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Typeset By	:	M. Hameed Zahid

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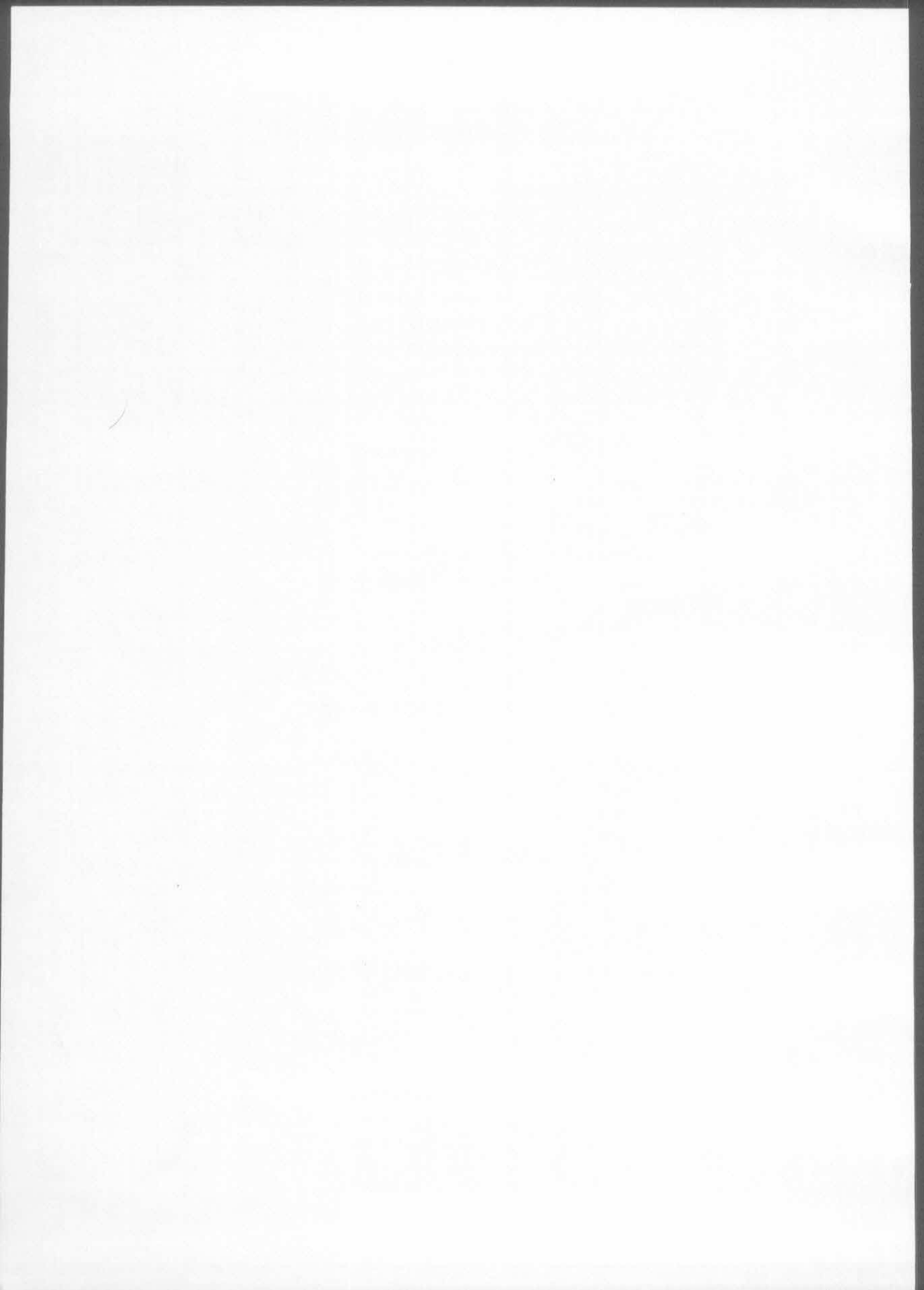
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EDITORIAL

TOLERANCE: THE NEED OF THE HOUR

The human being has been bestowed upon by Almighty Allah a number of qualities which appear to be the most distinguished, paramount and far-effecting elements. Through these super abilities, human being has carved out a position – much marvelous and highly impregnable in the midst of all creatures.

Among all these characteristics, the most meaningful is one, i.e., the *tolerance*. It is undoubtedly a great gift of God which absolutely preserves the dignity of man on this earth. It is such an ability through which the life becomes a source of merriment and full of fun. If this very act is lacking in the human structure, then the whole surrounding of the society is destined to become warmonger.

The meaning of the word *tolerance* generally appears to be as brook, bear, endure, put up with, etc. In broad sense we can say that "allow someone to do any act without protest". In the society, we come across numerous people of different nature. During discussion, one may loose his/her temper only for the petty things. And then, a quarrel may erupt.

Even in the game, it is generally observed that heated dispute or strong disagreement erupts among someone merely for some minor thing. At the end of the episode, this very thing turns to become a tug of war between the players, or even among friends and classmates.

This very habit of intolerance doesn't come on a par with the human being who is said to be اشرف المخلوقات (the best of all creatures). Thus, every human soul is required to show a sense of tolerance in all manners – whether it be in a play, during the classroom discussion or amidst religious talking. We should discuss any issue with other one, but with gentleness, sobriety; not to be intoxicated and frivolous. By all means we have to shun the habit of quarrelling. This very act of self-control may come only through tolerance.

Due to significance of this ability, our religion Islam has laid much emphasis on tolerance. If this very habit is adopted in the society, specifically in the modern era, a number of violence, wrangling, tumult, fist-fighting, uproar, agitation and terrorism would be erased from the surface of the society. Then our life would be secured and the world may become a Paradise for all and sundry.

To achieve this very glorious gold we are required to follow what the noted poet Mir Anees has said in his following verse:

خیال خاطر احباب چاہیے ہردم

انیس ٹھیس نہ لگ جائے آبگینوں کو

(It's essential to give a thought to and care for other ones. Beware! The crystal glass shouldn't be cracked by your ruthless act.)

Dr. Mahmudur Rahman
Editor

THE RELATIONSHIP OF SELF ESTEEM WITH NEED FOR ACHIEVEMENT AMONG TEACHERS AND STUDENTS OF GOVERNMENT SECONDARY SCHOOLS AND PRIVATELY MANAGED SECONDARY SCHOOLS

By
*Prof. Dr. M. Zafar Iqbal**
*Ms. Rizwana Batool***

Abstract

This survey investigates the relationship of self-esteem with need for achievement among teachers and students of government and privately managed secondary schools of District Chakwal (Pakistan). The focal objectives of the study includes: 1) to measure self-esteem among students and among teachers; 2) to measure self esteem and need for achievement among students and teachers; 3) to investigate gender differences in relationship of self-esteem with need for achievement among students and teachers; 4) to investigate differences in relationship of self-esteem with need for achievement among students of government secondary schools and privately managed secondary schools and teachers of government secondary schools. Questionnaires containing self esteem and need for achievement were developed and pilot tested and administrated on teachers and the students of secondary level in public and private schools of Tehsil Talagang (Distt. Chakwal). A total of 600 responses of students and 240 responses of teachers were obtained. Applying appropriate descriptive and inferential statistical techniques data analysis revealed that: 1) Male teachers and students had high self esteem as compared to female teachers and students; 2) Male teachers of public school had high self esteem as compared to male teachers of private schools; 3) Female teachers of private schools had high self esteem as compared to female teachers of public schools. 4) Both type of teachers and students of public and private schools have a positive value on the variable of need for achievement. 5) Male teachers and students had high need for achievement as compared to female teachers and students. 6) Male teachers of private schools had high need for achievements as compared to female teachers of private schools and existence of a clear

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* Prof. Dr. M. Zafar Iqbal is working as Dean/ Professor, Allama Iqbal Open University, Islamabad.
** Ms. Rizwana Bastool is MA (Education) Scholar, Allama Iqbal Open University, Islamabad.

relationship of self esteem with need for achievement among male and female teachers, whereas moderate tendency towards low relationship of self esteem with need for achievements among male and female students of private and public schools and a clear difference in relationship of self esteem with need for achievement among total male and female teachers of public and private schools.

Introduction

Considerable research has been done upon theories of motivation. The current theories of motivation include Maslow's hierarchy of needs, McClelland's "Achievement Motivation" which is also referred to as "Need Achievement", Rotter's Locus of Control and Weiner's Attributions Theory. The very first variable of the proposed research is *Self-Esteem*. Self-esteem is an important component of personality, which refers to how we feel about the self or how we value ourselves. It is the individual's private feeling that is derived from one's perception and appraisals of different attributes of the self. Self-esteem consists of general feelings of worth and competence associated with one's own self. Self-esteem is a personality construct, which refers to the individual's feelings about the self, and is indicative of the value placed over one's self-esteem is the individual's private feelings towards self that are derived from one's perceptions and appraisals of different attributes of the self. These are the general feelings of worth and competence associated with one's own self. These evaluations and feelings about the self affect the responses and shape one's behavior towards different aspects of life.

David McClelland and John Atkinson were among the first to concentrate on the study of achievement motivation that is also referred to as need for achievement. According to him, achievement motivation is a personality trait. It is the product of two conflicting needs: the need to achieve success and the need to avoid failure. Some students mainly strive to achieve success; others primarily strive to avoid failure. The students motivated to avoid failure, choose either too easy or too difficult goals. Some of them set easy goals to avoid failure and others choose difficult goals so that if they fail, they may attribute their failure to the task difficulty. The students motivated to succeed and access select tasks of moderate difficulty. Murray (1938) was the first psychologist who elaborated the need for achievement as the desire or tendency to do things as rapidly and/or as well as possible. It also includes the desire to accomplish some thing difficult, to master, manipulate and organize physical objects or ideas. Need for achievement, according to Cassidy and Lynn (1989), is a multidimensional concept that may be

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explained as the personal striving of individuals to attain goals within their social environment.

Literature Review

These are the general feelings of worth and competence associated with · one's own self. These evaluations and feelings about the self affect the responses and shape one's behavior towards different aspects of life. The self-esteem is an important component of personality which refers to how we feel about the self or how we value ourselves. It is the individual's private feeling that is derived from one's perception and appraisals of different attributes of the self. The self-esteem consists of general feelings of worth and competence associated with one's own self. According to Burger (1993. p.173), "self-esteem is a positive or negative way of evaluating one's values, feelings, attitudes and beliefs, fears and desires and strengths and weakness. It is the way we judge ourselves, which affect the responses and shape one's behaviour towards different aspect of life".

