. As a result, the research hypothesis is verified and null hypothesis is rejected.

However, to compare the male and female headmasters' views, the mean of their views has been



calculated and given in the following table. Table 6- 134 shows the obtained means of the two groups of the male and female schoolmasters' views that apparently there is not a great difference between the men's views (2.2286) and women's (2.1179). Therefore, the rate of the significant difference between their views has been dealt with.

**Table 6- 134** The mean of the data concerning the headmasters and headmistresses' views for the variable of "behaviour change"

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Behavior Change	Male	56	2.2286	.43052	.05753
	Female	56	2.1179	.45090	.06025

Table 6- 135 shows that the significance level of equality of the variances is more than (0.05). Therefore the assumption of the equality of the variances is accepted, so we follow the computation of  $t$  with equal variances. The computed  $t$  for two independent groups with equal variances is (1.329) which together with the degree of freedom (110) in comparison with  $t$  of the table show that the difference of the means of the two groups is not significant ( $\alpha = 0.187$ ). Therefore, since there is not a significant difference between the means of the two male and female schoolmasters' views concerning the "behaviour change", the null hypothesis is verified and the research hypothesis, the existence of significant difference between the views of the two groups is rejected.

**Table 6- 135** The data concerning the computation of "t" the variable of "behaviour change" for 2 independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Behavior Change	Equal variances assumed	.419	.519	1.329	110	.187	.11071	.08331	-.05438	.27581
	Equal variances not assumed			1.329	109.766	.187	.11071	.08331	-.05439	.27582

### 6.3.3 Inferential Analysis of the Research Hypothesis 3

*The designing of the plans of change does not take place based on the scientific needs assessment.*

The computed mean from the analysis of the data (2.29) is less than the assumed mean (2.50) and the observed  $t$  is more than the  $t$  of the table and they indicate that designing the change plans does not take place based on the scientific need assessment. Therefore, the research hypothesis is verified and null hypothesis is rejected.

However, in order to compare the headmasters and headmistresses' views, the mean of their opinions has been computed separately and given in the following table. Table 6- 136 shows that the mean of the men's views (2.3464) does not differ from that of the women's (2.2464). Therefore, in the following table the rate of the significance difference between their views has been dealt with.

**Table 6- 136** The mean of the data concerning the headmasters and headmistresses' views for the variable of the "designing of the plans"

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Designing	Male	56	2.3464	.42894	.05732
	Female	56	2.2464	.42296	.05652

Table 6- 137 shows that the significance level of the equality of the variances is more than (0.05). Therefore the assumption of the equality of variances is accepted. So the computation of the  $t$  with equal variances is followed. The computed  $t$  has been for the two independent groups with equal variances (1.242) that with the degree of freedom (110) in comparison with  $t$  of the table show that the difference of the means of the two groups is not significant. ( $\alpha= 0.217$ ).

**Table 6- 137** The data concerning the computation of "t" the variable of "designing the plans" for 2 independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Designing	Equal variances assumed	.003	.956	1.242	110	.217	.10000	.08050	-.05953	.25953
	Equal variances not assumed			1.242	109.978	.217	.10000	.08050	-.05953	.25953

Therefore, since there is not a significant difference between the means of the two groups of male and female headmasters in relation to the designing of the plans, the null hypothesis is verified and the research hypothesis, that is, the existence of significant difference between the views of the two groups is rejected.

#### 6.3.4 Inferential Analysis of the Research Hypothesis 4

*“Necessary planning for creating motivation among the executives of the plans of change does not take place.”*

The computed mean from the analysis of the data (2.25) is less than assumed mean (2.50) and observed  $t$  is more than the  $t$  of the table and they indicate that the necessary planning for creating motivation among the executives of the change plans does not occur. As a result, the null hypothesis is rejected and the research hypothesis, that is, lack of the enough motivation in the executives of the change plans is verified.

However, to compare the male and female schoolmasters' views the means of their views have been computed separately, and given in the following table. Table 6- 138 shows that the mean of the men's views (2.2883) apparently does not differ much from that of the woman's (2.2258). So, the rate of the significant difference between their views has been dealt with.

**Table 6- 138** The mean of the data concerning the male and female schoolmasters' views for the variable of the motivation

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Motivation	Male	56	2.2883	.36952	.04938
	Female	56	2.2258	.39753	.05312

Table 6- 139 shows that the significance level of the equality of the variances is more than 0.05. Therefore the assumption of the equality of the variances is accepted and thus the computation of the  $t$  together with the equal variances will be followed. The computed  $t$  for the two independent groups with equal variances has been (0.862) that with the degree of freedom (110) in comparison with  $t$  of the table show that the difference between the means of the two groups is not significant ( $\alpha= 0.391$ ). Therefore, since there is not a significant difference between the means of the two groups of male and female headmasters' views concerning “motivation”, the null hypothesis is verified and the research hypothesis, that is, the existence of significant difference between the views of the two groups is rejected.

**Table 6- 139** The data concerning the computation of “t”, the variable of “motivation” for the two independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Motivation	Equal variances assumed	.025	.874	.862	110	.391	.06250	.7253	-.08123	.20623
	Equal variances not assumed			.862	109.418	.391	.06250	.7253	-.08124	.20623

### 6.3.5 Inferential Analysis of the Research Hypothesis 5

*“The organizational structure of education has not paved the way for the successful implementation of the plans of change.”*

Since the computed mean of the data from the society (2.11) is less than assumed mean (2.50) and the observed  $t$  is more than the  $t$  of the table and they indicate that there is not a suitable organizational structure in the system of education for the successful implementation of the change plans, the null hypothesis is rejected and the research hypothesis, that is, lack of suitable organizational structure in the system of education is verified.

However, to compare the male and female schoolmasters' opinions, the means of their views have been computed separately and given in the following table. Table 6- 140 shows that the mean of the men's views (2.1556) apparently does not differ so much from that of the women's views (2.0714). So, the rate of the significance difference between their views has been studied.

**Table 6- 140** The mean of the data concerning the male and female schoolmasters' views for the variable of the organizational structure”

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Organizational Structure	Male	56	2.1556	.45280	.06051
	Female	56	2.0714	.45011	.06015

Table 6- 141 shows that the significance level of the equality of the variances is more than 0.05, therefore the assumption of the equality of the variances is accepted and the computation of the  $t$  together with the equal variances is followed. The computed  $t$  for the 2 independent groups with equal variances has been (0.987) that, with the degree of freedom (110) in comparison with the  $t$  of the table shows that the difference of the means of the two groups is not significant ( $\alpha=0.326$ ). Therefore, since there is no significant difference between the means of the two groups of male and female schoolmasters', the null hypothesis is verified and the research hypothesis, that is, existence of the significant difference between the views of the two groups is rejected.

**Table 6- 141** The data concerning the computation of “ $t$ ” the variable of organizational structure for the two independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Organizational Structure	Equal variances assumed	.016	.900	.987	110	.326	.08418	.08532	-.08490	.25326
	Equal variances not assumed			.987	109.996	.326	.08418	.08532	-.08490	.25326

### 6.3.6 Inferential Analysis of the Research Hypothesis 6

*“Required planning is not made to adjust executives’ resistance to the plans of change.”*

The computed mean from the analysis of the data (2.12) is less than the assumed mean (2.50) and the observed  $t$  is more than the  $t$  of the table and they indicate there is not a necessary planning for adjustment of the executives’ resistance versus the change plans; therefore, the research hypothesis is verified and null hypothesis, that is, the existence of suitable planning for the adjustment of the executives’ resistance is rejected.

But in order to compare the male and female headmasters’ views, the means of their opinions have been computed separately and are given in the following table. Table 6- 142 shows that the mean of the men’s views (2.1301) apparently does not differ from that of the women’s views (2.1122). Nevertheless, the rate of the significant difference between their views has been dealt with.

**Table 6- 142** The mean of the data concerning the male and female schoolmasters' views for the variable of the executives' resistance

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Resistance to change	Male	56	2.1301	.38359	.05126
	Female	56	2.1122	.43220	.05776

Table 6- 143 shows that the significant level of the equality of the variances is more than 0.05, therefore, the assumption of the equality of the variances is accepted and the computation of  $t$  with equal variances is done. The computed  $t$  for the two independent groups with equal variances has been (0.231) with the degree of freedom (110) in comparison with  $t$  of the table shows that the difference of the means of the two groups is not significant ( $\alpha=0.818$ ). Therefore, since there is no significant difference between the means of the two groups of male and female schoolmasters' views concerning the executives' resistance, the null hypothesis is verified and the research hypothesis, that is, the existence of significant difference between the views of the two groups is rejected.

**Table 6- 143** The data concerning the computation of “ $t$ ” the variable of the executives' resistance for the two independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Resistance to change	Equal variances assumed	.380	.539	.231	110	.818	.01786	.07722	-.13518	.17089
	Equal variances not assumed			.231	108.470	.818	.01786	.07722	-.13520	.17092

### 6.3.7 Inferential Analysis of the Research Hypothesis 7

*“The necessary socio-cultural grounds for the successful implementation of the plans of change have not been provided.”*

Since the mean of the data obtained from the society (1.95) is less than assumed mean (2.50) and observed  $t$  is more than the  $t$  of the table and they indicate that necessary socio-cultural grounds for the successful implementation of the change plans have not provided, the research hypothesis is verified and the null hypothesis, that is, the existence of the necessary socio-cultural grounds is rejected. But, to compare the headmasters and headmistresses' views, the means of their opinions have been calculated separately and given in the following table. Table 6- 144 shows that the mean of the men's views (2.0000) does not differ very much from that of the women's (1.9063). Therefore, the rate of the significant difference between their views has been studied.

**Table 6- 144** The mean of the data concerning the male and female schoolmasters for the socio-cultural variable

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Socio-cultural	Male	56	2.0000	.43952	.05873
	Female	56	1.9063	.52993	.07081

Table 6- 145 shows that the significant level of the equality of the variances is more than 0.05; therefore the assumption of the equality of the variances is accepted and the computation of  $t$  with equal variances is followed. The computed  $t$  for the two independent groups has been (1.019) with the degree of freedom (110) in comparison with  $t$  of the table shows that the difference of the means of the two groups is not significant ( $\alpha = 0.310$ ). Therefore, since there is no significant difference between the means of the two groups of male and female schoolmasters' views concerning the socio-cultural variable, the null hypothesis is verified and the research hypothesis is rejected.

**Table 6- 145** The data concerning the computation of “ $t$ ” the socio-cultural variable for the two independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Socio-cultural	Equal variances assumed	.968	.327	1.019	110	.310	.9375	.09200	-.08858	.27608
	Equal variances not assumed			1.019	106.364	.311	.9375	.09200	-.08865	.27615

### 6.3.8 Inferential Analysis of the Research Hypothesis 8

*“The financial conditions and possibilities required for the successful implementation of the plans of change have not been provided.”*

The obtained mean from the analysis of the data (1.80) is less than assumed mean (2.50) and indicates that conditions and financial possibilities for the successful implementation of the change plans have not been provided. Therefore, the research hypothesis is verified and the null hypothesis, that is, the existence of suitable conditions and financial possibilities is rejected.

However, to compare the views of the both male and female headmasters, their views have been calculated and given in the following table. Table 6- 146 shows that the mean of the men’s views (1.7708) apparently does not differ so much from that of the women’s (1.8125). Therefore, the rate of the significant difference of their views has been dealt with.

**Table 6- 146** The mean of the data concerning the male and female schoolmasters for the financial variable

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Financial Resources	Male	56	1.8433	.42998	.05746
	Female	56	1.7733	.40252	.05379

Table 6- 147 shows that the significant level of the equality of the variances is more than (0.05), therefore, the assumption of the equality of the variances is accepted and the computation of the “t” with the equal variances will be followed. The computed  $t$  for 2 independent groups with equal variances has been (0.474) with the degree of freedom (110) in comparison with  $t$  of the table shows that difference of the means of the two groups is not significant ( $\alpha = 0.636$ ). Therefore, since there is no significant difference between the means of the views of the two groups of schoolmasters both male and female concerning the financial variable, the null hypothesis is verified and the research hypothesis, that is, the existence of difference between the means of the two groups’ views is rejected.

**Table 6- 147** The data concerning the computation of “t” the financial variable for 2 independent groups

Variable	Equality	Levine’s Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Financial Resources	Equal variances assumed	1.314	.254	-.474	110	.636	-.04167	.08783	-.21572	.13238
	Equal variances not assumed			-.474	109.247	.636	-.04167	.08783	-.21573	.13240



### 6.3.9 Inferential Analysis of the Research Hypothesis 9

*The grounds required for the executives' participation in designing and ways of the implementation of the plans of change have not been provided.*

The computed mean from the analysis of the data (1.54) is less than the assumed mean (2.50). Therefore, it indicates that necessary grounds for the executives' participation in designing and ways of the implementation of the change plans have not been provided. Thus the research hypothesis is confirmed and the null hypothesis, that is, the existence of necessary grounds for the participation of the executives is rejected.

However, to compare the male and female schoolmasters' views the means of their views have been separately computed and given in the following table. Table 6- 148 shows that the mean of the men's views (1.5357) does not differ from that of the women's (1.5357).