The self-esteem is a very personal experience for an individual. It is an important judgment that is passed by the person himself/ herself. This judgment reflects the degree of self-respect and self-confidence that a person can have. The person whose self-esteem is high, feels worthy and important, and views himself/ herself as a competent person who can live appropriately and happily in ones life. He/ she feels capable, adequate and effective to deal with the demands of life and thinks him/ herself a likeable person who can enjoy healthy relationships with other people. An individual with low self-esteem, feels less regard for self, and lacks confidence and decisiveness as well as books vulnerable to feel shattered and may become easily frustrated in difficult life situations. He/ she loses courage while facing the adversities of life. Rifai (1999, p.180) has given a vivid picture of this concept. According to him:

> Self-esteem is a sense of personal value and efficacy. These feelings may be derived from the appraisals and evaluation that one receives from significant others. The development of the individual's self-esteem is affected by the opinions and perception of the significant others. The way a person is judged by others, it affects the opinion and perception that one may form about one's own self. The person, valued by others as worthy and competent, is more likely to have a positive view of one's self. The favorable opinions of parents, peers and others who are significant for the person may provide a fundamental base for the positive evaluation of the self. Later, throughout the life, that person keeps verifying

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these judgments in the light of the information that one may receive from the people social environment.

However, the self-esteem is continually modified or validated throughout the life span, by interactions with family and friends. The self-esteem is direct function of positive and negative past, present, and future experiences. Moreover, families, communities, and ethnic and cultural groups vary in the criteria on which self-esteem is based. Stereotyping, prejudice, and discrimination are also the factors that may contribute to determine the level of self-esteem.

Researches have shown that how we feel about ourselves in terms of self-worth and self-esteem is related to the sort of reflected appraisals we get from those in our social life, especially from those who are significant in our lives like parents, peers, and teachers. Such types of appraisal are so powerful and related to our self-image that it may triggers either a heightened or reduced sense of self-esteem. Therefore, self-esteem can be divided into three major components: a) self-image; b) self-talk and c) determination (Branden, 1987, p.84).

The self-esteem is associated with confidence, high expectations of success, optimism and lowered anxiety and depression. The low self-esteem is associated with a host of problems including drug, alcohols abuse, eating disorder, depression and suicide. Therefore, a positive self-esteem is indispensable for normal and healthy development because it provides resistance, strength, and a capacity for regeneration. Most of the perspective in psychology, such as social, psychodynamics, humanistic, etc. explain the concept of self-esteem with reference to self, as self remains the core issue in every psychological paradigm. In the social paradigm, Cooley (1902. p.119) was one of the earliest social theorists who addressed the concept of "self". According to him, the social milieu from which a person comes, contributes heavily to how a person views himself. On the basis of person's view, Cooley's theory states that self is concerned primarily with how the self grows as a consequence of interpersonal interaction. Here, he posited the concept of "the looking glass self". Cooley believes that self is an important aspect of our personality and is the reflection we receive from the minds of others. That reflection makes us to think in both dimensions positive (we can do) and negative (we can't do), which tarnishes our self-image. Cooley (1902) further suggested that our behaviour are under the influence of our social order. The self-esteem, self-confidence, and hopes are chiefly founded upon the opinions of others. Simply, people's feelings about themselves are highly sensitive to how they think that how they are being regarded by other people. McDougall (1920) divided the growth of self-concept into four stages. In the first stage, child is aware of the difference between his body and external environment. In the second

stage, the child can distinguish between inanimate objects and other persons. His behaviour is controlled by the rewards and punishments administrated by adults. In third stage, behaviour is controlled by social praise and blame. In the final step of the development, McDougall remarked that a person could distinguish, what is right and what is wrong. In simple words, a person defines his own course of action. McDougall (1920) mentioned this stage as: A man may send apart from his group and from the whole organized society, defying the general opinion by saying: "You are mistaken and I am right and I will do it, although I go to prison or hell." Mead (1934, p.177) hypothesized that "self" in any social condition is developed through the interaction between individuals and their social world. He further said: "Self is an object of awareness rather that a system of process." Mead's self is a socially formed self, which grows in a social setting where there is a social communication. Mead further suggests that people can have, as many selves as there are numbers of social groups in which they participate. For instance, a person may have a family self, which reflects the values and attitudes expressed by his family; a school self, which represents the expectations and attitudes, expressed by his teachers and fellow students and many themselves. Freud (1927, p.112) viewed "self" as an important factor in every dynamics and mental structures. According to Freud, emotions, striving, and ideas arise from a conflict between person's aggressive, pleasure-seeking, biological impulses, and the social restraints against them. Freud theorized that the conflict centers on three interesting systems; id, ego, and superego. In "the Ego of Id" Freud (1960, p.35) described the origins and development of id, ego and superego and also summarized their functions and relationship. According to Adler (1930.p.129.), each individual is unique being, in thinking, feeling, speaking, and acting. Even two individuals do the same thing; will not be the same, because of their "creative self". Adler also considered the environment and heredity as important factors. The creative power combines the innate potentialities and environmental influences into a movement toward overcoming of obstacles. The child is born within free creative self. It is subjective, dynamic, unified, personal, and unique style of life. Moreover, the creative self is the main determinant of personality because it utilizes the individual's heredity and environment. Maslow (1970, p.39) presented a needs theory, in which needs are arranged in hierarchy in an ascending order. The lowest level needs are the physiological needs, and the highest-level needs are self-actualization needs. Higher level needs are satisfied internally and lowest level needs are gratified externally. Maslow placed great emphasis on the needs of gaining and maintaining self-esteem. Maslow said that it is through the fulfilment of self-esteem need that individual proceeds to the highest level of need i.e., self-actualization.

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The overall concept of self-esteem has been illustrated by Woolfolk (1998, p. 378) in the following figure:

Figure - 1
Need hierarchy
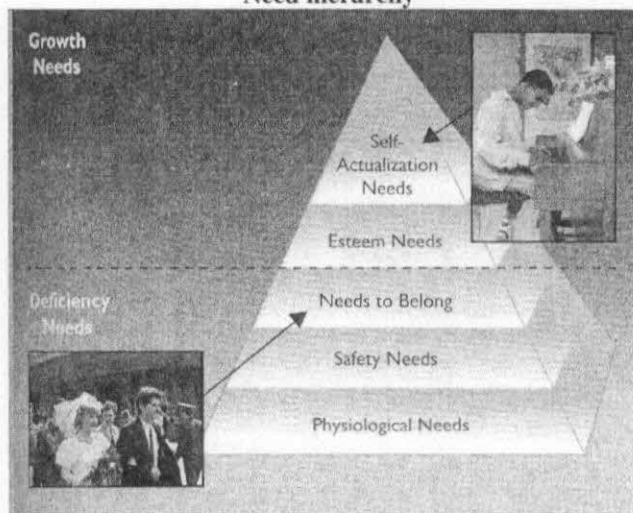
Source: Woolfolk (1998, p.378)

Maslow (1970) classified these needs into two subsidiary sets: Self-respect and esteem from other people. Self-respect includes such things as desire for competence, confidence, personal strength, adequacy, achievement, independence, and freedom. An individual needs to know that he is worthwhile-capable of mastering tasks and challenges in life. Esteem from others includes prestige, recognition, acceptance, attention, status, reputation, and appreciation. In this case, individuals needs to be appreciated for what they can do i.e., they must experience feelings of worth because their competence is recognized and valued by others. The self-esteem is a very critical variable in clinical settings. Clinicians and psychotherapists need to work at self-esteem. However, they cannot work over it directly because self-esteem is a product of some internally generated practices. If clinicians understand what these practices are, they can work in such a way as to facilitate or encourage their actualization. Six practices are crucial for the development of healthy self-esteem. When these practices are not in sight, self-esteem necessarily suffers. These are also called six pillars of the self-esteem. He suggests that living consciously is the first pillar of self-esteem. The appropriate use of consciousness can be termed as "sight over blindness and it is one of the most important determinants of self-efficacy and self-respect (Branden, 1992, p.13). One cannot feel competent in life while wandering around (at work, dealing with superiors, subordinates, associates, customers, or in marriages, or in relations with one's children in self-induced mental fog. Those who attempt to

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exist unthinkingly, suffer a deficiency in their sense of worthiness. So, each person must choose the level of consciousness at which to function. It can help to establish a sense of the kind of person he or she is. Self-acceptance is second practice to achieve self-esteem. It is expressed through the willingness to accept, to make to oneself without denial that we think what we think, feel what we feel, have done what we have done, and are what we are. Self-acceptance is the refusal to regard any part of ourselves, our bodies, our fears, our thoughts, our actions, our dreams as alien, as "not me". It is willingness to experience the facts of one's being at a particular moment. It is refusal to engage in an adversarial relationship with oneself. It is the willingness to say of any emotion or behaviour, "This is an expression of me nonetheless, at least at the time at the time it occurred". It is the virtue of reality applied to the self. The self-esteem begins with respect for reality. The self-responsibility is the third practice to have healthy self-esteem. To feel competent in life, one must be willing to take responsibility for actions and the attainment of goals. It means that one must take responsibility for his/ her life and well being. The practice of self-responsibility includes the realizations that one is responsible for ones' achievements, choices and actions, and personal happiness. It also refers to the realization that one is responsible for one's level of consciousness to work and relationship, one's behavior with others, and the values one chose to live. The fourth pillar is the practice of self-assertiveness. The self-assertiveness refers to honoring one's needs, wants, values, and convictions, and seeking rational forms of their expression in reality. One who lacks this ability seeks to avoid confrontation with someone whose values differ, or wants to please, or is trying simply to "belong". Healthy self-assertion helps to expand one's self-efficacy and self-respect. In this regard Branden (1992, p.13) says:

> Living purposefully is also a crucial practice to strengthen self-esteem and can be said fifth pillar of self-esteem. Purpose is the very essence of life process. Through our life purposes, we organize our behaviour, giving it focus and direction. Through our goals, we experience control over our existence. To live purposefully is to use our powers for the attainment of goals we have selected, such as studying, raising a family, earning a living, starting a business, or building a home. Our goals lead us forward and energize our existence.

However, the self-esteem should not mean that the measure of one's self-esteem is his/her external achievements. The root of self-esteem is those internally generated practices that make it possible to achieve. The practice of integrity is also fundamental for self-esteem. Integrity is the integration of ideals, convictions, standards, beliefs and behavior. One is said to have integrity when

one's ideals and practice match. Those who behave in ways that conflict with their own judgment of what is appropriate, lose face in their own eyes. If it becomes habitual they trust themselves less or cease to trust themselves at all. Integrity is one of the essential practices for self-esteem.