**Table 6- 148** The mean of the data concerning the views of the headmasters and headmistresses for the variable of participation

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Participation	Male	56	1.5357	.44576	.05957
	Female	56	1.5357	.46814	.06256

Table 6- 149 shows that the significant level of the equality of the variances is more than 0.05. Therefore the assumption of the equality of the variances is accepted, and the computation of  $t$  with the equal variances will be followed. The calculated  $t$  for the 2 independent groups with equal variances has been (0.000) with the degree of freedom (110) in comparison to  $t$  of the table with ( $\alpha = 1.000$ ) and shows that there is no difference between the means of the two groups of the male and female schoolmasters' views concerning the variable of the executives' participation. Therefore, the null hypothesis is confirmed and the research hypothesis, that is, the existence of difference between the views of the two groups is rejected.

**Table 6- 149** The data concerning the computation of "t" the variable of participation for the 2 independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Participation	Equal variances assumed	.256	.614	.000	110	1.000	.00000	.08638	-.17119	.17119
	Equal variances not assumed			.000	119.737	1.000	.00000	.08638	-.17119	.17119

### 6.3.10 Inferential Analysis of the Research Hypothesis 10

*“The system of education has not achieved the intended goals in the successful execution of the plans of change.”*

The obtained mean from the data (2.30) is less than assumed mean (2.50) and indicates that educational system has not achieved to the desired goals for the successful implementation of the change plans. Thus, the research hypothesis is confirmed and the null hypothesis, that is, the system of education's achieving the predetermined goals is rejected. However, in order to compare the views of the headmasters and headmistresses the means of their views have been separately computed and given in the following table. Table 6- 150 shows that the mean of the men's views (2.2232) apparently does not differ much from that of the women's (2.3839). Therefore, the rate of significant difference between their views has been dealt with.

**Table 6- 150** The mean of the data concerning the male and female schoolmasters' views for the variable of goals

Variable	Sex	Number	Mean	Std. Deviation	Std. Error Mean
Goals	Male	56	2.2232	.58713	.07846
	Female	56	2.3839	.56400	.07537

Table 6- 151 indicates that the significant level of the equality of the variances is more than 0.05 and therefore the hypothesis of the equality of the variances is accepted and the computation of “t” with equal variances will be followed. The computed  $t$  for 2 independent groups with equal variances has been (-1.477) with the degree of freedom (110) in comparison with the  $t$  of the table shows that the difference between the means of the 2 groups is not significant ( $\alpha= 0.142$ ). Therefore, since there is no any significant difference between the mean of the two groups of male and female schoolmasters' views concerning the variable of goals, the null hypothesis is verified and the research hypothesis, that is, the existence of the difference between the views of the two groups is rejected.

**Table 6- 151** The data concerning the computation of “t” the variable of goals for 2 independent groups

Variable	Equality	Levine's Test For Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig.(2 tailed)-	Mean Difference	Std.Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Goals	Equal variances assumed	.597	.441	-1.477	110	.142	-.16071	.10879	-.37632	.05489
	Equal variances not assumed			-1.477	109.825	.142	-.16071	.10879	-.37632	.05489

In general, according to available data in the current study the most important obstacles of managing change in educational system are shown in Table 6- 152 respectively. The data also indicates that lack of “participation” is the most important obstacle among all of the barriers and there has been the least difference between the male and female headmasters’ opinions in relation to “participation” in comparison with the other barriers.

**Table 6- 152** The most important obstacles of managing change in the educational system

Obstacles	Computed Mean	Assumed Mean	S. D.
Participation	1.54	2.50	0.45
Educational Leadership and Management	1.79	2.50	0.43
Financial Resources	1.80	2.50	0.41
Socio-cultural Problems	1.95	2.50	0.48
Organizational Structure	2.11	2.50	0.45
Resistance to Change	2.12	2.50	0.40
Behavior Change	2.17	2.50	0.44
Motivation	2.25	2.50	0.38
Change Planning	2.29	2.50	0.42

## 6.4 The use of the Delphi Technique (DT)

As mentioned in chapter five, in order to increase the scientific validity and accuracy of this research, Delphi technique was used to examine the opinions of experts of education about the obstacles on the successful accomplishment of educational changes and programs. First, an open ended questionnaire, including 13 questions, was designed; 12 questions were about the categorized factors about the obstacles of accomplishment of changes and one question was mentioned without any obstacles and the experts were asked to point out any important and effective factors in this regard. In the next stage, having collected the questionnaires, all their opinions were extracted, categorized and listed. According to the findings, a closed ended questionnaire including 58 statements was designed and completed in 2 stages by the same experts.

In order to analyze the opinions of the experts, 12 research questions were designed and the relevant statements to each research question were identified and they were analyzed as follows: *(The questionnaire of the experts is enclosed in the appendix).*

### 6.4.1 Research Question 1:

*What are the relevant obstacles of the educational management and leadership in successful accomplishment of educational changes and programs?*

Statements of 5-10 of the questionnaire were considered to analyze this research question. The retrieved information from these statements show that all 30 experts of education (100%) unanimously agree and have the same ideas about the following factors as main obstacles of educational management and leadership in successful accomplishment of educational changes:

- Instability of management and job security of principals in different levels of education.
- Dependence of change plans and programs to the retention of principals and their designers; i.e. changes and programs are usually forgotten with replacement of principals and designers.
- Impossibility of attracting specialized and efficient people for management positions of education because of disinclination to management.
- Influence and interference of political references in decision makings and management of education and deposition and appointment of principals.
- Not appointing principals due to their specialty and ability at different levels of education.

Opinions of high school principals are in accordance with the opinions of experts of education in the above-mentioned cases (see Table 6- 153).

**Table 6- 153** Opinions of experts about the obstacles of educational management and leadership

Frequency & Percentage	I agree	I disagree	I have no idea	Total
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

### 6.4.2 Research Question 2:

*What are the relevant obstacles to the training of administrators of educational changes and programs?*

Statements of 24-27 of the questionnaire were considered to analyze this research question. The retrieved information from these statements show that all 30 experts of education (100%) unanimously agree and have the same ideas about the following factors as main obstacles of training administrators for accomplishment of educational changes:

- Inapplicability and conflict of educational courses of principals and administrators of educational changes and programs with their real needs.
- Lack of scientific need assessment in measuring the educational needs of managers and administrators of educational changes.
- Not using specialized instructors for different aspects of educational changes and programs.
- Presenting incomplete, inadequate and inefficient educational contents in educational courses.

Opinions of high school principals are in accordance with the opinions of experts of education about the problems of training administrators (see Table 6- 154).

**Table 6- 154** Opinions of experts about the obstacles of training administrators

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

### 6.4.3 Research Question 3:

*What are the relevant problems of the planning educational changes and programs?*

Statements of 1-4 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that all 30 experts of education (100%) unanimously agree on the following factors as the problems of planning educational changes:

- Inattention to cultural-social characteristics and special needs of different regions in planning educational changes and programs.
- Not using opinions and suggestions of principals and administrators in planning educational changes.
- Lack of real sampling and lack of experimental accomplishment of changes at limited levels before their final and overall accomplishment in order to recognize the strengths and weaknesses of plans.
- Presenting spontaneous and temporary plans and changes without any long-term educational objectives.

Opinions of high school principals are in accordance with the opinions of experts of education in the above-mentioned cases (see Table 6- 155).

**Table 6- 155** Opinions of experts about the problems of planning educational changes

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

#### 6.4.4 Research Question 4:

##### *What obstacles are there in the motivation of staffs?*

Statements of 43-47 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that 28 experts of education (93.3%) introduced the following factors as main obstacles of motivation of principals and administrators in accomplishing educational changes and programs and only 2 experts (6.7%) disagreed with the following factors:

- Not paying enough attention to efficiency and competence of staffs and managers in their job promotion.
- Not providing change administrators with rewards and benefits in accordance with their attempts and activities.
- Lack of motivation of principals and administrators in the serious and exact performance of their responsibilities due to their financial problems.
- Inefficiency of official system of education in executing exact and prompt encouragement and punishment.
- Lack of motivation among students and lack of their cooperation in the successful accomplishment of changes due to employment problems and worrying about the future.

Opinions of principals and experts about obstacles of motivation were similar (see Table 6- 156).

**Table 6- 156** Opinions of experts about obstacles relating to the motivation of principals and administrators

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	28	2	0	30
<b>P</b>	93.3%	6.7%	0%	100%

#### 6.4.5 Research Question 5:

##### *What are the relevant problems of the organizational structure of education about accomplishment of educational changes?*

Statements of 28-31 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that all 30 experts of education (100%) unanimously agree on the following factors as the obstacles relevant to the organizational structure of education, and there are no disagreements among them:

- Structural and official centralization in Ministry of Education.
- Great emphasis of organizational structure of education on accomplishment of official affairs and services by school principals which hinders them from playing their main role as educational leaders and managers.
- Lack of superiority of mental and specialized ability of official forces of education in comparison with educational forces.

- Lack of delegation of authority to principals and administrators in accordance with their responsibility level.

High school principals and experts had similar opinions about the obstacles relevant to the organizational structure of education (see Table 6- 157).

**Table 6- 157** Opinions of experts about problems of organizational structure of education

Frequency & Percentage	I agree	I disagree	I have no idea	Total
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

#### 6.4.6 Research Question 6:

*What are the relevant problems of control and supervision of accomplishment of educational changes and programs?*

Statements of 11-17 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that 29 experts of education (96.7%) introduced the following factors as the problems of control and supervision on the process of accomplishment of change and only 1 expert (3.3%) disagreed with the following factors:

- Lack of exact, qualitative and scientific control, supervision and evaluation of process of accomplishment of educational changes and programs at schools.
- Not using specialized people and authorities who are familiar with aspects of educational changes and programs for supervision and evaluation of the process of their accomplishment.
- Inexistence of feedback in supervision and evaluation of plans in order to reinforce their strengths and revise their weaknesses.
- Presenting general and unreal reports from the accomplishment of plans to authorities and higher official levels.
- Lack of repetition of control, supervision and evaluation of educational changes and programs.
- Emphasis of official structure on external control and supervision instead of attention and planning internal control and supervision of staffs and administrators.
- Lack of defining organizational positions of supervisor, guide or educational evaluator in the organizational chart of education.

Opinions of principals and experts of education about problems of control and supervision were similar (see Table 6- 158).

**Table 6- 158** Opinions of experts about the obstacles of educational management and leadership

Frequency & Percentage	I agree	I disagree	I have no idea	Total
<b>F</b>	29	1	0	30
<b>P</b>	96.7%	3.3%	0%	100%

#### 6.4.7 Research Question 7:

##### *What are the cultural-social obstacles in the accomplishment of educational changes?*

Statements of 18-23 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that 27 experts of education (90.10%) introduced the following factors as cultural-social obstacles on the successful accomplishment of educational changes and programs and only 3 experts (9.90%) disagreed with the following factors:

- Lack of essential cooperation of different organizations with ministry of education for better accomplishment of educational changes and programs.
- Weak cooperation of parents with Ministry of education and schools due to their cultural deprivations and economic problems.
- Lack of reception of any programs or changes which are not exactly performed for preparing student to enter universities.
- Consumptive and expense requiring view to the organization of education by authorities and budget makers rather than its investing nature.
- Depreciating place of science and learning in the society.
- Lack of suitable news support and coverage of changes and programs in education by the mass media.

Opinions of principals and experts accorded about cultural-social obstacles (see Table 6- 159).

**Table 6- 159** Opinions of experts about cultural-social obstacles

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	27	3	0	30
<b>P</b>	90.10%	9.90%	0%	100%

#### 6.4.8 Research Question 8:

##### *What are the obstacles about the participation in planning and accomplishing educational changes?*

Statements of 48-51 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that all of the 30 experts of education (100%) introduced the following factors as main obstacles and problems in relation to participation in educational system:

- Lack of participation-seeking and participation-searching in different levels of education.
- Lack of theories and systematic thoughts at different levels of education.
- Existence of rules and regulations which hinders people from participating in education.
- Weak beliefs of people about financial and mental participation in education as a national investment.
- Lack of use of participation of principals and administrators in planning and decision makings.
- Dealing locally in different official sections of education.



Opinions of principals and experts of education about problems of participation were similar (see Table 6- 160).

**Table 6- 160** Opinions of experts about obstacles of participation

Frequency & Percentage	I agree	I disagree	I have no idea	Total
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

#### 6.4.9 Research Question 9:

*What are the reasons of resistance of principals and administrators against educational changes and programs?*

Statements of 53-58 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that 29 experts of education (96.7%) introduced the following factors as the main reasons for the resistance of principals and administrators against educational changes and programs and only 1 expert (3.3%) disagreed with the following factors:

- Fear of staffs to lose their benefits and current job positions.
- Inattention to profits of principals and administrators in planning changes.
- Uncertainty about the positive results of changes and programs according to the previous unsuccessful experiences.
- Escaping from responsibilities and further attempts for accomplishment of required new changes.
- Adaptation and getting used to the current situation and unwillingness to change it.

Opinions of principals and experts of education about reasons for resistance of principals and administrators against change were similar (see Table 6- 161).