Freud (1927) has argued that man and woman tend to feel differently about their self. These differences lead to further differences in their development. According to him, "Girls develop some complexes like a scar, a sense of inferiority" (p.112). On the other hand, boys feel superior in their daily life. These complexes disturb their esteem level. With that superiority, boys have high self-esteem and girls have low self-esteem. Studies confirming Freud's postulation had found that boys posses higher self-esteem than girls. In a study, it was found that males have higher self-esteem towards their masculinity as compared to females. They showed higher results in the scale of self-esteem showing that males have more positive regard with respect to their masculinity than females (Cyber Synce, 2005). It was found that men rated high score than women. The adolescent must develop a realistic yet compassionate self-concept in order to lead a stable life. He must learn to accept his own capabilities, and then shape his aspirations accordingly. Those who are unable to see themselves realistically, seek various forms of escape from the real world (Garrison and Garrison, 1975, p.71).

Gender differences in age related changes in self-esteem have been reported by Blyth (1983). He found that from sixth grade to tenth grade, the global self-esteem of girls decreases while the global self-esteem of boys increases. Most of the studies that evaluated gender differences in self esteem found that adolescent females score lower on self esteem than do adolescent males. Marsh (1993) found that more girls reported lower self esteem than did boys during middle and late adolescence but not between the ages of 8 and 11. Researches done in Pakistan also found gender differences in self-esteem. Girls have been found having lower self-esteem than boys (Rifai, 1999).

According to Woolfolk (1998), McClleland and Atkinson were among the first to concentrate on the study of need for achievement or achievement motivation. Arif (2003, p.168) argues that according to McClelland, achievement motivation is a personality trait. It is the product of two conflicting needs: the needs to achieve success and the need to avoid failure. Some students mainly strive to achieve success; others primarily strive to avoid failure. The students motivated to avoid failure choose either too easy or too difficulty goals. They set

easy goals to avoid failure. They choose difficult goals so that if they fail, they may attribute their failure to task difficulty. The students motivated to succeed and excel select tasks of moderate difficult.

Achievement motivation also refers to as the need for achievement. It is an important determinant of aspiration effort, and persistency when an individual expects that his/her performance will be evaluated in relation to some standard of excellence. Such behavior is called achievement-oriented behavior (Atkinson, 1957, p.64). Murray (1938) was the first psychologist who defined the need for achievement as "the desire or tendency to do things as rapidly and/or as well as possible. It also includes the desire to accomplish some thing difficult, to master, manipulate and organize physical objects or ideas. To do this as rapidly and as independently as possible, to overcome obstacles and attain a high standard, to excel oneself, to rival and surpass others, to increase self regard by successful exercise of talent. Need for achievement, according to him, is a multidimensional concept that may be defined as the personal striving of individuals to attain goals within their social environment. Bruno (1980.pp.171-172) clarifies:

> Achievement motivation is usually identified as one of the complex motives. It is defined as the tendency to overcome a challenge. The person who sets high standards for himself, who has valued goals in life, and who works to meet his standards and accomplish his goals is demonstrating achievement motivation.

Slavin (1997) defines the concept of achievement motivation as the desire to experience success and to participate in activities in which success depends on personal effort and abilities. He further illustrates that one of the most important types of motivation is achievement motivation, the generalized tendency to strive for success and to choose goal oriented success/failure activities. For example, French found that given a choice of work partners for a complex task, achievement-motivated students tend to choose a partner who is good at the task and affiliation-motivated students (who express needs for love and acceptance) are more likely to choose a friendly partner. Even after they experience failure, achievement-motivated students will persist longer at a task than will students who are less high in achievement-motivation and will attribute their failures to lack of effort (an internal but alterable condition) rather than to external factors such as task difficulty or luck. In short, achievement motivated students want and expect to succeed; when they fail, they redouble their efforts until they do succeed. Achievement motivation also affected the way people attempted to explain their successes and failure. People high in achievement motivation usually

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attributed their performance to internal factors their successes to high ability and high effort and their failures to lack effort. People low in achievement motivation were more likely to attribute success to external factors (ease of task and good luck) and failure to an internal factor-the lack of ability. From such results, it is possible to predict how much success a person will anticipate when confronted again with a particular task. For example, a person who attributes her/his success to stable factors (abilities and task difficulty) will expect to succeed the next time the task is undertaken. If unstable causes are believed to be responsible the person is less certain of succeeding at as task again (especially if luck is emphasized). These differences in the people view the causes of their successes and failures help to explain behavioral differences that have been found.

The need for achievement was only one of twenty basic human needs suggested by Murray. Along with subsequent investigators, primarily McClelland and Atkinson, Murray favored the research procedure of discovering the laws that govern one motive before attempting to determine whether other motives follow the same laws. The achievement motive was chosen for initial study because it was fairly easy to arouse.

People who have high levels of need for achievement, tend to set challenging goals, and try to achieve these goals. These people value feedback and use it to assess their accomplishments. They have a strong desire for self-efficacy and persist on a task only if they believe that they are likely to succeed. Need for achievement is accepted as an important characteristic of the individual and influences work behaviours to a great extent. Davidoff (1987) comments on gender differences in achievement motivation in this manner: "In the past, women have not achieved as much as men in the traditional sense, in the sciences, humanities, or arts. Underachievement is also characteristics of members of minority races. Although unequal opportunities are undoubtedly influential, achievement motivation contributes to the differences. A lot of women find it hard to imagine success in academic, intellectual and career related settings. These feelings are observable as early as the age of 7 years of age. Females show less self-esteem and confidence than males when it comes to their ability to perform academic tasks (but more self esteem in relation to their social abilities, such as empathy). There is a multitude of reasons why females often expect failure. Academic and intellectual achievements have long been considered inappropriate for women. In some cases parents, teachers, and others probably pass along negative expectations. In addition, mothers and fathers tend to treat young girls in ways that discourage achievement motivation. With different social

conditions however the achievement motive will be expressed differently. This condition has been evident for years in the United States and other countries. High achievement often has been synonymous with masculinity while it seemed incompatible with femininity. As a result, some women have learned to underplay their abilities, especially in the company of men and to downgrade their career goals. It is hypothesized that there existed instead a *motivation to avoid success* and that the primary goal of many women has been affiliation. This view was stimulated initially in a study of college men and women concerning probable success in medical school. Fear of failure was prevalent in both sexes, but fear of success was regarded differently. Less than 10 percent of the men reacted in a manner that suggested that they might feel alienated from others by a achieving a top rank in the class or by having position of authority over others. Among the women however, 65 percent displayed this concern. Such success would represent failure in the traditional female role. The incentives for women are changing, however, and so are the findings. Some of which have indicated no reliable differences. New methods of research have been suggested, which may resolve the ambiguities. In any case, in the United States, Europe, Australia and other countries today there is an increasing tendency for women to aspire towards achievement for themselves. Not just for their male offspring.

Aims of Study

The aims of this study were: 1) to measure self-esteem among students and teachers; 2) to measure need for achievement among students and teachers; 3) to identify relationship of self-esteem with need for achievement among students and teachers; 4) to explore gender differences in relationship of self-esteem with need for achievement among students and teachers; 5) to investigate differences in relationship of self-esteem with need for achievement among students of government secondary schools and privately managed secondary schools and teachers of government secondary schools and privately managed secondary schools.

A sample of 240 teachers from the total teachers teaching secondary classes and 600 students from total students studying at secondary classes at secondary level in the government secondary and privately managed secondary schools of Tehsil Talagang (District Chakwal, Pakistan) were randomly selected. The proportion of male and female teachers as well as students in both sectors was fifty in sample. The detail of sample is given below:

Table - 1
Sample size

Category of School	Total Teachers Teaching Secondary Classes	Sampled Teachers Teaching Secondary Classes	Total Students Studying in Secondary Classes	Sampled Students Studying in Secondary Classes
Government Secondary Schools	551	120	6230	300
Private Secondary Schools	532	120	5970	300

Two questionnaires were used as the research instruments of the proposed research. One questionnaire was used to measure self-esteem and second was used to measure need for achievement of teachers and students. The strategy of pilot testing was survey method.

Data collected through above mentioned questionnaires was scored, tabulated, analyzed and interpreted by applying appropriate descriptive and inferential statistical techniques e.g. Mean, Standard Deviation and Pearson Correlation in the light of the objectives of the study.

Results and Discussion

Table - 2
Comparison of Self-esteem with Need for Achievement

Responses of Teachers	Category	N	Mean	Standard Deviation
	Male	120	19.32	4.6
	Female	120	16.6	4.5

Table 2 indicates that male teachers have high need for achievement as compared to female teachers as mean score of male teachers is 19.32 while mean score of female teachers is 16.6.

Table - 3
Relationship of Self-Esteem with Need for Achievement

Responses of All Male and Female Teachers (Public+Private)	N	Self-Esteem		Need For Achievement		Correlation r
		Mean	Standard Deviation	Mean	Standard Deviation	
	240	150.18	21.13	17.94	4.8	0.74

Table 3 indicates that there is clear strong relationship of self-esteem with need for achievement among total male and female teachers of public and private secondary schools i.e.0.74

Table - 4
Difference in relationship of self-esteem with need for achievement among total male and female teachers

Responses of Teachers	Category	N	Self- Esteem		Need For Achievement		Correlation r
			Mean	Standard Deviation	Mean	Standard Deviation	
	Male	120	153.23	18.89	19.32	4.6	0.77
	Female	120	147.25	22.82	16.6	4.5	0.72

Table 4 indicates that there is difference in relationship of self-esteem with need for achievement among total male and female teachers of public and private secondary schools. Male teachers of public and private secondary schools have high relationship of self-esteem with need for achievement as compare to female teachers of public and private secondary schools as correlation coefficient value of male teachers is 0.77 and correlation coefficient value of female teachers is 0.72.

Table - 5
Comparison of mean and standard deviation score of self-esteem with need for achievement of male and female students

Responses of Students	Category	N	Mean	Standard Deviation
	Male	300	17.52	3.78
	Female	300	15.68	3.94

Table 5 shows comparison of mean score of need for achievement of total male and female students of public and private schools. Male students have high need for achievement as compared to female students as mean score of male students is 17.52 while mean score of female students is 15.68.

Table - 6
Relationship of self-esteem with need for achievement among all students

Responses of All Male and Female Students (Public+Private)	N	Self-Esteem		Need For Achievement		Correlation r
		Mean	Standard Deviation	Mean	Standard Deviation	
	600	110.51	10.45	16.6	3.97	0.55

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Table 6 indicates that there is low relationship of self-esteem with the need for achievement among total male and female students of public and private secondary schools i.e.0.55.