**Table 6- 161** Opinions of experts about reasons for resistance of principals and administrators against change

Frequency & Percentage	I agree	I disagree	I have no idea	Total
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

#### 6.4.10 Research Question 10:

*What are the financial problems of accomplishing educational changes and programs?*

Statements of 37-42 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that all 30 experts of education (100%) unanimously agree on the following factors as the financial obstacles of accomplishing educational changes and programs, and there are no disagreements among them:

- Inexistence of suitable and required facilities and equipments for accomplishing educational changes and programs at schools.
- Lack of coordination between programs and budgets at different levels of education. In other words, plans and programs are presented without predicting and providing their financial sources.
- Late allocation of financial sources for accomplishment of educational changes and programs.
- Lack of belief of financial authorities to effectiveness to educational changes and programs and their little support in this regard.

Principals and experts had similar opinions about financial obstacles (see Table 6- 162).

**Table 6- 162** Opinions of experts about financial obstacles

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

#### 6.4.11 Research Question 11:

*What are the problems about information technology and accomplishment of educational changes?*

Statements of 32-36 of the questionnaire were considered to analyze this research question. The retrieved information from these statements indicates that all 30 experts of education (100%) unanimously agree on the following factors as the relevant problems to information technology, and there are no disagreements among them:

- Inadequate ability of staffs and administrators in using information technology.
- Impossibility to have prompt and easy access to internet with adequate speed for employees, teachers and students.
- Lack of presenting basic and adequate trainings about information technology to staffs and administrators.
- Lack of assignment of specialized and required human forces in organizational charts of schools to information technology.
- Lack of financial support and adequate and up to date facilities about information technology.

Principals of schools and experts had the same opinions about the problems relevant to information technology (see Table 6- 163).

**Table 6- 163** Opinions of experts about information technology

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	30	0	0	30
<b>P</b>	100%	0%	0%	100%

#### **6.4.12 Research Question 12:**

*Has education been able to achieve its objectives in accomplishing educational changes and programs during secondary education?*

Statement number 52 of the questionnaire was considered to analyze this research question. The retrieved information from this statement indicates that 28 experts of education (93.3%) pointed out that education has not been able to achieve its objectives in accomplishing educational changes and programs at schools and only 2 experts (6.7%) did not give an agree or disagree respond to this question.

Principals of schools and experts had the same opinions about the extent of achieving educational objectives (see Table 6- 164).

**Table 6- 164** Opinions of experts about the extent of achieving educational objectives

<b>Frequency &amp; Percentage</b>	<b>I agree</b>	<b>I disagree</b>	<b>I have no idea</b>	<b>Total</b>
<b>F</b>	28	0	2	30
<b>P</b>	93.3%	0%	6.7%	100%

## 7 Conclusions and Suggestions

Conclusions and suggestions of the present research are provided in two parts:

### 7.1 Conclusions Based on the Theoretical Studies (Management and Change Theories)

Theoretical studies in relation with the present research and answer to the following research question have come to the below conclusions:

*How can we managing change in educational systems based on management and change theories?*

- In the world of today's organizations, change is essential and unavoidable. In this regard, successful organizations are those who not only welcome positive and constructive changes, but also are themselves origins and pioneers of change. Such organizations have passed their competitors.
- Despite the fact that sometimes automatic and haphazard changes occur to organizations, change requires planning. Any type of organizational evolution should take place based on pre-planned changes. During implementation process various important factors must be taken into consideration. These factors include staff participation, staff empowerment, motivating staff, creating and developing change vision, training and changing the behavior of staff and change executers, controlling and supervising change process, change leadership and management and resistance to change.
- Any type of change in organizations including change of the content, structures, production methods, management styles etc, is eventually made by people although people may somehow resist against the change. It can be said, there is a universal condition that wherever there is a change effort, there will be resistance. However, it is worth mentioning that resistance against change is not a negative issue and does not mean that the staffs do not want to cooperate or participate, but resistance against implementation of any type of change is essential and unavoidable. According to the authorities of the science of management resistance plays a positive role in change process because staff's resistance clarifies some concerns which may be neglected by leaders and planners. This negligence could have caused some obstacles in the way of implementing changes. Paying attention to the staff's opinions and viewpoints and studying the reasons of their resistance leads to the revision of plans and programs and

prevents hasty and hurried decision making. It also makes the staff participate and cooperate in order to achieve organizational objectives and implement the changes.

- One of the oldest and most effective strategies for overcoming resistance is to involve organization members directly in planning and implementing change. Participation can lead both to designing high quality changes and to overcoming resistance to implementing them. Staff's participation in the process of organizational planning and decision making commits them to the better implementation of change programs and increases their responsibility. Also, change programs must not endanger staff's occupational position and benefits.
- Any constant organizational change requires change in staff's group behavior and change in staff's group behavior requires a change in their individual behavior. Such change needs a change in their attitudes and beliefs. However, changing their attitudes and beliefs requires a change in their knowledge and awareness. Thus, it is necessary for the managers of the organizations to pay close attention to the change process in staff's behavior in order to achieve their objectives and pave the path for their organizational success by proper planning. On the other hand, as W. Edwards Deming has stated, "Nothing changes without personal transformation". (Senge, 1999).
- As mentioned before, change is essential and unavoidable. Nevertheless, the necessity of change in education -due to its aim and nature which is to provide and train the human force different sectors of the society need- is more severe than in other social organizations. Throughout history, it is expected from education to bring up future men and prepare today's generations for future society and life. Therefore, educational programmers and policy makers, teachers and education administrators should know the requirements and necessities of future life to be able to nurture required knowledge and wisdom in children and youth. Hence, planners and managers of education are more expected to be the pioneers of numerous positive and constructive changes.
- Scientific concepts and theories of management including total quality management, learning organizations management, theories of organizational behavior management and scientific theories of planned change management would help managers to achieve future objectives in a more acceptable and proper way.
- The pace of global, economical, and technological development makes change an inevitable feature of organizational life. However, change that happens to an organization can be distinguished from change that is planned by its members. Organization development is directed at bringing about planned change to increase an organization's effectiveness. It is generally initiated and implemented by managers. Organizations can use planned change to solve problems, to learn from experience, to reframe shared perceptions, to adapt to external environmental changes, to improve performance, and to influence future changes (Cummings and Worley, 2008).
- Organization leadership and management must create an environment in which people accept the need for change and commit physical and psychological energy to it. However, unless individuals are motivated and committed to change, unfreezing the status quo will be extremely difficult. Motivation is a critical issue in starting change

because ample evidence indicates that people and organizations seek to preserve the status quo and are willing to change only when there are compelling reasons to do so.

- In today's organizations tendency toward decentralization and decrease of bureaucracy leads to authorizing the inferior, more and increase of their participation in decision-making. Some advantages of tendency toward decentralization in participative management system are: paying attention to the needs, enforcement facilities and situations, possibility of exchange of ideas between high and low levels or interaction of managers and planners and performers, paying attention to the staffs' individual differences, paying attention to the innovations, inventions and freedom of action and paying attention to decision-making in low levels and delegation of authority to low levels of the organizations.
- Unnecessary replacement of organizations' managers due to political and social changes has a harmful effect on organizations and quality of their activities. Due to these alterations, managers pay attention to short-term planning and objectives instead of long-term planning and qualitative objectives and participation decreases.
- Organizational change is not a temporary short-term flow, but a permanent program to reform and improve organizational efficiency which deals with beliefs, values and organizational culture and generally with behavior of organization members. Its main objective is to create the necessary change to remove obstacles and troubles and to prepare factors of organization growth and self-renewing and to become consonant with different technological, cultural, social and economical changes and finally to get to organizational efficiency. Organizations and managers should understand that change would gradually become a fixed feature of their work life since in our age, changes have speeded up. Modern technology makes impossible, possible and normal. Change exists in everywhere around us and the ability to manage it in an efficient way is of the most important characteristics of successful managers and organizations in today's world.
- In organizations motivating plays a large part in determining the level of performance of employees, which, in turn, influences how effectively the organizational goals will be met. In his research on motivation, William James university professor of Harvard found that hourly employees could maintain their jobs (that is, not be fired) by working at approximately 20 to 30 percent of their ability. His study also showed that employees work at close to 80 to 90 percent of their ability if highly motivated.
- Among different branches of management, management of educational organizations is of great importance and has a pivotal role, since all objectives and elements of these organizations are human-related and their role is to alter inexperienced people into skillful, inventive, self-aware and grown-up ones, as well as to provide the society's need for human resources in cultural, social and economic sectors. In education system all levels of management is of high position and unique characteristics which cannot be compared to management in other organizations. No education system can reach its objectives without efficient experienced capable managers. So, investment in training qualified managers of different organizational levels in education -especially school managers- with regard to qualitative and quantitative aspects, is the best and most useful kind of investment.

- Nowadays, decentralization and authorization have become the center of reforms in education. It is two decades that school-based management is in the agenda of reform programs of most countries as a new and effective sample of decentralization. On the other hand, educational reforms which are designed at high levels of education system in a centralized and similar way and schools are ordered to enforce them, generally do not lead to change and improvement of the main process of teaching, education and learning in schools and classrooms. Based on these experiences, it is advised to consider schools in planning, decision-making and managing as independent units and not as the mere performers of the similar programs ordered from higher levels to lower ones.

## **7.2 Conclusions and Suggestions Based on Field Study**

In the present study, by means of descriptive statistics and inferential statistics questions and hypotheses of the research are scientifically described and analyzed based on the gathered data. In this chapter, the conclusions of description and analysis of any of the research questions and hypotheses are being addressed separately. Then, based on the findings and conclusions of the research, required suggestions for each part are provided.

General comparison of data gathered from analysis of the presented research hypotheses in this study indicates that the most important obstacles on the way of managing change and successful implementation of the changes in education regarding their importance are:

- Lack of seeking and accepting participation in education.
- Inefficiency and ineffectiveness of educational leadership and management.
- Pecuniary and financial problems of education.
- Socio-cultural problems and issues.
- Inappropriate organizational structure.
- Resistance to change.
- Problems of training and changing the behavior.
- Lack of motivation.
- Inappropriate planning of change.

According to the aforementioned data lack of “participation” is the most important obstacle among all of the barriers and there has been the least difference between the male and female headmasters’ opinions and as well as the experts of education in relation to “participation” in comparison with the other obstacles.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 1

### **7.2.1 Change Leadership and Management**

Peter Drucker, the influential management scientist believes that the leaders are the most infrequent, important and valuable source and property of organizations. A manager of any organization is supposed to be the key to that organization. In other words, if an organization is

regarded as a human's body, its manager is the head of the body. Accepting such a viewpoint, managers and leaders of organizations must be the most efficient and appropriate ones to be able to achieve organizational objectives through planning the change and leading effectively.

Having analyzed this research hypothesis the researcher has come to the conclusion that education leadership and management is not sufficiently efficient and effective regarding the eight indicators defined, based on John P. Kotter's change theory of change, which is used to study the degree of success in implementation of programs of change in education. Reasons for failure in education leadership and management with regard to the eight indicators are ordered below:

- Forming a guide coalition
- Creation of short-term wins
- Creating necessity and urgency
- Empowerment
- Recap of change and creation of future changes
- Transfer of vision and strategy
- Internalization of change in culture
- Development of vision and strategy

The results also indicate in analyzing this hypothesis the mean obtained based on headmasters' opinions (1.79) is less than the assumed mean (2.50). It shows that the educational leadership and management have functioned weakly in implementation of change. In this study the null hypothesis at the level of 0.95 has been rejected and the research hypothesis has been verified i.e. there has been no significant difference between male and female managers' opinions.

According to the education experts, the main problems relating educational leadership and management are: a lack of management stability, a lack of attraction of management posts, interference of some political figures in decision making and appointing and dismissing and finally a lack of emphasis on appointing managers of different educational and official levels based on their specialization and experience.

Headmasters' opinions agreed with the opinions of education experts in this regard.

### **Suggestions**

- Discovering and attracting qualified talented people interested in educational leadership and management in order to make them continue their education in this field and become experts.
- Creating motivation and pecuniary and spiritual attractions for accepting management posts.
- Appointing and dismissing education managers and planners in different educational and official levels -especially headmasters- based on their qualification, specialization and experience.



- Establishing educational planning and management faculties and reinforcing their content and structure to train qualified expert education leaders and managers.
- Creating management stability in different educational and official levels of education system.
- Creating a new major named “change leadership and management in educational organizations” at B.A, M.A and PhD levels.
- Holding in-service education in relation with change management to empower managers and staffs in different educational levels especially headmasters.
- Preventing the interference of political figures in decision making and appointing and dismissing education managers.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 2

### **7.2.2 Training and Changing Managers and Executors’ Behavior**

As famous American scientist Edwards Deming has declared, there would be no organizational change without changing the staff. There is hope that effective changes will be enforced but this can only occur when managers and executors are ready to accept and implement them. Such change may only take place with their knowledge, attitude, individual behavior and group behavior. Studying the aforementioned research hypothesis shows that no effective actions have been taken in order to train managers and executors, to change their individual and group behavior. Required facilities and appropriate time for holding training courses has not been prepared. Superior managers’ behavior in this field has not been acceptable and they have not acted as positive role models for their employees and colleagues, either. Low mean of the headmasters’ opinions (2.17) in comparison to the hypothetical mean (2.50) explains the situation clearly. Indeed, male managers’ opinions were a little more positive than the female managers’ opinions. However, as the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified, the difference between their opinions was not significant according to the statistics.

The results concluded from studying education experts’ opinions agrees with the headmasters’ opinions and indicates that the training courses held to train managers and executors of programs of change were not well planned and did not meet the needs of the trainees. This means there was no scientific need assessment carried out to meet the beneficiary people’s exact educational needs. Additionally, teachers of educational courses were not expert, experienced or capable enough to lead this programs. The content of the training courses was neither related nor applicable.

### **Suggestions**

- In order to successful implementation of each change in educational organizations, professional training of managers and executors must be prior to anything else. Such training should be provided before and during the implementation.

- The content of the training courses must be completely up-to-date, related and in agreement with the chosen subject of change and be provided in an applicable way. The content should be prepared with emphasis on making a change in knowledge, attitude, individual, group and organizational behavior of change executors and staff.
- Teachers of the training courses must be chosen from amongst those with sufficient expertise, experience and qualification. They also should believe in and be proficient in the subject of change.
- Superior managers should speak and act in a way to support the plans and encourage their executors. They must act as role-models for others, as well.
- Time assessment, place assessment and preparation of proper facilities and equipments should be done in order to train and change managers and staffs' behavior. Such actions should be taken based on real surveys asked from the beneficiary.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 3

### **7.2.3 Designing Change Plans**

Successful implementation of any plan and program to create change in organizations requires sagacious and wise planning based on real need assessment. Planning and programming mean thinking before acting, having plans for future actions, being provident and predicting, preparing facilities and equipments to reach the desired objectives and linking the past, present and future. Having studied and analyzed this research hypothesis, one can come to the result that plans of change in education have not had clear objectives and visions. In addition, there were no clear tangible methods chosen for their implementation. As a result, superior managers, staff and plan executors did not have the same understanding of the content and implementation methods of the plans. Furthermore, special conditions and needs of different areas were not taken into account in planning the programs and proper time was not allocated for their implementation. Therefore, such plans could not practically meet various needs of different areas. A lack of real effective participation of the beneficiaries and executors such as headmasters, teachers, students and their parents in decision making and planning is another problem.

Comparison of the mean of the headmasters' opinions (2.29) to the hypothetical mean (2.50) indicates such inefficiencies clearly. Indeed, male managers' opinions were a little more positive than the female managers' opinions. However, as the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified, the difference between their opinions was not significant according to the statistics.

Moreover, 100% of education experts believed that change plans did not meet the particular needs of the areas and were not performed scientifically at the level of pilot implementation before final vast implementation. In addition, there has been no effort made in order to reinforce their strengths and revise their weaknesses. Most of the plans originated from the planner's momentary temporary thoughts instead of scientific need assessment.

## Suggestions

- Any change plan must be planned based on scientific need assessment after distinguishing real needs of different areas and be implemented scientifically at pilot level before final vast implementation. Real need means the distance between the current situation and the desired one. In other words, it means distance between “are”s and “should”s.
- Real participation of the managers, staff, executers and other people who benefit from the change programs such as headmasters, teachers, students and their parents in planning, preparing and implementing the plans is required.
- Any change plan must have clear, measurable and achievable objectives.
- Particular tangible methods should be identified and used in order to reach the objectives and visions of the change plans.
- Particular time, place, facilities, equipments and financial sources should be predicted for more appropriate implementation of the plans.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 4

### 7.2.4 Motivating

Two main factors of success in any organization are the degree of capability and motivation of its staffs and managers. Lack of any of them prevents the organization from reaching its desired objectives. An analysis of this research hypothesis has indicated that the education system has not been able to create sufficient pecuniary and spiritual motivation in managers, teachers and other executors of plans of change. Headmasters were of the opinion that none of their essential needs such as physiological, safety, social, esteem and self-actualization needs were met, which they had expected. Such needs have been studied in Maslow’s analysis on the hierarchy of needs. They have declared that staffs’ salaries and fringe benefits cannot meet the real needs of their lives and their current social position and prestige are not what was to be expected. According to their opinions, in most cases promotion of the staff is not based on correct procedure and the system of encouragement and penalizing is not efficient enough. Comparison of the mean of the headmasters’ opinions (2.25) to the hypothetical mean (2.50) indicates such issues clearly. In this study the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified. It means regarding such hypothesis, there was no significant difference between the opinions of male and female managers.

Studying the opinions of education experts has also shown that 93.3% of them believed in many cases rewards and premiums of the executers are not paid to them according to their efforts and their promotion is not based on their capability and efficiency. They also believed that the educational and official system is inefficient in praising and castigating at proper time and situation and staffs’ and teachers’ financial problems are not rectified. Education experts’ opinions agreed with headmasters’ opinions.

## Suggestions

- Financial and pecuniary needs of the staffs and teachers should be provided through increasing their salaries and fringe benefits, consumption and housing cooperatives, providing more appropriate health services, providing more recreation and welfare facilities and other suitable actions in this regard.
- There must be efforts to promote education staffs' and teachers' social and occupational position and prestige.
- Staffs should be promoted based on their efficiency and capability.
- Comprehensive system of encouragement and punishment should exist throughout every level of education based on scientific and rational standards.
- Fringe benefits and rewards should be paid to the staffs with regard to their efforts and function.
- There must be efforts to provide the staffs with their different needs based on the present scientific samples such as Maslow's hierarchy of needs with different levels of physiological, safety, social, esteem and self-actualization.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 5

### 7.2.5 Organizational Structure

Organizational structure indicates the type of relations, hierarchy of authority, vertical and horizontal relationships of the staff and units and division of labour in an organization. According to the science of management, there must always be accordance between the authority and the responsibility of the managers and the staff of organizations. In other words, the authority given to anyone should be in agreement with his responsibility. In the current environment of the education system due to various reasons such as official bureaucracy and its centralized system, managers and staff are not given the authority, which corresponds to their responsibility. A centralized structure of education prevents attention being paid to the real needs and cultural, economical, social, ecological and geographical situations in planning and in implementing the educational plans. Most of the plans introduced to schools, which are implemented are planned nationally in a centralized manner at the head of the education system. Up until now most of the programs have been planned from the centralized education organization and very few have been planned at a local level. Thus, bureaucracy and official centralization prevents innovations, programming and decision making at lower levels of education. The coordination and communication between the various involved parties at different levels of the education system is not what headmasters had expected. Moreover, secondary and service affairs such as the amount of time spent on school administration and bureaucracies, which are supposed to be done by the headmasters, prevents them from playing their main role as educational leaders and managers. Comparing the mean of the headmasters' opinions (2.11) to the hypothetical mean (2.50) clarifies such an issue. Indeed, female managers' opinions were a little more positive than the male managers' opinions. However, as the null

hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified, the difference between their opinions has not been significant.

According to education experts structural and official centralization, lack of agreement between authority delegated to the managers and executors and their responsibility, secondary role of the headmasters as educational leaders and managers in comparison with their main role in doing secondary and service affairs and a lack of clarity regarding the capabilities of the planners in correlation to the capabilities of the executors of the plans is also one of the main concerns of the present structure of the education system. Education experts' opinions in this regard agreed with headmasters' opinions.

### **Suggestions**

- There must be programming and efforts to change the present centralized structure into structural and official decentralization in education. In fact, due to the geographical, ecological, cultural, social, economical, tribal and lingual diversity in different regions of Iran, this issue is of a great importance. Practical actions in this regard may lead to innovations and decision making suitable for the situation of each region which result in improvement of the education quality and function.
- Authority should be given to the education staff, executors and managers at all levels especially at school level in agreement with their responsibility.
- There must be efforts to set headmasters as educational leaders instead of being service providers.
- Accordance should be established among different levels of educational and official structure (vertical and horizontal) in order to reach common and similar understanding of the plans and programs being implemented.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 6

#### **7.2.6 Resistance to Change**

Resistance to change is obvious and it often occurs. Change must not only be negative and worrisome, it can also in many cases be positive and constructive. The important point is to identify the reasons and sources of the resistance and to apply appropriate methods to overcome it. Analysis of the available data has shown that the headmasters and other staff often resisted to changes. They mainly resisted to changes because: they were not sure of the positive results of the plans, the executors did not accept the programs of change, the benefits and needs of the executors of the plans were not seriously taken into account, the executors and the staff gained little reward for their many efforts and they were not informed of the plans before they being announced and implemented. Comparison of the mean of the headmasters' opinions (2.12) to the hypothetical mean (2.50) indicates such issues clearly. Also, in this inferential analysis, the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified. It means regarding such hypothesis, there was no significant difference between the opinions of

male and female managers.

All the education experts have believed that the managers and executors of the change plans in education resist to changes since: they were afraid of losing their occupational position, their benefits and needs were not taken into account, they had unsuccessful experiences in the past and were not sure of the positive results of the plans, they were not sufficiently informed about the necessity and objectives of the plans, they did not tend to accept more responsibilities and efforts and they were used to the current situation. Education system has not been able to solve these problems.

## **Suggestions**

- Reasons and factors of the executors' and staffs' resistance to change plans should be identified and there must be planning to reduce the resistance.
- Participation of the executors and managers should be asked for in planning and programming the plans and programs.
- Sufficient knowledge and information about the philosophy, objectives and benefits of the plans before their Implementation should be given to their executors.
- Benefits and needs of the staffs should be taken into account and their rewards should be paid to them according to their efforts.
- Available scientific theories should be used in order to reduce the resistance –for example Curt Lewin's model of Force-Field Analysis can be used to intensify change driving forces and reduce restraining forces. Also, the process of participative change can be used instead of coercive change. There must be tendency towards ascending programming, as well.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 7

### **7.2.7 Socio-cultural Obstacles**

Studying this hypothesis has shown that the socio-cultural factors were not taken into consideration, which would made it possible for other organizations and students' parents to cooperate with, invest in and support education plans because other organizations and students' parents have not supported the schools as expected. Indeed, every year charities, which some Iranians living either in or out of Iran build schools in different regions of the country and make good investments. However, the number of such people is still quite low and this issue has not yet become a public topic debate or a national impetus. The frequent changing of managers over short periods of time has become quite common and because of this issue plans and programs, which ought to be implemented are either forgotten or lose their importance. Due to such situations, managers get used to a routine schedule and do not tend to have middle-term or long-term goals regarding the implementation of programs. Headmasters are of the opinion that the individual's personal objectives are prioritized over that of the programs or of the education system. The mean of the headmasters' opinions (1.95) has been lower than the hypothetical

mean (2.50). The null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified which means there was no significant difference between the opinions of male and female managers.

In addition, according to 90.10% education experts, most parents were not ready to cooperate with and support schools and education programs due to their cultural and economical weaknesses. On the other hand, as students must pass a national entrance examination to enter universities and there is a great competition among them, their parents object to the implementation of the plans which do not prepare them for the examination. Education experts believe that the position of science and learning in society has decreased and the country's administrators and programmers view education as an economic burden. Different organizations do not provide required sufficient supports for school educational programs and the mass media are also not very supportive or cooperative with the education system. Education experts' opinions in this regard agreed with headmasters' opinions.

### **Suggestions**

- There must be efforts to strengthen the socio-cultural basis of families through increasing the society's level of literacy, knowledge and general culture. Mass media have important role in this regard.
- There must be programming to attract other organizations to cooperate with and support educational programs through issuing defined laws and appropriate agreements.
- The position of science and learning in society should be strengthened by gathering all pecuniary and spiritual facilities.
- The power of mass media should be used at its highest point to support education programs.
- There must be efforts to make administrators change their view and take education as production and capital, not consumption.
- There must be efforts to change the culture and focus on programs and objectives instead of the individuals and their tastes.
- Culture of stability in management should be made and culture of middle-term and long-term programming at different levels should be institutionalized.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 8

#### **7.2.8 Pecuniary and Financial Obstacles**

Comparing the mean of the headmasters' opinions (1.80) to the hypothetical mean (2.50) clarifies that the education system has not been able to provide the schools with the much-needed workshop, laboratorial, educational and technological equipments and facilities in accordance with the plans being implemented. In addition, in many cases the structural conditions of the schools were neither suitable for the needs of the plans being implemented. This meant that in such cases, the planners have made plans, which do not take the current position of

the schools and their space, equipments and facilities into account. The budget and per capita allowance allocated to the schools for 1 year was not able to meet their requirements. In 2006 the Kermanshah province had 3% of Iran's students although the budget, which was allocated to this province, was equal to 2.8%. In the same year, 59.7% of the province budget was allocated to education while the country's average was 66.5%. Usually about 94% of the budget of education is used for its personnel and only about 6% of it is used for educational purposes, which cannot meet the real needs in the education sector. According to statistical analysis the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified. It means regarding such issue, there was no significant difference between the opinions of male and female managers.

All education experts agreed that factors such as little equipment and financial support, shortage of educational and physical space in schools, a lack of agreement between programs and budget in education, insufficient financial credit to each of the plans being implemented in schools, delayed allocation of financial sources for implementation of the plans and a lack of financial administrators' belief in effectiveness of the plans and accordingly their little support are some of the obstacles, which hinder the successful implementation of the plans in schools.