Table - 7
Comparison of difference in relationship of self-esteem with need for achievement among students

Responses of Students (Public+ Private)	Category	N	Self- Esteem		Need For Achievement		Correlation r
			Mean	Standard Deviation	Mean	Standard Deviation	
	Male	300	111.17	10.81	17.52	3.78	0.56
	Female	300	109.85	10.05	15.68	3.94	0.54

Table 7 indicates that there is difference in relationship of self-esteem with need for achievement among total male and female Students of public and private secondary schools. Male Students of public and private secondary schools have high relationship of self-esteem with need for achievement as compare to female students of public and private secondary schools as correlation coefficient value of male Students is 0.56 and correlation coefficient value of female students is 0.54.

Conclusion

Major conclusions of the study were:

Both male and female teachers as well as male and female students had good score on the variable of self-esteem. The comparison of mean score of self-esteem of total male and female teachers and students of public and private schools showed that male teachers and students had high self-esteem as compared to female teachers and students. The comparison of mean score of self-esteem of total male teachers of public and private schools showed that male teachers of public schools had high self-esteem as compared to male teachers of private schools. The comparison of mean score of self-esteem of total female teachers of public and private schools showed that Female teachers of private schools had high self-esteem as compared to female teachers of public schools.

The study indicated that both type of teachers and students of public and private schools have a positive value on the variable of need for achievement. The comparison of mean score of need for achievement of total male and female teachers and students of public and private schools showed that male teachers and

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students had high need for achievement as compared to female teachers and students. The comparison of mean score of need for achievement of total male and female teachers of private schools showed that male teachers of private schools had high need for achievement as compared to female teachers of private schools.

The study showed that there was a clear relationship of self-esteem with need for achievement among male and female teachers whereas moderate tending towards low relationship of self-esteem with need for achievement among total male and female students of private and public schools. There was clear difference in relationship of self-esteem with need for achievement among total male and female teachers of public and private secondary schools. Male teachers of public and private secondary schools have high relationship of self-esteem with need for achievement as compared to female teachers of public and private secondary schools. Same was the case with students of both type of gender.

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STUDENTS PERCEPTIONS OF LABORATORY WORK IN CHEMISTRY AT SCHOOL AND COLLEGE IN PAKISTAN

By
*Dr. Qudsia Riffat**
*Dr. Iqbal Shah** and*
*Mr. Norman Reid***

Abstract

The student's learning experience, their experience about the teacher and teaching and the subject itself – all play a very important role in the formation of their attitudes towards the subject. Attitudes affect behaviour, influencing what the learner selects from the environment, how they will react to the teachers, the materials being used and the other students. This paper describes the experience of the students at school and college level with regard to laboratory work in chemistry in Pakistan. A survey was conducted to collect views of BSc first year and second year university students and trainee teachers who have completed their BSc. The objective was to study and compare students' perceptions of their experience of laboratory work in chemistry at school and college level. Questionnaires were used to collect data. The majority of the students hold positive attitudes towards laboratory work in chemistry and consider it a vital part of the course. There is, however, considerable polarisation of views while the three groups seem to hold similar views. There is a need to improve the quality of laboratory work in chemistry at all levels so as to make it more organised, open ended and effective. Recommendations are offered, based on what the survey has revealed. The results may be typical pertaining to many countries and offered insights into ways forward in making laboratory work more effective and efficient.

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* The writer is working in Science Education Department, Allama Iqbal Open University, Islamabad, Pakistan.

** The writer is working in Science Education Department, Allama Iqbal Open University, Islamabad, Pakistan.

*** The writer is working in Centre for Science Education, University of Glasgow, Scotland

Introduction

The laboratory is one of the characteristic features of education in science at all levels. It would be rare to find a science course without a substantial component of laboratory work. However, very little justification is normally given for its inclusion in the curriculum. It is assumed to be necessary and important: it is taken for granted that experimental work is a fundamental part of any science course and this especially true for chemistry course. Very frequently, it is asserted that chemistry is a practical subject and this is assumed to offer adequate justification for the presence of practical work in the course of chemistry. The development of practical skills is also mentioned as a justification for practical work. Nonetheless, these arguments need to be questioned to justify the time and money spent on practical work.

Laboratory teaching is very expensive in terms of materials and staff-time. Students' reaction to practical work is often more negative at university level and this may reflect a students' perception that there is a lack of clear purpose of practical work in science education: they go through the experiment without any stimulation. This leads on the question about students' perceptions about the purpose of practical work.

Some Previous Findings

Chemistry is an experimental science and its development and applicability demand a high standard of experimental work (Hanson *et. al.*, 1993). Dall'alba (1993) extends the idea and asserts that an important factor in higher education teaching is to initiate students into what is to be practitioner of their subject, but, in its extension to the learning of chemistry, it can give rise to divergence of views.

Laboratory work in chemistry is an expensive activity. Laboratories are costly to build, to equip; academic and technical staffing, instruments and consumables are a drain of resources. The perception is that it is becoming increasingly difficult to provide students with a high quality conventional laboratory experience. It is perhaps time to think about the laboratory in terms of quality of experience rather an assessment of skills.

Hargreaves (1972) argued, "Education is concerned with the changing of attitude". It almost seems as if he and other writers believe that, without changes

in attitudes, there can be no education. Halloran (1967) indicated that attitude change depends upon several factors. Three of the most important are:

(a)   The perception of the person presenting the information by those receiving it;
(b)   The form in which the information is given;
(c)   The characteristics of the people who are receiving the information.

One of the most significant factors appears to be the credibility of the communicator, the chemistry teacher. At school level, the pupils' perception of the teacher may be influenced by factors outside the teachers' control. Two of the most important of these are: the pupils' previous experience of chemistry teachers, and teaching. These may have encouraged the development of certain expectations towards teachers and schools in the communities, which are served by the school, will be important.

Laboratory teaching is one of the hallmarks of education in the sciences (Hegarty-Hazel, 1990; Tobin, 1990; Hofstein and Lunetta, 1982; Lunetta and Tamir, 1981; Woolnough,, 1991). It is hard to imagine learning to do science, or learning about science, without doing laboratory work. Experimentation underlies all scientific knowledge and understanding. It is widely observed that the laboratory is often one of the most popular parts of science courses at school level (Reid and Skrybina, 2002). Similarly, university students' views of practical work were much more positive than their views of lectures (Rollnick, 2000).

Parkinson (1994), in his research with 11- 14 years old students, found the most common feature that attracted them to science was the amount of practical work and the opportunity to work with others. Piburn and Baker (1993) interviewed 83 elementary pupils in the USA and concluded that younger pupils rate experiments in science more highly than do secondary pupils because, in the USA, the curriculum is less assessment oriented at this stage and the pupils welcome the open ended enquiries that this allows. Attitudes tend to be formed as a result of school experience and such attitudes will be brought to the university learning situation.

In a study of attitudes of primary school pupils to science, Hadden and Johnstone (1982) found very positive attitudes towards science among Scottish pupils. The findings reinforce the views of many secondary science teachers that a very real initial advantage, which they have in introducing incoming pupils to the world of science, is the evident interest and enthusiasm for science that pupils bring with them (Hadden and Johnstone, 1982). In a follow up paper, Hadden and

Johnston (1983) looked at the first two years of secondary schooling. They observed some erosion of initially highly polarised and favourable attitudes to science taking place. The evidence suggests that this erosion is more pronounced in science than it is in other subject, but the evidence does not suggest that the erosion of interest has taken place to the extent that favourable attitudes to science (or to other subjects) have become unfavorable attitudes. The results reported by Alison (1986) confirm that most children's attitude to science decline between the age of 11 and 13 or 14.

Research on working in the laboratory shows more positive attitudes to science courses. Students are also attracted by science topics at the university level. Work with university students have shown clearly that students of both sexes are attracted by topics which can be described as "modern "(Letton, 1987; Skryabina, 2000).

Following the information of the National Literacy Strategy (DFEE 1998a) and the Numeracy Strategy (DFEE, 1998b), measurements were made of pupils attitudes towards science experiments (among many other things) with English and Welsh pupils, aged 5 to 11. The findings showed that the pupils liked cooperative practical work and choosing equipment and finding out what happens but they are not so keen on working out how to set up the investigation or finding out why the results occur. They also much preferred the teacher telling them the answers. These findings accord with Parkinson (1994) who, working with 11 to 14 years old children, found that most common features that attracted them to science was the amount of practical work and the opportunity to work with others.

Kirschner *et al.* (1993) compared the student's perceptions with those of the experts' using a list of possible objectives. An interesting result was that most of the purposes were neither anticipated nor encountered by the students. The reason was that students were not well prepared to perceive the purpose of the practical work and also the students have no (or limited) experience of this type of exercise.

All aspects of chemistry learning can contribute to attitudes towards chemistry and to the learning of chemistry. Overall, findings in most countries suggest that laboratory work is highly rated at secondary school levels but positive attitudes are less evident in higher education. There is a clear need to re-think the purposes of laboratory work and to ensure that the way the laboratory work is conducted reflects such purposes.

Methodology

This study is seeking to explore chemistry laboratory experiences of students in Pakistan. The major focus of the study was students' perception of the nature, mode and effectiveness of laboratory work at school and university level. The long-term aims of the study included development of a strategy to equip B.Ed. level student teachers of Allama Iqbal Open University to conduct laboratory work at secondary level more effectively and efficiently. This reports the findings of the survey conducted on chemistry students' perceptions of laboratory work in chemistry at school and university level.

The sample included BSc first year chemistry students, BSc second year chemistry students and BEd students of Allama Iqbal Open University, all of whom studied chemistry at BSc level. First year students were at the start of their BSc course in chemistry and second year students had almost completed their second year's study while BEd students of A .ama Iqbal Open University had completed their BSc and were enrolled in the BEd programme of the University.

The researcher had no influence on sa `pling. Postal questionnaires were sent to the students of AIOU and B.Sc. first year and second year students. It was a convenience sample the details are as under:

Respondents	Sample size	Return Rate
First Year	300	299 (76%)
Second Year	250	150 (60%)
B.Ed Student	250	118(47%)

The data were collected through questionnaires. The questionnaires aimed to gain insight into students' perceptions of:

Group work and individual work in a school chemistry laboratory.
Group work and individual work in a university chemistry laboratory.
Their overall school chemistry laboratory experiences.
Their overall university chemistry laboratory experiences.

Questionnaire was developed by the researcher. The questionnaire was given to thirty Science Education experts for validation. The questionnaire was finalized after making minor amendments on the basis of observations given by the experts.