### **Suggestions**

- Agreement must be established between units of programming and budgeting in education and budget should be allocated to each of the plans in accordance with their real needs.
- There must be efforts to increase the budget of education system, in general and the budget of education sector at school level, in particular through legislative authorities of government and parliament.
- There must be more efforts to attract participation and pecuniary and spiritual investment of the students' parents, other people and benefactors who build schools in education.
- Available pecuniary and financial sources should be enjoyed as well as possible. Indeed, sometimes available sources are not enjoyed well.
- Activities of the private sector in education should be intensified and a sound competition should be established through obviating the obstacles.
- Standard workshop and educational spaces should be designed and built according to the real needs of the schools.
- The view of the administrators, especially financial administrators, should be changed with regard to the necessity and importance of more financial investments in education particularly in schools.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 9

#### **7.2.9 Participation**

As a matter of fact, participation of the executors in the process of programming and decision-making makes them more responsible and committed to more effective and serious



implementation of the programs and decisions made. In such a case, the executors think of the plans as reproduction of their own thoughts, ideas and participation in decision-making and insist on implementing them. Participation increases the efficiency in organizations and reduces the resistance to organizational change. It also lessens clashes and conflicts and makes for a sound and suitable occupational environment. In such situations the value of the human factor in organization is recognized. Participation not only paves the way for using practical experiences and theoretical thoughts of the staff and executors, but also provides more motivation and encourages them. Staffs' participation is an important factor which influences their willingness in accepting the changes and supporting them. Results of describing and analyzing the aforementioned research hypothesis with regard to the difference between the mean of the headmasters' opinions (1.54) and the assumed mean (2.50) clarifies that headmasters, teachers, students and their parents have not sufficiently participated in programming and decision making related to the schools. In this analysis, the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified. It means there was no significant difference between the opinions of male and female managers.

Totally, 100% of education experts believed that the culture of participation in education is not internalized because: there is no seeking for and accepting participation, there is a sector view at different levels of proficiency, there is no systemic and participative thought, people do not accept mental and financial participation as a national investment and finally there are some restrictive rules and regulations. Education experts' opinions in this regard agreed with headmasters' opinions.

## **Suggestions**

- Culture of seeking for and accepting participation and group and team work at all educational and official levels particularly at schools should be enforced.
- There must be decentralization and a tendency towards changing the centralized structures with an approach focusing on schools. Authority should be delegated to lower educational and official levels especially in schools.
- Managers and staffs should be trained with required trainings in participative management and the culture of participation should be distributed throughout different levels of education.
- The spirit of cooperation among sectors should be increased and sector view should be prevented by means of methods of participative management and systemic thinking.
- Redundant restrictive official and financial rules and regulations should be omitted and there must be efforts to increase pecuniary and spiritual participation of all the society in education as a national investment.
- Real participation of the headmasters, teachers, students and their parents in programming and decision making in education should be attracted as well as possible.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 10

### **7.2.10 Controlling, Supervising and Assessing**

Controlling, the organizational, group and individual functions of the managers and staff are among the main duties of organizational leadership and management because of two purposes: to identify and reinforce the strengths of their functions and to identify and eliminate the weaknesses and shortcomings of their functions. Qualitative on-time control and supervision especially during the implementation of the plans and providing the staff and executors with correct feedback are of great importance. The obtained data has indicated that the education system has not functioned properly in controlling, supervising and assessing the plans being implemented in schools. Formative and summative assessments related to the plans being implemented in schools were incomplete and did not lead to correct feedback to reinforce the strengths and eliminate the weaknesses. In addition, pilot implementation of the plans at a restricted level, which is needed for their comprehensive implementation, did not meet the required quality. Therefore, in this statistical analysis the null hypothesis was rejected and the research hypothesis which asserted the lack of significant difference between the opinions of male and female managers was verified.

Moreover, 96.70% of education experts believed that: a lack of exact scientific controlling, supervising and assessing the implementation of the plans, lack of correct on-time feedback, failures to select supervisors from amongst skilled experienced individuals who are familiar with different aspects of the plans, preparing holistic nominal unreal reports to be offered to the higher organizational levels, lack of continuity in controlling and finally the emphasis of the current organizational structure on external control in stead of internal control are some of the other problems in this field. Education experts' opinions in this regard agreed with headmasters' opinions.

### **Suggestions**

- Continuous exact scientific qualitative and quantitative controlling, supervising and assessing are needed for the plans being implemented at different levels of education, especially at schools.
- Formative assessment must be emphasized in order to prevent plans from digression during their performance, to revise the weaknesses on time and to have the summative assessment to be sure of the success of the plans at the end of them.
- Correct on-time feedback resulting from pilot implementation of the plans should be provided before vast implementation of them in order to enhance the strengths and revise the weaknesses. Pilot implementation should be done on samples which are real representatives of the society.

- Skilled experienced individuals who are familiar with different aspects of the plans should control, supervise and assess the implementation of the plans.
- Controlling, supervising and assessing should be continuous and internal control should be emphasized instead of external control.
- Correct and exact system of reporting must be established and holistic nominal unreal reports on implementation of the plans and function of the managers and executors should be shunned.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 11

### **7.2.11 Information Technology (IT)**

Today's world is called knowledge age, digital age, speed age, technology age, communication age, information age and age of knowledge explosion. By means of communicational and informational technologies, geographical boundaries have vanished and everybody can access the latest information from the furthest areas of the world and be informed about the innovations and increasing advances of man in the shortest time. In current situations, appropriate investment in developing communication and information technology is an immediate need and necessity in order to enjoy up-to-date knowledge. Obtained data indicates that the teachers', staffs' and students' access to the internet and practical use of it in schools was less than expected. Trainings provided to the teachers and students did not meet their expectations. Indeed, during recent years there have been great efforts to develop IT throughout the country and education system and establish computer workshops in schools and hold training courses for teachers. However, according to the headmasters such endeavors were no sufficient and did not meet the real needs of the schools. An internet network among schools has not been established by the time that this study has been carried out. In some cases the communication network between schools and education offices is established but these bilateral communications are not really useful and effective. The space allocated to the computer workshops is not as sufficient and the computers given to the schools are not enough. In 2006, there were only 1.13% computers per each 100 students in Kermanshah Province. In the same year only 30 high schools out of about 400 high schools of the province were connected to the Internet. In 2005, seepage coefficient of the Internet in the country was 10% and in the Kermanshah Province it was only 3.36%. In the Kermanshah Province, high school students' access to the Internet has been 14.40% in the same year. As the null hypothesis was rejected and the research hypothesis was verified there was no significant difference between the opinions of male and female managers.

All education experts have also believed that there are some problems which are not eliminated. These problems include: lack of teachers' and students' easy access to the Internet, lack of high-speed connection to the Internet, lack of sufficient suitable computer equipments, lack of standard computer workshops, insufficient budget for IT and practical trainings to meet the

needs of the schools. Another problem is that no one seems to be allocated the role of organizing and implementing the usage of IT within the schools. Education experts' opinions in this regard agreed with headmasters' opinions.

### **Suggestions**

- Educational space should be provided and standard computer workshops should be established in schools.
- Teachers and students should be provided with practical trainings in IT and modern technologies.
- All the schools should be able to connect to the Internet.
- Efficient communication network should be established among schools and education offices in order to exchange information and enjoy required effective communication.
- Human force expert in IT should be allocated to schools and be predicted in organizational chart. Such forces are supposed to manage IT workshops and provide required trainings in this field.
- IT credit should be predicted in all high school majors and also in pre-high-school grades.

Conclusions and suggestions based on description and analysis of the research hypothesis no. 12

#### **7.2.12 Education Objectives**

Nowadays education is the basis for change and development in different aspects of society. The main reason for many advances and failures of the societies in different cultural, economical and social aspects lies within education. Here, an important question arises: if education cannot carry out its duties and reach its objectives how can a society reach its defined large-scale objectives in today's hastily changing world?

Results of analyzing the aforementioned research hypothesis have shown that the mean of the headmasters' opinions (2.30) is lower than the hypothetical mean (2.50). It means that in general education objectives, which are expected, are not reached by implementing plans of change. An example which indicates this is that in 2006 the Kermanshah province was ranked 23rd among 30 provinces of the country regarding the number of students accepted in university national entrance examinations. However, female managers' opinions were a little more positive than the male managers' opinions regarding education objectives which have been reached. Indeed, according to the statistical analysis, the null hypothesis at the probable level of 0.95 was rejected and the research hypothesis was verified which means the difference between their opinions was not significant.

Moreover, 93.30% of education experts believed that education could not reach the real objectives of the change plans and programs as expected. Education experts' opinions agreed with headmasters' opinions.

## **Suggestions**

In the present research different aspects of education system of Iran and the Kermanshah Province were studied. In addition, some of the present problems were recognized and elaborate suggestions were provided to eliminate them. Hence, it is expected that required revisions be carried out through rethinking to reach the objectives of education. Revisions should address the following items:

Reviving efficient and effective educational leadership and management, providing real trainings for successful implementation of the change plans, scientific planning of educational plans based on the situations and needs of different regions, tending toward decentralization, enjoying scientific methods of motivating staffs and managers and executors, focusing on expertise, revising organizational structure, reducing resistance to change through scientific methods, eliminating socio-cultural obstacles, solving pecuniary and financial problems of education, enjoying real participation of the headmasters and teachers and students and their parents in educational programming and decision making, providing advanced services in IT and finally utilizing the scientific processes of controlling, supervising and assessing the plans and programs being implemented and continuing such processes.

The following four main activities are introduced as the base and foundation of any effective action and change in reaching the objectives of education:

- Need assessment and exact expert recognition of the present sources and constraints of the defined program or change, considering all its aspects (studying and analyzing the status quo)
- Planning necessary changes based on real needs in order to reach defined objectives by means of the recognition obtained from studying the present sources and constraints (predicting and planning the desired situation)
- Exact implementation of the plans and planned changes according to the predicted programs to reach the defined objectives (moving from the status quo to the desired one)
- Providing continuous feedback to enhance the strengths and revise the weaknesses of the plans and changes being implemented

### **7.3 Suggested Model of Planning and Creating Effective Change in Educational Organizations**

Educational organizations including schools have unique exclusive characteristics. Such organizations deal with the world's most complicated creature; human being. Dealing with humans due to their complicated nature needs special skills and expertise. It is possible for many of management and scientific plans and programs to be implemented easily in industrial organizations and even in other social organizations but not in educational and training ones.

In this part with regard to the comprehensive profound studies carried out in research literature and especially in the subject of *change* and analysis of data and obtained results, a particular model is suggested for programming and creating effective change in educational organizations. Then, key factors effective in reaching the objectives of this model are introduced. As shown in Figure 7- 1, this model includes 6 main steps and they are change leadership and management who are in charge of playing the main role of planning and implementing these steps effectively. If such steps are programmed and implemented carefully and effectively, the function and effectiveness of the mentioned organization would improve. In fact, each of these 6 steps is always in continuous bilateral interaction with the environment –internal and external environment of the educational organization. Moreover, in each of the steps of this model the feedback of the carried out activities and actions are provided continuously and on-time in order to identify and enhance the strengths and recognize and eliminate the weaknesses and shortcomings. This model is designed based on a systemic process. Now, the 6 steps are explained briefly:

1. **Need assessment for change:** need is the distance between the current situation and the desired one. In other words, it is the distance between “are”s and “should”s. Need assessment focuses on assessing, identifying and determining the needs, priorities, necessities, urgencies and shortcomings with regard to the situations, conditions and facilities of each region. Need assessment leads to identification of at least one particular need or shortage and indicates the necessity of creating change and moving from the current situation toward the desired one.
2. **Clarifying the objectives:** objectives are determined based on real needs and provided with regard to the vision and strategy of the future programs and changes. Objectives must be real, defined, measurable and applicable. Based on their duration, objectives are categorized into 3 categories: short-term, middle-term and long-term.
3. **Change planning:** planning means thinking before acting, planning proper implementation of the plans and changes to reach the objectives. In other words, planning determines the strategy and method of reaching the objectives. through connecting three periods of past, present and future and determining the required methods, facilities, sources, equipments and time, paves the way to reach short-term, middle-term and long-term objectives in a proper way.
4. **Change implementation:** change programs are implemented base on predetermined objectives by means of defined and programmed plans. Limited pilot implementation is essential before vast comprehensive implementation in order to identify the strengths of the plans and programs, enhance them and discover and eliminate their weaknesses and shortcomings.
5. **Internalizing the change:** internalization eases the continuity of the plans and programs through making balance. It seeks to internalize the established changes and implemented plans in organizational and individual personality of people.
6. **Assessment, control and supervision:** assessment, control and supervision are continuous dynamic processes which are carried out to become sure whether or not organizational actions and plans lead to reach the objectives. Assessing the plans and changes can be carried out at three levels: 1) assessment before implementation (actions like studying the skills, sources, facilities, knowledge and attitude of people about change or the new program), 2) assessment during implementation (gaining information about the degree of progress at each level of the plan), and 3) assessment after

implementation (in order to know whether the program has reached the desired objectives or not). The results of the assessment should continuously lead to providing feedback of the activities and plans. Providing on-time exact feedback is of great importance and emphasized.

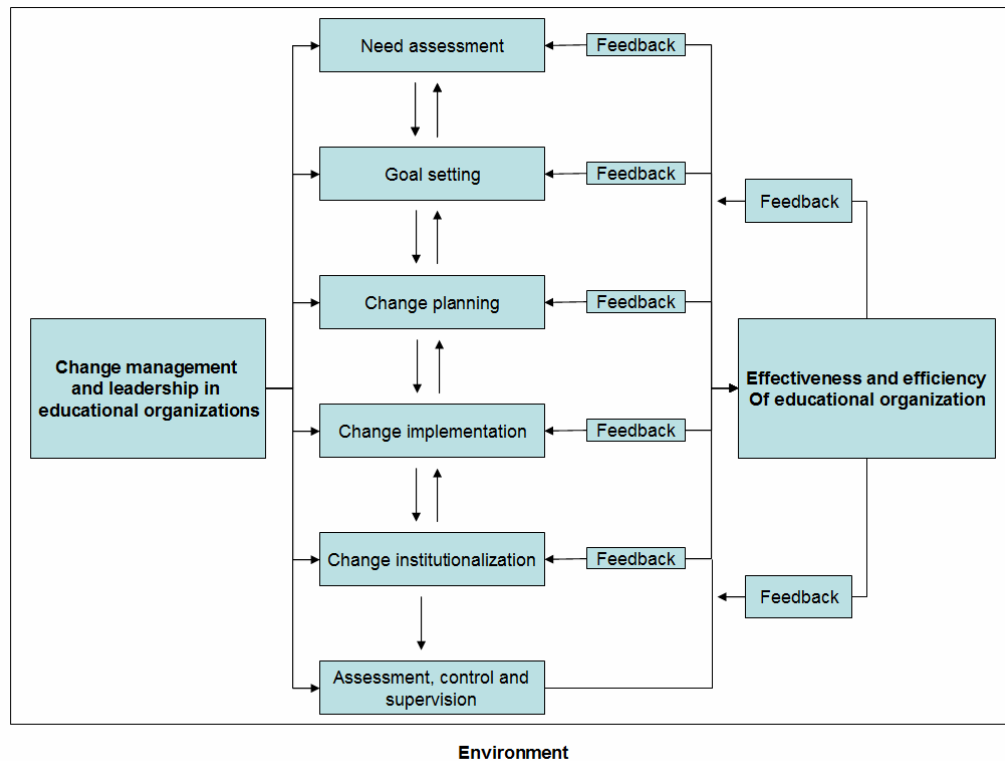


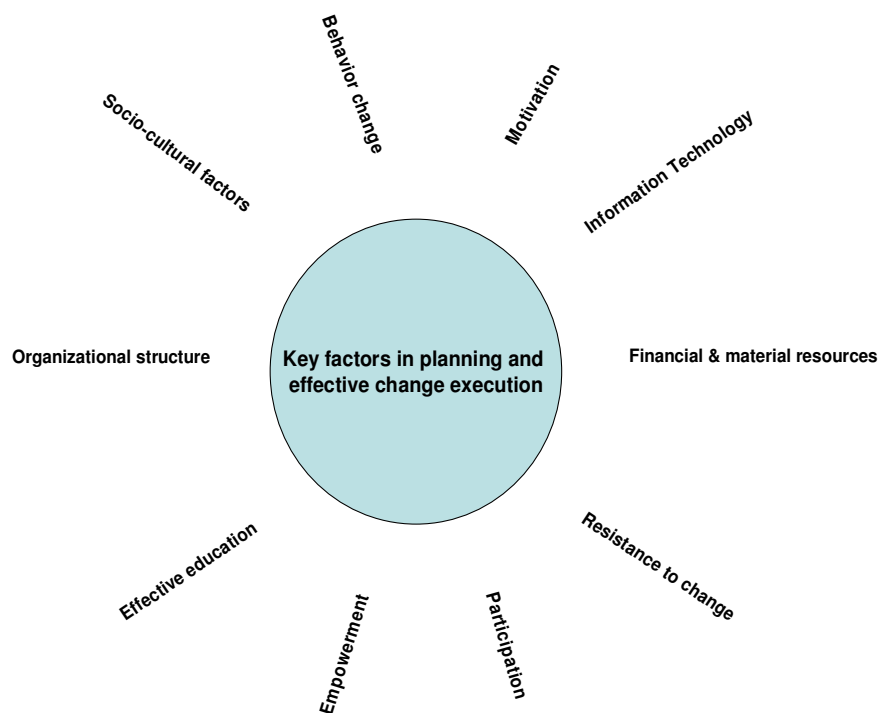
Figure 7- 1: A model for planning and making effective change in educational organizations

### 7.3.1 Key Factors in Planning and Implementing the Suggested Model of Change

As mentioned before, by reviewing the literature and through field study done in this research, key factors which are effective in success and reaching the objectives of the suggested model of change have been identified and presented. Complete recognition of the role and importance of each of these key factors and using them in planning and implementing educational changes are of the main duties of change leadership and management. Lack of paying sufficient attention or ignoring any of these factors would prevent reaching change objectives. Such factors are introduced in Figure 7- 2. Educational leadership and management should take effective actions in the following cases:

providing the executers with required effective trainings, making change in executers' and staffs' levels of knowledge, attitude, individual behaviour and organizational and group behavior, motivating them, empowering the staff and delegating them proper authority, enjoying the participation of all the beneficiaries and executers, providing required pecuniary and

financial sources, reducing resistance to change, using information technology appropriately, establishing suitable organizational structure and providing proper socio-cultural bases.



**Figure 7- 2:** Key factors in planning and effective change implementation

## 7.4 Recommendations for Further Studies

It is clear that factors such as the constraints of time, place, budget, facilities and human force prevent a research from finding the answers to all the questions and hypotheses about education comprehensively. In addition, with regard to the wideness of education system and the variety of its activities and services and also the complication of educating human with his all unique characteristics, it is practically impossible to study its all aspects in a single research. Due to the aforementioned constraints, this research has been carried out in the Kermanshah province and at secondary education level. Therefore, it is suggested that other researches be carried out at national scale studying issues such as the obstacles of change at different levels of situation, reasons of not reaching educational objectives, socio-cultural problems and issues related to education, education leadership and management, participation and investment in education, credits and facilities allocated to education, changes in Iran's education during recent decades and studying the vision and future of education in Iran.



## **8 Summary**

### **8.1 English Summary**

In today's world, organizations have to plan and change according to global and environmental changes not only to stand ahead of the others, but also to be able to survive and go on. In other words, they have to create competitive advantages to survive. In fact, emerging pioneer organizations have passed this step and are the origins and the beginners of change.

Among various organizations, education organization and the schools adhering to it have a distinctive pivotal role in changes and future of countries since they are in charge of providing and training "human force", i.e. the asset and the most important factor of production of any organization.

During three last decades of Islamic Revolution of Iran there have been many undeniable efforts by authorities, figures and administrators of educational and cultural affairs in order to change and improve Iran's education. However, in spite of all efforts, in the age called "knowledge-based age" or the age of knowledge explosion with education being introduced as the key of all developments, Iran's education has not been able to change and improve increasingly and keep pace with global changes or even with changes of other sectors inside the country, in spite of the fact that according to the vision document of Islamic Republic of Iran in the perspective 2025, Iran had to become a developed country at the first level of economy, science and technology in the region, especially in south west Asia. In this document, the particular role of education in reaching the objectives of the twenty-year vision has been emphasized.

Anyway, centralized educational system, weakness and inefficiency of educational leadership and management, low teachers' occupational satisfaction, shortage of educational budget and credits, little motivation, inadequacy of educational content and weakness of educational planning, are of the concerns preventing country's education from change and being dynamic. For instance, the budget of education has been decreased from 2000 on.

However, regardless of the general problems of the education at national level, education of Kermanshah province does not occupy a fine position among other provinces. According to official statistics of the recent years, among 31 provinces, this province occupied a level lower than the average of the country, especially in secondary education. For example, by studying the results of the universities' national entrance examination and comparing the number of students being accepted, it is concluded that this province has been among the last provinces. Education has always encountered plans and programs which have not had enough efficiency due to their inappropriate planning such as severe centralization and not paying attention to the real needs

and situations of different regions. Also in some cases required bases for their proper implementation in different regions were not prepared.

The present research aimed at studying the obstacles of successful implementation of the educational changes and plans and reaching educational objectives in high schools of Kermanshah. The factors distinctly being scientifically studied in this regard are: educational leadership and management, education and changing behavior, motivating, resistance to change, educational planning and programming, educational need assessment, organizational structure, participation, control supervision and assessment, socio-cultural bases, pecuniary and financial sources and information technology.

In order to reach the aforementioned goals and after a vast comprehensive review of literature and face-to-face interviews with a number of education experts and headmasters, 12 research hypotheses in agreement with mentioned factors were presented and tested scientifically.

In order to increase the scientific credit of this research, two different statistical populations including headmasters (male and female) and education experts were selected. Methods of research used in this study are Delphi technique and survey study.

Sample size of this research included 112 headmasters of public high schools in Kermanshah (56 male headmasters and 56 female headmasters) and 30 educational experts in this city in academic year of 2006-2007.

A closed-ended questionnaire with 81 questions was prepared to be given to the headmasters and also an open-ended questionnaire with 13 questions and a closed-ended questionnaire with 58 statements were prepared to be given to the experts of education.

To determine the validity of measurement tool opinions of university professors, educational experts and a number of headmasters were used and to determine the reliability of the research proper statistical analysis was done through Cronbach's alpha and reliability coefficient of 94% was obtained.

In order to have inferential and descriptive analysis statistical methods of percentage taking, frequency tables, mean and standard deviation were used. Also statistical methods of one-sample t-test and two-sample t-test for comparing the means of the two groups were utilized.

Research conclusions have indicated that the main obstacles of successful implementation of the educational changes and plans and reaching desired educational objectives according to their importance are:

- Lack of accepting and seeking participation at different levels of education
- Weakness of educational supervision, leadership and management
- Shortage of budget and financial inadequacies of education
- Socio-cultural problems
- Inappropriate organizational structure
- Resistance to change

- Inadequacies related to education and obstacles of changing behavior
- Lack of motivation
- Weakness of educational planning for making change

At the end of the research, required solutions and suggestions were provided to enhance the strengths, revise weaknesses, eliminating the obstacles and constraints of successful implementation of educational changes and plans in order to reach the objectives of education. Also, a suggested model is presented for planning and creating effective change in educational organizations.

## **8.2 Deutsche Zusammenfassung**

Um ihre Existenz zu sichern, müssen die heutigen Institutionen in der Lage sein, sich an gesellschaftliche und globale Veränderungen anzupassen und mit ihnen zu wachsen. Nur somit werden sie im Wettbewerb von Dauer bestand haben. Marktführende Institutionen gehen sogar einen Schritt weiter und initiieren selbst Veränderungen.

Unter verschiedenen Institutionen spielen Bildungsorganisationen und dazugehörige Schuleinheiten bezogen auf die Zukunft eines Landes eine unabdingbare Rolle. Der Grund dafür ist, dass diese die Verantwortung für die Bildung der Menschen, welche das Kapital einer Gesellschaft darstellen, übernehmen.

Nachdem die islamische Revolution 30 Jahre vergangen ist, wurden in dieser Zeit viele Bemühungen und Anstrengungen durch die Verantwortlichen in den Bereichen Kultur und Bildung unternommen. Aber trotz dieser Bestrebungen konnte der Bildungsbereich im Iran in einer Zeit, in der Wissen und Lernen als Schlüssel zum Erfolg bezeichnet wird, sich nicht zeitgemäß verändern bzw. entwickeln. Nach dem 'Zwanzig Jahr Programm (2005-2025)' sollte der Iran in den Bereichen der Wirtschaft, Wissenschaft und Technologischen Entwicklung mindestens in Süd-West-Asien den Spitzenplatz erreicht haben. Nach diesem Konzept war der Bildung eine besondere Gewichtung beigemessen. Unter anderem das zentralorientierte Bildungssystem, die Schwäche im Management, die Unzufriedenheit der Lehrenden, das niedrig eingesetzte Budget, die Demotivation, die defizitären Inhalte und die Missplanung stellen Probleme dar, die eine adäquate Entwicklung bzw. Veränderung im Bereich Bildung verhindern. Als Beispiel mussten wir leider nach dem Jahr 2000 eine kontinuierliche Verminderung des Budgets im Bildungsbereich zur Kenntnis nehmen. Abgesehen von der Situation auf nationaler Ebene ist der Zustand des Bildungswesens im Bundesland Kermanshah im Vergleich zu anderen Bundesländern nicht in einem akzeptablen Rahmen. Nach offiziellen Berichten ist Kermanshah in den letzten Jahren besonders im Bereich gymnasialer Bildung unter 31 iranischen Bundesländern schlechter als der Durchschnitt. Als Beispiel bezogen auf die Ergebnisse der Aufnahmeprüfung für die Universitäten belegt dieses Bundesland eines von den letzten Plätzen.