The use of questionnaires was necessary because the students at an open university are scattered geographically. However, the responses need to be treated with caution. The responses rates are generally high and the samples are fairly large. This suggests that the picture obtained is likely to represent the real views of the student population fairly well. Responding was voluntary and anonymous and this supports honesty in the responses. However, the student responses may reflect how they see the situation at the present, based on their experiences; or they could also represent what students would like to see. There is always this tension between reality and aspiration in any questionnaire although, in this case, the students were directed specifically to certain laboratory experiences and it is expected that the responses will reflect reality more than aspiration.

In discussing the outcomes, the question is shown and the data from the three groups presented in terms of percentages for clarity. Any statistical calculations are carried out on the actual frequencies. Chi-square is used as a contingency test: in this, there is no control group but the response patterns of the different groups can be compared.

Results
(1)   School Laboratory Experiences

(1)   What are your opinions about your school laboratory experiences in chemistry\?
Tick ONE box on each line.

Useful	□	□	□	□	□	□	Useless
Not helpful	□	□	□	□	□	□	Helpful
Understandable	□	□	□	□	□	□	Not understandable
Satisfying	□	□	□	□	□	□	Not satisfying
Boring	□	□	□	□	□	□	Interesting
Well organised	□	□	□	□	□	□	Not well organised
The best part of chemistry	□	□	□	□	□	□	The worst part of chemistry
Not enjoyable	□	□	□	□	□	□	Enjoyable

The data obtained are now shown, with only the left hand end labelled, for simplicity and clarity. Results have been reversed where necessary to show the positive end at the left hand side.

Useful	first year	55	25	11	4	3	4
	BEd students	55	15	11	4	0	6
	second year	53	17	14	4	3	9
Helpful	first year	55	15	8	7	6	4
	BEd students	49	17	6	6	0	13
	second year	39	17	13	6	13	11
Understandable	first year	45	16	17	6	4	4
	BEd students	52	17	9	0	7	8
	second year	42	23	16	5	4	9
Satisfying	first year	40	24	14	10	5	4
	BEd students	42	18	10	6	3	12
	second year	32	30	8	15	0	14
Interesting	first year	48	17	7	8	7	14
	BEd students	46	14	8	3	6	13
	second year	37	28	6	5	5	17
Well organised	first year	25	24	17	9	4	13	$\chi^2 = 12.7$ (df3), $p < 0.01$
	BEd students	31	9	15	3	8	24
	second year	30	27	7	7	6	23	$\chi^2 = 14.1$(df2), $p < 0.01$
Best part of chemistry							
	first year	42	22	14	7	4	4
	BEd students	52	14	9	4	3	3
	second year	41	21	17	9	0	11
Enjoyable	first year	43	20	8	9	5	10
	BEd students	46	14	8	5	8	12
	second year	44	2	7	9	7	11

As the three groups are looking back to their school experience, it might be expected that similar patterns of responses would be likely and the absence of significant differences in response patterns confirms this. The table shows that

the responses of the three groups tend to reflect positive views except for statement number six (well organised) where there is a spread of views. Here, Trainee Teachers and BSc. students have a more neutral perception about the laboratory organisation. Of greater interest is the amount of polarisation of views: while groups of students seems to hold very positive views, there are often *sizeable minorities* holding *very negative* views with no distribution really conforming to a normal distribution. The most polarised group appears to be the trainee teachers group although the difference is not significant. This is matter of concern in that a significant minority of the trainee teachers appears to hold a very negative perception relating to several aspects of laboratory work at school level and this may influence the way they would use laboratories in their own teaching.

(2)   Students perception of mode of laboratory work at school level

The data below shows that the three groups had very similarly views about the mode of working in school laboratory, working in pair or small groups was considered as preferred mode. This may be due to the fact that in most of the schools laboratory work is done in pairs or groups. The same trends are shown in responses to the question about style of working in college/university laboratory. Nonetheless, about one quarter preferred to work individually. To meet this need requires more space and resources and the reason underlying this preference needs to be explored to see if it can be met in another way.

	Working Individually		Working in Pairs		Working a demonstration	
	School	University	School	University	School	University
First year (229)	22	27	69	68	9	5
Second year (150)	25	26	65	65	10	9
Trainee Teachers (118)	15	31	75	65	6	3

(3)   Overall chemistry laboratory experience

Students were asked:

Think about your past experiences in chemistry laboratory work, and then give their opinion about each statement.

Again, the data is shown for clarity as percentages, with the response of *strongly agree* being first and *strongly disagree* being last. Response patterns were compared using chi-square as contingency test for first year/second year and second year/BEd students but are only shown when significant. The most significant observation is how few significant differences can be observed.

			SA	A	N	D	SD	Statistics
a	I believe that the laboratory is a vital part in learning chemistry	First year	58	35	5	2	0	More convinced in second than first year year: χ^2 (df2) =12.9, p < 0.01
		Second year	67	19	5	0	8	
		BEd students	65	30	4	1	0	
b	I prefer to have written instructions for experiments	First year	31	48	13	7	0	
		Second year	25	51	9	5	8	
		BEd students	34	47	8	6	0	
c	All the chemicals and equipment that I needed were easily located	First year	24	33	16	20	5	
		Second year	26	29	17	17	10	
		BEd students	24	19	23	21	8	
d	I was unsure about what was expected of me in writing up my experiment	First year	15	29	31	11	7	More unsure in second year. $1^{st}/2^{nd}$ χ^2 (df4) = 16.2, p < 0.01 BEd/2nd χ^2 (df3) = 14.2, p < 0.01
		Second year	19	22	19	24	9	
		BEd students	15	41	18	13	5	
e	Laboratory work helps my understanding of chemistry topics	First year	44	39	10	2	3	
		Second year	39	36	12	5	7	
		BEd students	47	35	9	5	0	
f	Discussions in the laboratory enhance my understanding	First year	39	41	8	7	2	
		Second year	33	43	14	4	5	
		BEd students	37	38	9	10	0	
g	I only understood the experiment when I started to write about it afterwards	First year	21	32	18	22	5	
		Second year	17	37	13	19	12	
		Bed students	14	35	11	25	8	
h	I had few opportunities to plan my experiments	First year	17	40	16	18	7	
		Second year	21	35	19	13	8	
		BEd students	15	35	20	17	5	
i	I felt confident in carrying out the experiments in chemistry	First year	38	41	11	6	3	Confidence drops in second year $1^{st}/2^{nd}$ χ^2 (df3) =19.8, p < 0.01 BEd/2nd χ^2 (df1) = 8.8, p < 0.01
		Second year	22	39	21	11	7	
		BEd students	31	42	6	14	0	

j	I found writing up about experiments pointless	First year	15	25	21	25	12	
		Second year	15	27	23	25	7	
		BEd students	11	23	20	25	8	
k	The experimental procedure was clearly explained in the instructions given.	First year	28	38	17	8	3	
		Second year	23	42	16	14	4	
		BEd students	20	48	13	10	5	
l	I was so confused in the laboratory that I ended up following the instructions without understanding what I was doing.	First year	7	25	14	28	22	
		Second year	9	23	18	35	13	
		BEd students	11	24	13	30	18	
m	I feel that examinations should take account of laboratory experiments I have completed	First year	39	36	14	4	4	
		Second year	39	40	13	4	5	
		BEd students	31	53	6	4	0	

The majority of the students in the three groups recognised laboratory work in chemistry as vital. However, second year students were more positive in their view ($df2 = 12.9$, $p < 0.01$) with slight signs of polarisation. The students showed their preference for written instructions for laboratory work. It may be to help them to work more efficiently or it may simply reflect their insecurity that they may feel when not sure what to do, and how to do it. Responses of the three groups are similar on the question about the availability of equipment. It reveals that, at both university and school level, there was a shortage of equipment although the problem was not seen as severe. 44% first year and 41% second year and 56% trainee teachers students felt that they were unsure about what had to be written about in their report and this may reflect their uncertainty about laboratory work as conducted in schools. The difference between the opinions of groups was significant and reveals a slightly more positive attitude with the older group.

The majority of the students in all the groups thought that laboratory work helped in understanding chemistry topics. It reflects on the fact that there was link between practical and theory in chemistry course and that both are closely integrated. Students of all the groups thought that discussions enhanced their understanding of the laboratory work. It may reflect (confirmed from other research: Heller and Marks, 1992) that group work has this benefit. Over 50% students in all the groups agreed that it was only when they write about the experiment that they understood the experiment. A majority of the students in all

the groups agreed that they had few opportunities to plan their experiments. It reflects a highly structured laboratory programme with little, if any, chance for students to plan the procedure of their experiments. Experimental planning is a vital feature of the role of experimental work in any science and this is a sad reflection but typical of many countries.

The majority of the students felt confident in doing experiments. However, a significantly higher percentage of Trainee Teachers (BEd) and First Year students held this view. Students' views on utility of write up of experiments are widely spread but 40% agreed that they found writing up of experiments pointless. It reflects the unsatisfactory nature of the write up.

Both the groups agreed that the procedure was clearly explained. It also reveals a highly structured nature of laboratory work in chemistry at both university and school level. About one third students in each group expressed that they follow laboratory instructions without understanding. It reveals that for these students the laboratory work will not be very effective. Around 75% of students in each group agreed that laboratory work should be included in final assessment. This reflects the attitude with many students not taking seriously that which is not assessed. Sadly, assessment of laboratory work can often distort the aims. Some of the more important outcomes are not easily assessed and much less important outcomes, because they are assessed, become dominant, often reducing any value from the experience.

(4) Reasons for laboratory work in Chemistry

Students were given the following list of reasons for undertaking laboratory work in learning chemistry and asked to tick the *three* they thought were most important. This question reveals the priorities from the student's perspective and shows where there is a potential mismatch between these and any aims of the courses.

		First Year	Second Year	Trainee Teacher
(1)	Experimental work makes chemistry more enjoyable for me	45	43	36
(2)	Experiments illustrate theory for me	35	36	36
(3)	Laboratory work allows me to test out ideas	31	37	38
(4)	Experiments allow me to find out about how materials behave	42	31	24
(5)	Experiments teach me chemistry	37	26	23
(6)	Experimental skills can be gained in the laboratory	26	27	42
(7)	Experiments assist me to plan and organise	12	14	11
(8)	Experimental work allows me to think about chemistry	30	33	45

Because of the nature of this kind of rating data, it is difficult to check statistically for significance. However. the following general observations are

made. Laboratory work is highly rated by BSc first year and second year students as an enjoyable activity. However, more experienced group of trainee teachers rated the laboratory work highly for teaching practical skills. A majority of the respondents in the three groups consider it helpful in illustrating the theory. The role of laboratory work as a means to know how materials behave and in teaching chemistry are highly rated by the less experienced first year students. A comparatively low percentage of second year students and trainee teachers value practical work as an aid in teaching chemistry and to know how materials behave. The role of practical work in inculcating planning and organising skills is rated by only a small minority of respondent as one of the reasons for conducting practical work. This reflects the highly structured nature of practical work.