Die Hauptprobleme sind auf einer Seite die Missplanung in der Konzeption und auf der anderen Seite die misslungene Umsetzung derer. Durch das zentralorientierte Bildungskonzept werden die regionalen Bedürfnisse und Gegebenheiten außer Acht gelassen.

Das Hauptziel dieser Forschungsarbeit ist die Analyse der Erfolgshindernisse für die Veränderung und Entwicklung sowie deren Umsetzung auf gymnasialer Ebene in Kermanshah. Um dieses Ziel zu erreichen sind folgende Schwerpunkte analysiert wurden: Management, Verhaltensänderung, Motivation, Blockadereaktion in Bezug auf Veränderungen, Planung und Konzeptentwicklung, Bedarfsermittlung, Organisationsstruktur, Partizipation, Controlling, kulturell gesellschaftliche Aspekte, Finanzierung und Informationstechnologie. In diesem Rahmen sind nach umfangreichen literarischen Recherchen und Gesprächen mit einigen ErziehungswissenschaftlerInnen und SchuldirektorInnen 12 Hypothesen aufgestellt und untersucht worden. Um repräsentative Ergebnisse zu erreichen sind als statistische Grundgesamtheit 2 Analysegruppen ausgewählt worden: 1. ErziehungswissenschaftlerInnen und 2. SchuldirektorInnen. Als Forschungsmethoden waren Delphi und Survey Study eingesetzt. Bei den 112 Befragten handelt es sich um die DirektorInnen der öffentlichen Gymnasien der Stadt Kermanshah, davon 56 Männer / 56 Frauen und 30 ExpertInnen des Bildungswesens vom Schuljahr 2006/2007. Als Instrumente für die Befragung waren eingesetzt: 1. ein Fragebogen mit 81 geschlossenen Fragen für die DirektorInnen und 2. ein Fragebogen mit 13 offenen sowie ein Fragebogen mit 58 geschlossenen Fragen für BildungsexpertInnen. Um die Anwendbarkeit der Fragebögen zu überprüfen sind diese ExpertInnen aus universitären und anderen Bildungsbereichen vorgelegt worden. Die Stichhaltigkeit bzw. Gültigkeit dieses Instrumentes ist von den Fachleuten bestätigt worden. Die Zuverlässigkeit dieser Forschung ist mittels *Alpha-cronbach* mit Koeffizienten 94% ebenso abgesichert worden.

Für die deskriptive und schließende Analyse der Ergebnisse sind Methoden der prozentualen Auswertung, Darstellung in Tabellen, Diagrammen, Mittelwert-Bestimmung, Eine-Variable t-test und Zwei-Variable t-test für den Vergleich der Mittelwerte bei der zwei befragten Gruppen eingesetzt worden. Nach den Ergebnissen der Auswertung sind die Hindernisse in der erfolgreichen Planung und Umsetzung im Bildungswesen in folgender Reihenfolge:

- Fehlende Partizipation auf verschiedenen Ebenen des Bildungswesens
- Schwäche im Management und Controlling
- Niedrig eingesetztes Budget
- Kulturelle und gesellschaftliche Probleme
- Defizitäre Organisationsstrukturen
- Blockadereaktionen gegenüber den Veränderungen
- Hindernisse bezogen auf Verhaltensänderungen
- Demotivation
- Missplanung in der Konzeption und deren Umsetzung.

Die Ergebnisse der Forschung durch die Auswertung sowohl bei der Delphi Methode als auch bei Survey Study sind identisch. Zum Schluss dieser Forschungsarbeit wurden Vorschläge bzw. Empfehlungen zur Optimierung der Stärken und Korrektur der Schwächen entwickelt. Diese sollen die Hindernisse überwinden und die Wege zu einer erfolgreichen Planung aufzeigen. Letztendlich wird ein Modell präsentiert, welches die Planung für die notwendigen Veränderungen in Bildungsinstitutionen hervorruft.

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## 10 Appendixes

### Questionnaire No. 1

#### Dear colleague:

The questionnaire you have been provided with has been designed for doing a university research concerning the study of the obstacles of successful implementation of educational plans and changes in high schools in Kermanshah.

Please answer the questions carefully and patiently in order to improve the scientific quality of the research.

This questionnaire lacks names; however, the information is considered confidential and is merely used for research. Please put  in the blanks provided.

#### N.B:

Wherever word 'plan' has been used in the questionnaire, this means any plan such as:

Cost price plan, continuous class asking plan, Information Technology (IT) plan, family education plan, cultural and artistic competition plan, scientific festival plan, sport competition plan, effort plan, parent participation plan, student organization plan, higher teaching methodology plan, counselor's cooperator plan, schooling and job information plan and so on which have been circulated to schools by ministry of education, provincial department of education or the three-district departments of education in Kermanshah.

1. Before executing the plans, to what extent, have you been given the necessary information and knowledge about them?

Very little  A little  Moderate  Much  Very much

2. Before executing the plans, to what extent have you been informed of their necessity and importance?

Very little  A little  Moderate  Much  Very much

3. Before executing the plans, to what extent have the teachers been given the useful and necessary information?

Very little  A little  Moderate  Much  Very much

4. Before executing the plans, how much information and required knowledge has been given to the students?

Very little  A little  Moderate  Much  Very much

5. Before executing the plans, to what extent have the students' parents been given the required and necessary information?

Very little  A little  Moderate  Much  Very much

6. To guide the schools in implementing of plans circulated, has a team or a specific group been introduced to school or have they been known to you?

Yes  No

If yes, please answer the following questions:

6.1. To what extent, have there been competent people with necessary specialty in the group?

Very little  A little  Moderate  Much  Very much

6.2. To what extent, have the introduced people in the guide team been famous and experienced enough?

Very little  A little  Moderate  Much  Very much

6.3. To what extent, has the leader of the team enjoyed the required qualifications?

Very little  A little  Moderate  Much  Very much

6.4. To what extent, has the guiding team been successful in solving the problems and executing the plans?

Very little  A little  Moderate  Much  Very much

7. To what extent, have the plans circulated to the schools had clear, specific and achievable objectives?

Very little  A little  Moderate  Much  Very much

8. To what extent, have the plans circulated to the schools had long term objectives with clear pictures of the future?

Very little  A little  Moderate  Much  Very much

9. To what extent, have the specific, suitable and enforceable way in achieving the objectives been included in the plans?

Very little  A little  Moderate  Much  Very much

10. To what extent, has the use of ways and other procedures other than the introduced ways been necessary to materialize the goals of the plans?

Very little  A little  Moderate  Much  Very much

11. For transferring the information and introducing the plans better to you, to what extent have meetings and sessions been held?

Very little  A little  Moderate  Much  Very much

12. To what extent, have the meetings and sessions been effective in response to your ambiguities and questions?

Very little  A little  Moderate  Much  Very much

13. In order to transfer the information and introduce the plans to you better, to what extent have the mass media such as pictures, films, posters, brochures, interviews, TV and radio panels and so on been used?

Very little  A little  Moderate  Much  Very much

14. To what extent, has the usage of the above-mentioned media in the previous question, helped in the common understanding of the executives in the goals of the plans and in removing the existing ambiguities?

Very little  A little  Moderate  Much  Very much

15. To what extent, have the officials' behaviors and functions been an appropriate pattern in supporting of the executing the plans?

Very little  A little  Moderate  Much  Very much

16. To what extent, has the ground for the execution of plans and doing the school affairs and conditions of risking and welcoming the new thoughts without getting worried and the fear of their consequences or reprimanding existed?

Very little  A little  Moderate  Much  Very much

17. To what extent, have you been given the authority of decision- making proportionate to your responsibilities?

Very little  A little  Moderate  Much  Very much

18. To what extent, have the schools been successful in executing the plans circulated to them?

Very little  A little  Moderate  Much  Very much

19. To what extent, has the education department been able to put an end to the obstacles in the way of executing the plans?

Very little  A little  Moderate  Much  Very much

20. Has the possibility of creating the short- term achievements during the execution of the plans been predicted?

Yes  No

If yes:

20.1. To what extent, have the achieved short- term objectives been introduced to others?

Very little  A little  Moderate  Much  Very much

20.2. To what extent, have the achieved short- term goals been made important and outstanding as an introduction to further achievements?

Very little  A little  Moderate  Much  Very much

21. To what extent, have the officials assigned on part of the education department been

- continuing their cooperation in the execution of the plans until their completion?
- Very little  A little  Moderate  Much  Very much
22. To what extent, the headmasters and the rest of the staff who have been successful in the execution of plans been granted organizational and job promotion?
- Very little  A little  Moderate  Much  Very much
23. To what extent, have the executed plans paved the way for the execution of the new plans?
- Very little  A little  Moderate  Much  Very much
24. After the execution and completion of the plans, to what extent, has the education department taken actions to examine the results?
- Very little  A little  Moderate  Much  Very much
25. Based on your own previous experiences concerning the executed plans, to what extent, are you sure that by executing the new plans the situations will become better than before?
- Very little  A little  Moderate  Much  Very much
26. To what extent, have the previous executed plans been continuing in schools?
- Very little  A little  Moderate  Much  Very much
27. To what extent, can the previous executed plans be considered as an integral part of the school's body so that without their existence in school they will cause vacuum?
- Very little  A little  Moderate  Much  Very much
28. To what extent, have the previous executed plans become a part of your management and administrative behavior and still you consider their execution as a must?
- Very little  A little  Moderate  Much  Very much
29. To what extent, have the objectives and the ways of execution of the plans been made in such a way that the headmasters and other executives have got the same and coordinated understanding?
- Very little  A little  Moderate  Much  Very much
30. To what extent, have the circulated plans been made according to the vernacular and geographical conditions as well as regional requirements?
- Very little  A little  Moderate  Much  Very much
31. To what extent, has the allocated time been useful in executing the plans?
- Very little  A little  Moderate  Much  Very much
32. To what extent, do you emotionally and spiritually feel comfortable at work?
- Very little  A little  Moderate  Much  Very much
33. To what extent, are you worried about your future job security?
- Very little  A little  Moderate  Much  Very much



34. To what extent, do the salary and fringe benefits that you receive meet your real life needs?  
Very little  A little  Moderate  Much  Very much
35. In your current job, to what extent, do you enjoy social esteem?  
Very little  A little  Moderate  Much  Very much
36. How much are the teachers and school staff attached to each other?  
Very little  A little  Moderate  Much  Very much
37. To what extent, are the headmasters respected on part of teachers and employees in school?  
Very little  A little  Moderate  Much  Very much
38. To what extent, are the headmasters respected by the authorities of education?  
Very little  A little  Moderate  Much  Very much
39. To what extent, have material benefits such as fringe benefits, allowance been allocated to the executives in return for the execution of the plans?  
Very little  A little  Moderate  Much  Very much
40. How much have the executives of the plans been appreciated in written form and other non-material ways?  
Very little  A little  Moderate  Much  Very much
41. To what extent, have the appreciations expressed or the rewards given to the people been proportionate to actions taken by them?  
Very little  A little  Moderate  Much  Very much
42. In the event that you have done suitable and effective services, expecting reward and appreciation in return, to what extent, have you been rewarded for your services?  
Very little  A little  Moderate  Much  Very much
43. To what extent, has the education department taken legal and administrative punitive measures against the nonchalant, idle employees?  
Very little  A little  Moderate  Much  Very much
44. To what extent, have the school teachers welcomed the execution of the circulated plans and cooperated in their execution voluntarily?  
Very little  A little  Moderate  Much  Very much
45. To what extent, is there sympathy and coordinated group attempt among the managers in different administrative and educational levels for the successful execution of the plans?  
Very little  A little  Moderate  Much  Very much
46. To what extent, have the executed plans been effective in resolving the needs and problems of students and schools?

Very little  A little  Moderate  Much  Very much

47. To what extent, have the necessary equipment and possibilities been provided to your school and been proportionate to the execution of the plans?

Very little  A little  Moderate  Much  Very much

48. To what extent, have lack of equipment and possibilities prevented the successful execution of the plans in schools?

Very little  A little  Moderate  Much  Very much

49. To what extent, has the lack of appropriate physical and educational space necessary for the plans prevented the successful execution of them.

Very little  A little  Moderate  Much  Very much

50. To what extent, has your school been provided with financial aid when needed for the execution of the plans?

Very little  A little  Moderate  Much  Very much

51. To what extent, has the shortage of budget and financial credit prevented the execution of the plans?

Very little  A little  Moderate  Much  Very much

52. To what extent, has the per-capita income allocated to your school during a school year met the real needs of school?

Very little  A little  Moderate  Much  Very much

53. To what extent, have the administrative and educational communications and instructions circulated to schools been necessary and effective in improving the educational quality?

Very little  A little  Moderate  Much  Very much

54. To what extent, does carrying out the affairs of school depend on the decisions taken beyond the school level?

Very little  A little  Moderate  Much  Very much

55. To what extent, do the laws and regulations made in higher levels suffice to answer the different problems?

Very little  A little  Moderate  Much  Very much

56. To what extent, has doing the peripheral and service affairs of school prevented you from performing your main role as an educational manager?