A comparison of the rating given by the three groups shows that in two questions (2 and 7) ratings have not changed while in 3 questions (1,4 and 5), ratings have fallen. The decline in question (1) has been noted as a matter of concern while the decline in (4) and (5) may reflect increased realism. This rise in question (6) occurs between the second year and the trainee teachers and may either indicate an emphasis that they have experienced or a commitment to a purpose for their own training. In two questions (3 and 8) the highest rating occurs for the second year and at almost certainly reflects the style of laboratory work in the second year.

Conclusions

Looking at the pattern of results overall, the following general conclusions can be drawn:

(a)   There is a generally positive attitude towards laboratory work at school with all groups although there is quite a marked polarisation with a sizeable minority holding very negative views. These negative views tend to grow and tend to be highest with those training to be teachers. This has potentially serious consequences for the next generation of learners.

(b)   Laboratory work at school is popular: around two thirds indicate positive views of school chemistry in terms of it being seen as helpful, satisfying, interesting and the best part of chemistry while 63% specifically say it is enjoyable. However, the laboratory work in school chemistry is often not very well organised and the students are not clear about what was expected from them and they follow the instructions without understanding.

(c)   The highly structured nature of practical work leaves no opportunity for the students to plan and organise their experiments. The students prefer written instructions and this reflects their insecurity. The write up of the experiments is ineffective and lacks purpose.

(d)   Laboratory work has an enjoyment factor and is helpful as a means to illustrate theory and to teach how materials behave.

(e)   There is a mismatch with what the students see the purposes of laboratory work and what actually happens. The responses of students show a wide diversity of view and none of the aims stands out clearly. This suggests that there is a lack of clarity about the nature and purpose of laboratory work.

Recommendations

The first and most important issue is to clarify the aims for laboratory work at school and at university levels and to share these aims with the students. It is simply not sensible to aim for the development of laboratory skills in that, for most of the students, they will never become bench chemists and such skills are irrelevant. It could be argued that all the students, and especially student teachers, need to know the basic methods used in chemical enquiry. Indeed, this is very important for those who plan to teach chemistry. However, for most school students who take chemistry and many university students, the practical skills of chemistry are a means to an end: They are ways by which chemistry addresses questions of the materials under study. Understanding these skills is important, being able to carry them out is less important.

School and university labs offer opportunities for the students to see chemistry in action, to meet real materials, to see what is taught in lectures and classes happening. Planned properly, there are opportunities to allow students to see a science in action: the key source of evidence in developing understandings about the behaviour of materials comes by means of experiments. Students should have opportunities to experience this. The surveys show the confusions over the aims for laboratory work. These need thought through, clarified and shared.

The second recommendation derives from this. Students need opportunities to experience open-ended experiments, to be able to plan and see how an effective experiment can be constructed and employed. There are exciting opportunities here and it is not as difficult as might be first thought. The paper laboratory concept (see

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Shah, 2004) offers one way forward. Students seem to want more scope for freedom. With some thought, this is not too difficult to develop.

The third recommendation relates to laboratory organisation. If the teachers and the students are sharing a common set of aims, then it is easier for the labs to be organised meaningfully. This need not involve large amounts of new chemicals or equipment. It does mean sitting down and planning to see how the agreed aims can be achieved effectively and efficiently. The criticisms of organsiation may not, of course, be reflected in all countries and all contexts.

The fourth recommendation considers laboratory reports and assessment. Both must reflect the agreed aims. Neither must distort the aims or emphasise things which are not important. For example, if an experiment seeks to illustrate the behaviour of some chemicals, then the report must offer an account of this and assessment must reflect the extent to which the student has grasped the chemical behaviour. On the other hand, if an experiment aims to allow students to plan an experimental enquiry for a stated purpose, then the assessment must show the extent to which the student has been successful in planning. The idea of allocating a mark many be meaningless. It may be much better to record that the student has carried out the task satisfactorily and achieved the aim set, the evidence of this being based on qualitative measures. Students want assessment; it is the task of the teacher to ensure that assessment is valid and helpful.

Finally, there are numerous important skills which can be developed by means of laboratory work: team working, observation skills, deduction skills, skills of analysis, evaluation and synthesis, skills relate to data handling, and so on. These can be part of a laboratory report and can also be assessed. In the long run, such skills may be *much more* important than correctly following laboratory instructions and getting a 'right' answer. Students clearly have difficulties with regard to the place and nature of reports.

The potential for laboratory work is simply enormous. It need not cost more in terms of time or money to achieve exciting outcomes. It does need clear thought, specification of aims, and a careful use of all aspects of assessment. Together, these can offer the next generation of students a much more enriching experience.

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DEVOLUTION PLAN AND CAPACITY BUILDING OF EDUCATIONAL MANAGERS

By
*Salma Nazar Khan**

Abstract

This study was designed to analyze the implementation status of Devolution Plan in education sector at Rawalpindi district and to assess the training requirements of educational managers/school principals for capacity building under the document. The study also intended to explore the advantages and disadvantages of the plan. Devolution is actually the decentralization of decision-making power at district level that has been transferred to district government from the central government through Devolution Plan. Both quantitative and qualitative approaches were used for this purpose. The sample of the study consisted of the 28 principals/ head masters of high schools (4 from each of seven tehsils) and EDO (Executive District Officer). The questionnaire and interview schedule were used as research tools. Self made questionnaire comprising 39 questions, both qualitative and quantitative was administered for collection of data from school principals and semi structured interview consisting of 10 questions, open-ended and leading, was designed for EDO. The researcher collected data personally. The study concluded that powers have not been delegated at district level as outlined in the Devolution Plan. It also concludes that educational managers/ school principals require training in administrative, financial and academic procedures as per provision of Devolution Plan. In the light of conclusions, the study strongly recommended that delegation of powers may be implemented on the lines of decentralization along with scheduling a comprehensive training programme for educational managers/school principals for their capacity building in the light of professional requirements as set in the various provisions of Devolution Plan.

* The writer is associated with Fatima Jinnah Women University, Rawalpindi.

Introduction

In education, the Devolution Plan has evolved as main thrust area of Education Sector Reforms. Devolution Plan has been proposed for good governance and proper educational delivery, to make the policy and planning process of Federal and Provincial governments more realistic and relevant to the ground realities and to ensure the participation of the community.

The Education Sector Reforms (ESR) programme was initiated in 2001, with systematic attention on major areas of education, such as i.e. establishment/ strengthening of adult literacy centre, establishment of early childhood education centre, introduction of technical stream at selected secondary schools, revamping of science education, rehabilitation of facilities at elementary level, establishment/ renovation of teacher training resource centre, teacher training and public-private partnership (Government of Pakistan, 2002). Devolution Plan is one of the major areas proposed in ESR with its own significance and distinctive features. Florestal and Cooper (1997) describe the devolution in the following way:

> "Devolution is associated with four key features the body that exercises responsibility, the body acts on its own, the body that can exercise only the powers given to it, and the body that can act only within geographic limits set out in law."

After Devolution Plan 2001 or decentralization of decision-making in Pakistan, Divisions were abolished, and instead a new government structure comprising of three categories of local government - districts, tehsils and unions – was brought in. Before Devolution Plan, there was little scope for elected representatives to participate in local administration, but now elected Nazim and Naib Nazim are the head of each union, tehsil and district local government and there are political linkages among the three tiers. The old system of government lacked democracy at local level. The governance was centralized so that decisions about local level were taken up with little reference to local needs and priorities. Accountability was a missing link which is the most important factor for good governance. According to Education Sector Reforms 2001-2005: "Good governance plan 2001 is designed to address the issues of good governance at a systematic level. It addresses five fundamentals, viz. devolution of political power, decentralization of administrative authority, decentralization of management function, diffusion of power-authority nexus and distribution of resources to the district level". (Government of Pakistan, 2002).

Devolution Plan/Decentralization in Education

According to Fiske (1996, cited in Shah 2003), "Decentralization in Education a complex process that deals with changes in the way schools systems go about making policy, generating revenues, spending funds, and training teachers, designing curricula, and managing local schools". The term decentralization in education is actually the transfer of school policy-making authority; from the federal to local level through provincial, district and tehsil levels. Decentralization shifts the decision making process, from central or provincial headquarter down to the district government level, for achieving the objectives of education more effectively through an efficient and an accountable mode of governance (Shami and Waqar, 2007). Decentralization in education also allows the community members to involve in decision-making process for the development and improvement of school system.

Main Feature of Devolution Plan in Education

Decentralization in education has become extremely appealing in education sector because of its prominent features like: delegation of power to the district, allocation of financial power/fiscal decentralization, effective monitoring, evaluation, audit of schools at district level, empowering head teachers/principals and involvement of community at school level, etc. In Devolution Plan not only the decentralization of decision-making power is taken place but also the financial powers have been transferred to the head teachers/principals who are supposed to be as backbone of an educational institution. Involvement of community at school (or establishment of School councils) is another aspect of decentralized educational structure. School Councils work for the development of school and for the delivery of quality education of their children. Usually it is believed that all the stakeholders of the school councils are well aware of their needs in educational set up and they are more efficient for the improvement and development process probably this is the sole reason that school principals cannot utilize the school FTF (Farogh-e-Taleem Fund) without the permission of the School Councils. As it is stated in report of Multi-donor Support Unit that the Local Government Ordinance 2001 provides for the establishment of the Citizen Community Boards (CCBs) in order to ensure effective and institutionalized community participation in service delivery. These Citizen Community Boards, in turn, can form stakeholders associations, such as Parent Teacher Association for community involvement in the improvement and maintenance of specific services", (Multi- donor Support Unit, 2002) Although its name is different in different provinces, yet its aim is just the improvement and development of the ' schools. According to the report of HRCP (Human Rights Commission of Pakistan) "SMC's (School Management Committees) are known by different names, Village Education Committee (VEC) and Parent- Teacher Association

(PTA) in NWFP, Parent- Teacher School Management Committee (PTSMC) and Village Education Committee (VEC) in Balochistan, PTA's in Sindh and School Councils in Punjab (HRCP Report, 2004).