Very little  A little  Moderate  Much  Very much

57. To what extent, have the various organizations cooperated with school in executing the plans?

- Very little  A little  Moderate  Much  Very much
58. To what extent, have the students' parents cooperated with school in executing the plans?  
Very little  A little  Moderate  Much  Very much
59. To what extent, has the change of managers higher than school levels caused to abandon the plans or make them less important?  
Very little  A little  Moderate  Much  Very much
60. To what extent, does the replacement of headmasters prevent the plans from being executed successfully and cause them to be less important?  
Very little  A little  Moderate  Much  Very much
61. To what extent, have various administration levels in education tried to update the educational school activities in line with creating qualitative changes?  
Very little  A little  Moderate  Much  Very much
62. To what extent, have the headmasters been ready to accept the new extra-responsibilities beyond their assigned organizational duties?  
Very little  A little  Moderate  Much  Very much
63. To what extent, do the teachers and other employees in school accept the extra-responsibilities voluntarily in addition to the organizational duties without any compulsion?  
Very little  A little  Moderate  Much  Very much
64. When circulating the new plans to school for execution, to what extent, do school teachers consider them in line with their own opinions?  
Very little  A little  Moderate  Much  Very much
65. To what extent, in designing the plans, have the interests and needs of the employees and executives been taken into consideration?  
Very little  A little  Moderate  Much  Very much
66. To what extent, have you been aware of the plans before being circulated to school?  
Very little  A little  Moderate  Much  Very much
67. To what extent, do you consider the plans circulated to school in line with your own contemplative wishes?  
Very little  A little  Moderate  Much  Very much
68. When circulating new plans to school for execution, to what extent, have the headmasters disagreed with them?  
Very little  A little  Moderate  Much  Very much
69. In designing and decision-making about the plans which have been circulated to schools, to what extent, have your participation and sympathy been used?

Very little  A little  Moderate  Much  Very much

70. In designing and decision-making about the plans circulated to schools, to what extent have the teachers' participation and sympathy been used?

Very little  A little  Moderate  Much  Very much

71. In designing and decision-making about the plans circulated to schools, to what extent have the parents' participation and sympathy been used?

Very little  A little  Moderate  Much  Very much

72. In designing and decision-making about the plans circulated to schools, to what extent, have the students' participation and sympathy been used?

Very little  A little  Moderate  Much  Very much

73. During the execution of the plans, have they been evaluated in written form or through a questionnaire?

Yes  No

If Yes:

73.1. To what extent, has the evaluation given rise to consolidating the strengths and removing the weaknesses of the plans?

Very little  A little  Moderate  Much  Very much

74. During the implementation of the plans have any certain people come to your school to evaluate them?

Yes  No

If yes:

74.1. To what extent, have they referred to school for the evaluation of the plans?

Very little  A little  Moderate  Much  Very much

74.2. To what extent, have the evaluators' reference helped to consolidate the strengths and to correct the weaknesses of the plans?

Very little  A little  Moderate  Much  Very much

75. To what extent, has after the evaluation of the plans their feedback been announced to schools?

Very little  A little  Moderate  Much  Very much

76. After complete execution of the plans has the summative evaluation been done from them?

Yes  No

If yes:

76.1. To what extent, has accurate, real and scientific evaluation been carried out from the executed plans?

Very little  A little  Moderate  Much  Very much

76.2. To what extent, has the education department asked for the regular feedback of the problems concerning the execution of the plans in schools?

Very little  A little  Moderate  Much  Very much

76.3. To what extent, has the evaluation done created required feedback for the improvement and consolidation of the plans?

Very little  A little  Moderate  Much  Very much

77. Have any plans for experimental execution been circulated to your school?

Yes  No

If yes:

77.1. After the experimental execution, to what extent, have the plans been corrected?

Very little  A little  Moderate  Much  Very much

78. On the whole, to what extent, have schools reached the predetermined goals of plans?

Very little  A little  Moderate  Much  Very much

79. Has your school been connected to the Internet?

Yes  No

If yes:

79.1. To what extent do the teachers and employees at school have access to the Internet?

Very little  A little  Moderate  Much  Very much

79.2. To what extent do the teachers and employees have the ability and skill to use the Internet?

Very little  A little  Moderate  Much  Very much

79.3. To what extent, do the teachers and employees at school use the Internet scientifically during the day?

Very little  A little  Moderate  Much  Very much

79.4. To what extent, do the students have access to the Internet at school?

Very little  A little  Moderate  Much  Very much

79.5. To what extent, do the students have the necessary skill and ability in using the Internet?

Very little  A little  Moderate  Much  Very much

79.6. To what extent, do the students use the Internet daily?

Very little  A little  Moderate  Much  Very much

79.7. To what extent, are there personal computer systems at school for using the Internet?

Very little  A little  Moderate  Much  Very much

79.8. To what extent, is there physical room at school to set up the computer systems so that people can use them?

Very little  A little  Moderate  Much  Very much

80. Is there an Internet connection between your school and the other schools in the district?

Yes  No

If yes:

80.1. To what extent, can using this net create an effective and useful connection among the schools?

Very little  A little  Moderate  Much  Very much

81. Is there an internet connection between your school and education department in district?

Yes  No

If yes:

81.1. By using this network, to what extent, is there an effective bilateral connection between your school and the education department?

Very little  A little  Moderate  Much  Very much

Please explain whatever you feel necessary to comment on the plans and their successful implementation:

Please fill in the following:

Gender: Male  Female

College degree: Diploma (high school graduate)

Associate Degree  Bachelor (B.A)

Master's Degree (M.A)  Ph.D.

Course of study: .....

Years of service: ..... year (s)

School management service: ..... year (s)

Teaching record: ..... year (s)



1. Explain the obstacles and problems of designing and preparing plans:
  
2. Explain the obstacles and problems of managing, leading and guiding the plans:
  
3. Explain the obstacles and problems of controlling and supervising of the implementing of plans and their evaluation:
  
4. Explain the obstacles of socio-cultural implementation of plans:
  
5. Explain the educational obstacles of the implementation of plans: (specifically executives' training)
  
6. Explain the obstacles created by organizational structure of education:
  
7. Explain the obstacles of using Information Technology (IT):





### Questionnaire No. 3

#### Dear colleague:

Thank you for your cooperation in previous stages of this research. Based on your views and other experts' of the education, the following factors have been identified as obstacles in the way of the successful implementation of the educational plans and changes at high schools and are listed. The objective of doing this research at this stage is to survey the rate of your agreement and other clear-sighted authorities concerning the stated factors.

Please indicate the rate of agreement that most accurately reflects your opinion by marking the boxes  "I agree" "I disagree" or "I have no idea"

Beforehand I appreciate you for your sincere cooperation at this stage of research which indicates your high scientific position and interest in research.

The obstacles of the successful implementation of educational plans and changes at high schools:

1. Lack of attention to socio-cultural features and the requirements of the various districts in designing the plans.  
I agree  I disagree  I have no idea
2. Lack of participation on part of executives in designing the plans.  
I agree  I disagree  I have no idea
3. Lack of real sampling and experimental implementation of the plans in limited level.  
I agree  I disagree  I have no idea
4. Presentation of impromptu, spontaneous, temporary plans without considering long-term goals of education.  
I agree  I disagree  I have no idea
5. Lack of managerial stability and job security of the managers in the education.  
I agree  I disagree  I have no idea
6. Dependency of plans on the reinstatement of managers and designers.  
I agree  I disagree  I have no idea
7. The impossibility of attracting the competent people in managerial positions due to lack of managerial appeal.  
I agree  I disagree  I have no idea
8. Lack of using the scientific management and knowledge- oriented system in guiding and leading the plans.  
I agree  I disagree  I have no idea

- 
9. The influence of influential political authorities on decision- makings and education management.  
I agree  I disagree  I have no idea
10. Lack of appointment of managers based on their specialization and competency.  
I agree  I disagree  I have no idea
11. Lack of control, supervision and accurate qualitative and scientific evaluation over the implementation of the plans.  
I agree  I disagree  I have no idea
12. Lack of feedback in supervision and evaluation of the plans.  
I agree  I disagree  I have no idea
13. Not using experts, who are clear-sighted and acquainted with the a b c of supervision and evaluation.  
I agree  I disagree  I have no idea
14. Presentation of general, superficial and unreal reports about the implementation of the plans.  
I agree  I disagree  I have no idea
15. Lack of continuity in supervising and evaluating of the plans.  
I agree  I disagree  I have no idea
16. Organizational structure's emphasis on external control and ignoring the internal control concerning the control and supervision over the plans.  
I agree  I disagree  I have no idea
17. Lack of definition for positions of supervising, evaluating in organizational chart of ministry of education for controlling, supervising and scientific evaluating of the plans.  
I agree  I disagree  I have no idea
18. Lack of necessary cooperation on part of various organizations with department of education for better implementation of the plans.  
I agree  I disagree  I have no idea
19. Lack of cooperation on part of parents with department of education due to cultural and economical poverty.  
I agree  I disagree  I have no idea
20. Lack of welcoming any plan which is not in line of preparing the students to pass the university entrance examination.  
I agree  I disagree  I have no idea

- 
21. Education in the eyes of the authorities and budget planners is consumptive rather than being productive.  
I agree  I disagree  I have no idea
22. Devaluation of science and learning knowledge in the society.  
I agree  I disagree  I have no idea
23. Little mass media support for education plans.  
I agree  I disagree  I have no idea
24. The in-service courses are not applicable and nor are they in conformity with the real needs of the plans.  
I agree  I disagree  I have no idea
25. Lack of scientific need assessment in assessing the educational needs of the executives.  
I agree  I disagree  I have no idea
26. Presenting procrastinated education to the executives of the plans.  
I agree  I disagree  I have no idea
27. Not employing expert instructors who are thoroughly competent in plan educating.  
I agree  I disagree  I have no idea
28. Centralism in system of education.  
I agree  I disagree  I have no idea
29. Not delegating of authority to the executives proportionate to the level of their responsibilities.  
I agree  I disagree  I have no idea
30. The overemphasis of education structure on doing administrative affairs and services on part of school headmasters which prevents them from performing their main role as educational managers.  
I agree  I disagree  I have no idea
31. Lack of superiority of staff forces of education over line forces as far as specialization is concerned.  
I agree  I disagree  I have no idea
32. Lack of enough ability on part of executives of plans in using Information Technology.  
I agree  I disagree  I have no idea
33. Neither the executives nor the students have actual and easy access to the Internet with enough speed.  
I agree  I disagree  I have no idea

- 
34. Not presenting deep and essential education about Information Technology (IT) to personnel and executives of the plans.  
I agree  I disagree  I have no idea
35. Not employing the required expert human forces equipped with IT in organizational chart of schools.  
I agree  I disagree  I have no idea
36. Lack of financial support and enough updated equipment in the field of Information Technology.  
I agree  I disagree  I have no idea
37. Lack of standard physical and educational space for the execution of the plans.  
I agree  I disagree  I have no idea
38. Lack of appropriate equipment and facilities necessary for the execution of the plans.  
I agree  I disagree  I have no idea
39. Not allocating necessary budget and credit to the implementation of the plans.  
I agree  I disagree  I have no idea
40. Lack of coordination between budget and program in the various levels of education.  
I agree  I disagree  I have no idea
41. Allocating overdue equipment and financial resources for implementation of the plans.  
I agree  I disagree  I have no idea
42. Lack of belief in effectiveness of the plans on part of financial managers and their little support in this regard.  
I agree  I disagree  I have no idea
43. In many cases lack of granting promotion to personnel based on their merit and ability.  
I agree  I disagree  I have no idea
44. The executives of the plans do not receive reward and fringe benefits proportionate to their work and endeavor.  
I agree  I disagree  I have no idea
45. Lack of motivation on part of executives due to their financial problems.  
I agree  I disagree  I have no idea
46. The inefficiency of administrative system in encouraging and punishing on time and to the point.  
I agree  I disagree  I have no idea
47. Students' lack of motivation because of employment problems and their worry about future.

- 
- I agree  I disagree  I have no idea
48. Lack of participation in different levels of education.  
I agree  I disagree  I have no idea
49. Focusing on district in expert levels and lack of systematic and participative thinking.  
I agree  I disagree  I have no idea
50. Lack of belief in financial and thinking participation on part of people in education as a national investment.  
I agree  I disagree  I have no idea
51. The existence of laws and regulations that has prevented people's participation culture from becoming internalized in the system of education.  
I agree  I disagree  I have no idea
52. Lack of access to real objectives of plans by the system of education.  
I agree  I disagree  I have no idea
53. Resistance to plans of changes because of fear of losing fringe benefits and job positions.  
I agree  I disagree  I have no idea
54. Resistance to plans of changes because of ignoring the executives' benefits and expedience.  
I agree  I disagree  I have no idea
55. Resistance to plans of changes because of lack of confidence in their positive results taking the past unsuccessful experiences into consideration.  
I agree  I disagree  I have no idea
56. The executives' resistance due to lack of necessary knowledge and acquaintance in the necessity and objectives of plans.  
I agree  I disagree  I have no idea
57. The resistance of executives due to avoiding extra responsibilities and double attempts in the implementation of new plans.  
I agree  I disagree  I have no idea
58. The resistance of executives due to their adaptation and habit to current situation.  
I agree  I disagree  I have no idea