Main Provision of Devolution Plan in Education

Alongwith the salient features of Devolution Plan, it proposed some important provisions for educational set up which includes: School based planning; proper provision of funds; proper provision of resources; assurance of teacher training; provision of school text books in the beginning of academic year; improvement of physical facilities, etc.

Devolution Plan provides some revolutionary reforms in education sector. This also provides opportunity for common masses to get educated by presenting some initiatives like no fee and free textbooks to every individual student. Provision of free textbooks in all public sector schools is an important step for poverty reduction and for the involvement of deserving students. Teachers' training is another important provision for the improvement of education, but again it is not conducted on regular basis as it is stated in the UNESCO report in the words that decentralized system is comparatively more effective. Under this system, education planning, management and monitoring/evaluation have been decentralized to district level. However, it has been observed that the new system is facing certain problems, such as shortage of qualified personnel, facilities and services and ambiguity in functions, responsibility and authority, which will be hopefully addressed with the passage of time (UNESCO, 2005).

Educational Management and Managers

Educational management is the collective utilization of human and material resources, in order to effectively achieve the objectives set for schooling (Shami, et al, 2006). Management is vital for the successful progress of any educational institution. Effective management provides positive direction and purpose for the achievement of set objectives. Educational managers are school principals who manage the school and resolve the issues related to school development. This supports the idea that the head teacher/principal has the overall responsibility for managing school effectively, which includes management and motivation of staff, supervision and support of pedagogy and pedagogical leadership, personnel development, team building, and community liaison. Participation of all key stakeholders in decision- making on different issues has been found to be most effective. (Shami and Waqar, 2007) Thus, the principal who accomplishes his mission and objectives is said to be effective. Efficiency

describes the relationship between the amount of resources used (inputs) and accomplished objectives (outputs). Thus, effective and efficient educational managers/school principals benefit the organization.

Professional Requirements and Capacity Building of Educational Managers/School Principals under Devolution Plan

Capacity building of educational managers is a crucial factor in any changed situation. Educational governance is increasingly complex after Devolution Plan; decentralization has brought a range of stakeholders and resources (human and financial) in educational set up. Now, if we need an effective change in education system, an important consideration should be given to the management issues including a number of specific skills and characteristics of educational mangers for capacity building under Devolution Plan. According to the report of UNESCO, "Educational management is another weak area where lack of capacity results in induction of poorly trained educational managers" (UNESCO, 2005).

Statement of the Problem

The study was aimed to analyze the implementation status of Devolution Plan and capacity building of the educational managers/ school principals.

Research Objectives

The aim of the research was to analyze the situation after Devolution Plan 2001 alongwith the major changes and development in education sector. In this context the objectives of the research were: to analyze the implementation status of Devolution Plan in Rawalpindi District; to explore the perceptions of educational managers about Devolution Plan; to identify the needs and professional requirements of school principals/ educational managers under Devolution Plan for capacity building and to suggest viable suggestions.

Methodology

Descriptive design of research was used. There are total 259 secondary schools in seven tehsils of Rawalpindi district. Four principals from each tehsil were selected from the population on random-stratified sampling technique as sample for the study by giving equal weightage to each strata. Moreover, EDO was also included in the sample. Self-constructed questionnaire used for school

principals/educational managers and semi-structured interview was designed for EDO to collect the data. On the basis of collected information through document analysis, a questionnaire comprising of 39 questions, was developed. First part of the questionnaire was based on demographic information of the school and educational manager. Then, two basic categories were designed about main feature and provisions of Devolution Plan. Four different categories: General (about Devolution Plan), administrative training requirements, financial training requirements, and academic training requirements to identify the capacity building needs of the principals and four open ended questions were added to investigate the advantages and disadvantages of Devolution Plan. All the questions asked in interview based on different aspects of Devolution Plan/ Decentralization and educational management was prepared for data collection

Analysis and Interpretation of Data

Collected data through questionnaire was tabulated and analyzed keeping in view of the objectives of the study. Mean and Chi-square were used to analyze the data. Data was analyzed and results were interpreted.

Table - 1
Shows the cumulative opinion of principals on various aspects of Devolution Plan and capacity building of educational managers

Aspects	Tehsil Gujar Khan	Tehsil Kotli Sattyan	Tehsil Kahuta	Tehsil Kallar Syaddan	Tehsil Taxila	Tehsil Murree	Tehsil Rawalpindi	Tehsil wise Cumulative Mean
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Features of Devolution Plan	1.5	2.20	1.81	2.04	2.27	1.56	1.58	1.85
Provisions of Devolution Plan	1.00	1.31	1.37	1.59	2.28	1.31	1.65	**1.50**
General querries about Devolution Plan	3.65	3.8	3.6	4.05	3.55	2.8	3.6	3.57
Administrative training needs	4.46	4.12	4.40	4.31	3.93	4.06	4.59	4.27
Financial training needs	4.59	4.31	4.45	4.47	3.88	4.56	4.56	**4.40**
Academic training needs	**4.79**	4.29	4.33	4.54	4.45	4.29	4.25	4.38
Aspect wise Cumulative mean	3.33	3.33	3.32	**3.5**	3.33	**3.09**	3.37	**3.3**

Table 1 indicates that (i) maximum mean score (4.79) is on the opinion of principals of tehsil Gujar Khan, on the aspect "academic training needs". (ii) The cumulative maximum mean score (4.40) is on the parameter of "financial training needs" while the minimum score (1.50) is on the parameter of "provisions of

Devolution Plan" against the aggregate mean score of 3.3 and (iii) Maximum mean score (3.5) on all the parameters of various aspects of Devolution Plan and capacity building of educational mangers for tehsil Kallar Sayyadan while the minimum mean score (3.09) is for tehsil Murree against an aggregate mean score of 3.3.

Table - 2
Shows statement wise values of chi- Square value
on all aspects of Devolution Plan

Aspects	$*\chi^2$ (Calculated value)	χ^2 (Table value)	Significance at 0.05 level
Delegation of power to the district	7.91	5.99	Non- significant
Decentralization takes place at district level	3.79	5.99	Significant
EDO has the authority for the appointment of regular staff	0.29	5.99	Significant
EDO has the authority for the appointment of staff on contract basis	2 .1	5.99	Significant
Allocation of financial powers	3.58	5.99	Significant
Effective monitoring and evaluation of schools at district level	7.00	5.99	Non- significant
Information regarding Devolution Plan has been communicated by EDO	17.20	5.99	Non- significant
Empowering head teachers/ principals	2 1.58	5.99	Non- significant
Involve community at school level	11 .81	5.99	Non- significant
School council playing important role	0.95	5.99	Significant
EDO supervises the work of school councils	3.79	5.99	Significant
EDO supervise the curricular and co-curricular activities of schools	3.43	5.99	Significant
Planning and management of school system	6.48	5.99	Non- significant
Training of principals in making school budget account keeping	1.07	5.99	Significant
Decentralization assures teacher training	2 .1	5.99	Significant
Provision of school text books in the beginning of academic year	51.08	5.99	Non- significant
The share of development budget has been increased	0.35	5.99	Significant
Proper provision of funds	2 .93	5.99	Significant
Proper provision of resources	4.66	5.99	Significant
Improvement of physical facilities	7.32	5.99	Significant
The Devolution Plan is the decentralization of decision-making at grassroots level	6.74	9.49	Significant
Management and supervision has been improved through devolution in education	7.40	9.49	Significant
Good governance in schools may be achieved without intensive training in management and supervision	23.39	9.49	Non- significant

District Education authorities are helpful in decision making processes in schools	12.15	9.49	Non- significant
School Councils Management play important role in school development.	3.35	9.49	Significant
Planning and management of school system	8.87	9.49	Significant
District Education authorities are helpful in decision making processes in schools	11.18	9.49	Non- significant
Disciplinary rules	2.48	9.49	Significant
Kind of leaves and leave rules	21.44	9.49	Non- significant
Diary and dispatch noting/ drafting	1.90	9.49	Significant
Maintenance of cash books, fees fund registers, staff registers, admission registers etc	2.11	9.49	Significant
Repair and maintenance of building, furniture and other things.	5.29	9.49	Significant
Holding meetings with school councils	11.14	9.49	Non- significant
Procedure of obtaining budget	5.72	9.49	Significant
Procedure of maintenance of budget records	3.01	9.49	Significant
Preparation of different kind of bills	4.02	9.49	Significant
Coding about budget and other finance matters	2.74	9.49	Significant
The general financial rules about receipts, loans, arrears and advances.	1.21	9.49	Significant
Maintenance of service books and their verification	4.29	9.49	Significant
Procedure of claim and to draw house rent, motorcar advances and loans	3.00	9.49	Significant
Documents needed to maintain the records of different loans and advances	3.77	9.49	Significant
Preparation of monthly expenditure	6.16	9.49	Significant
Rules about pension provident funds and benevolent funds and allotment of GP fund	7.90	9.49	Significant
Evaluation and assessment procedures	6.40	9.49	Significant
Use of computers in planning and management of lessons	5.56	9.49	Significant
Daily reports and development of timetable	5.56	9.49	Significant
Maintenance and regular use of A.V aids	6.40	9.49	Significant
Development and revision of curriculum	6.62	9.49	Significant
Controlling the discipline and drop out problems	18.26	9.49	Non- significant

This table indicates that decentralization takes place at district level, EDO has the authority for the appointment of regular staff, EDO has the authority for the appointment of staff on contract basis, allocation of financial powers, school councils are playing important role, EDO supervises the work of school councils, EDO supervise the curricular and co-curricular activities of schools. The table also reveals that decentralization assures teacher training and training of principals. The share of developmental budget has been increased, proper provision of funds and Proper provision of resources and facilities is assured through decentralization. The

data analysis also supports that Devolution Plan amply provides the decentralization of decision-making at grassroots level, management and supervision has been improved and School Management Councils play important role in school development, planning and management of school system.

All the statements that are significant at 0.05 level considered to be true and the statements that are non-significant at 0.05 level are not true in the context of Devolution Plan and professional requirements of educational managers.

* Chi square was calculated using the formula $$\chi^2 = \Sigma \frac{(fo - fe)^2}{fe}$$ Where as: $\qquad$ fo $\quad = \quad$ Frequency observed $\qquad\quad$ fe $\quad = \quad$ Frequency expected

Findings
- Data shows that EDO has power of allocation of financial resources. EDO also confirmed transfer of financial powers at district level under Devolution Plan.
- Majority of the principals have the opinion that "information regarding Devolution Plan had not been communicated by EDO" and they have not seen even the document of Devolution Plan or ESR.
- Majority of the principals have the opinion that delegation of power to the district has not been practically implemented. However, decentralization at district level has been implemented. This was also confirmed by the interview with EDO.
- Head teachers/principals had not been empowered under Devolution Plan.
- Community at school level had not been involved in school in general in Rawalpindi district and in Gujar Khan and Kallar Sayyadan tehsil in particular. Hence EDO was of the view that community mobilization has been increased under Devolution Plan and school councils are playing important role in the development of schools.
- EDO supervised the work of School Councils as well as the curricular and co-curricular activities in the schools in district Rawalpindi
- Share of development budget has been increased under the Devolution Plan.
- Improvement of physical facilities had not been made under the Devolution Plan.
- School Management Committees (SMC's) play vital role in school development.

Open-ended question about the "identification of some important areas in which training for capacity building is required" revealed that most of the educational managers/school principals need training in the following five areas:

1. Planning and management
2. Budgeting process
3. Computer-based training
4. Financial rules

Educational managers required training on the above mentioned areas for duration of at least one month particularly for budgeting procedures, management, curriculum development and financial rules and three months for computer-based training. They proposed agencies like Ministry of Education, NISTE (National Institute of Science and Technical Education) and different NGO's for any such training because they are not satisfied with the training provided by DSD (Directorate of Staff Development). The training of teachers will be rigorously carried out by developing and enforcing recruitment and promotion criteria, developing procedures, teacher deployment and pre-service and in-service training (National Commission for Government Reforms, 2007).

Conclusions and Discussion

From the findings of the study, following conclusions were drawn:
1. Though the decentralization has been implemented but powers have not yet been delegated at district level.
2. EDO has the authority to appoint any staff in their respective districts and to allocate financial resources according to the requirements of schools.
3. Monitoring and evaluation of school is not made at district level and there is a dire need of improvement in monitoring policies and procedures.
4. Devolution Plan was not communicated by EDO to head teachers. They have also not been empowered under Devolution Plan.
5. Community has not been involved in school. Consequently School Councils are not playing any role in the development of education.
6. School based planning and management has not been started and no budget is provided for teacher training under decentralization.
7. It was found that the educational managers/school principals are required to be trained in the areas like: planning and management, disciplinary rules and regulations, diary/dispatch, noting, drafting,

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maintenance of school records and registers, repair and maintenance of building, furniture and other things

8. Educational manager/principals of secondary schools in Rawalpindi district need school-based training in handling the following matters:
   a) Budgetary procedures including coding, maintenance, record keeping, income and expenditure statements, accounting, documentation regarding loans, provident funds, advances, salaries, etc.
   b) Maintenance of service books and all types of registers like stock register, attendance registers, etc.

9. District management may arrange training for educational managers/principal of high school in handling the training matters including: evaluation and assessment procedures, use of computer in planning and management, daily reports, development of timetable, maintenance and utilization of A.V aids and development and revision of curriculum.

The study focused upon analyzing the implementation status of Devolution Plan and capacity building (needs for professional development) of educational managers/school principals under it. Tehsil wise comparison of all the aspects included in the questionnaire and statement wise analysis of all the aspects shows that effective monitoring and evaluation of schools at the district level is not made in all tehsils in general and in Kotli Sattyan in particular. Non-availability of the transportation and insufficient manpower at district level is confirmed. Community Mobilization was an important component of decentralization may be put into operation. Hence, under Devolution Plan community was not effectively involved in schools in general in Rawalpindi district and in particular in tehsils Gujar Khan and Kallar Sayyadan as the mean score was highest in the relevant statement. In the seminar of Governance Reforms in Education Sector, Dr. Ishrat Hussain said the establishment of District Educational Boards would provide the much-needed civil society participation in education planning and the introduction and design of initiatives to improve educational outcomes. (National Commission for Government Reforms, 2007)

This was also supported by the findings of statement-wise analysis that effective monitoring and evaluation of schools was not accepted at 0.05 levels It is evident that Kotli Sattyan is a far-flung tehsil and it may be due to the shortage of monitoring staff and non-availability of transport. Discussion with the principals during field visits revealed that a process of selection rather than election had formed school councils, and most of those selected parents lacked ·

interest or were unaware of their role and responsibilities. Even motivated ones had no formal mechanism for disciplining teachers and were reluctant to sending complaints to line departments because of personal biases. Officials had little incentives to resolve the complaints. Financial resources are pre-requisite to undertake the activities in district. Data shows that EDO has power of allocation of financial resources. EDO also confirmed transfer of financial powers at district level under Devolution Plan. In above referred seminar Ishrat Hussain amply remarked that other provincial governments should also provide conditional grants to the district governments for expeditious completion of missing facilities in the educational institutions in line with the criteria adopted by the Punjab government. (National Commission for Government Reforms, 2007)

Recommendations

Following Recommendations may be cited in the light of conclusions of the study:

- Powers may be delegated at district level as per provisions of the Devolution Plan in letter and spirit through trickle down effect for the empowerment of educational managers.
- Another way of doing things positively may be that responsibility and authority should go side by side at all levels of management viz-a-viz EDO, educational managers/school principals and school councils.
- It is also suggested that awareness about the Devolution Plan with all its significant features and developments may be created among all stakeholders
- A comprehensive schedule for the training of the educational managers/principals in all the administrative, financial and academic matters (indicated in the conclusions in detail) may be chalked out it in line with its boarder objectives and cost effectiveness at district level. It may be made mandatory for every district manager (EDO) to adhere to it.
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THE INVESTIGATION OF MACRO PROCESSING AND MICRO PROCESSING IN READING COMPREHENSION OF GOVERNMENT SECONDARY SCHOOL STUDENTS

By
*Dr. Tanzila Nabeel**
*Gulnaz Bibi***

Abstract

The study on the above-mentioned topic was carried out through descriptive research approach. Population of this study was the students of 05 government secondary schools of Haripur city. 50 Secondary school students were the sample of this study. Survey was carried out. A test was developed and administered which consisted on two parts: part 1 of the test was about Macro processing and part 2 was Micro processing. The first part of the test was Micro processing having six questions and the part 2 was developed to check the Macro processing having two questions. The results indicate that students have problems in Macro processing and Micro processing in reading comprehension.

Introduction

The purpose of learning to read is to comprehend. The comprehension depends on working vocabulary and then background knowledge. Recent research supports that written composition is improved by mastery of the component skills of spelling and writing just as reading comprehension is supported by smooth/easy word recognition. Fluent, accurate letter formation and spelling are related with students' production of longer and better-prepared compositions. Word usage, handwriting, punctuation, capitalization, and spelling are the necessary principle of written expression that must be taught alongside strategies for composing. The students learn spelling and handwriting more readily if those skills are taught explicitly from first grade onward, and if they are applied in the context of frequent, purposeful writing assignments. (Alliance. 2000)

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* The writer is working as Assistant Professor in the Department of Special Education, Allama Iqbal Open University, Islamabad.
** Research Student.

Reading comprehension is understanding a text that is read, or the process of constructing meaning from a text. Comprehension is a constructing process because it involves all of the entire element of the reading process working together as a text is read to create a presentation of the text in the reader's mind. The process of synthesizing and organizing individual idea unit into a summary or organized series of related idea is called Macro processing. (Gipe, 1995) In the comprehension process the reader must first construct the meaning from the individual idea unit in each sentence and decide which of these ideas to remember. This initial task of chunking and selectively recalling individual idea units is termed Micro processing. So, Micro processing is a sentence comprehension. (Gipe, 1995) The skills which are necessary for comprehension process, are that the reader should know the meaning of the text, underline important detail, know about the usage of words. Then understand words in context and to select the meaning related to the text. The reader should be able to understand the main idea of the lesson, answer questions about the lesson and then be able to make a summary of the text.

The present study was conducted to investigate the skill of Macro processing and Micro processing in reading comprehension of government secondary school students in schools of Haripur district.

Objectives

- To analyse the skills of reading comprehension in Macro processing.
- To analyse the skills of reading comprehension in Micro processing.
- To suggest the corrective reading techniques in reading comprehension of Macro processing and micro processing.

Methodology

It was a survey type research study. Investigation into the Macro processing and Micro processing of students in reading comprehension was carried out. The research has highlighted the problems in reading comprehension.

The five Government Girls High Schools of Haripur district were the main base of the study. Five schools were selected from 40 schools using Cluster sampling technique. 5 schools were required for the study so using the formula of kth number (5/40=8), the value of 8 was found so every 8th number was selected.

The research instrument was a researcher made test for the Investigation of Macro processing and Micro processing in Reading comprehension of Government Secondary School Students. For developing the test, books on English language comprehension and teachers teaching the subject English were consulted.

Before data collection a pilot study was conducted. For this purpose two schools as sample were selected, G.G.H.S.S Khanpur and G.G.H.S Joulian. The test was administered among 10 students of each school. On the basis of the results of pilot study, some of the test items were modified. (Ahsan, 2001., Bakerand Westrup, 2000., Long, 1980., Mcwhorter, 1997., Milan, 1988., Yee and Leng, 1995)

The test was consisted of two parts. The part 1 was related to the Micro processing and the part 2 was related to the Macro processing. The test had eight questions altogether. Among them 6 questions were in the section of Micro processing and 2 questions were in the section of Macro processing. The test consisted of the following parts

PART-1
Micro Processing

Questions
1.   Fill in the blanks.
2.   To checks the Words expression.
3.   Words Meanings.
4.   True and False.
5.   Match Column.
6.   Complete the spelling of words.

PART-2
Macro Processing

Questions
1.   5 comprehension questions in the given passage.
2.   Determining the main idea.

So, these were the items of the test.

Table - 1

Table - 1
Result of Q. 1 (Fill in the blanks) Total Marks: 05

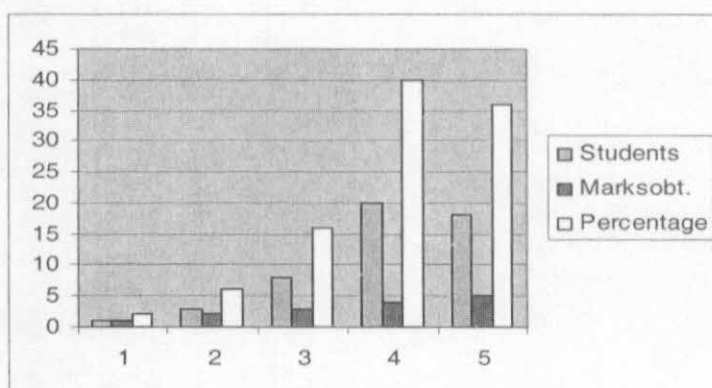| S. No.	No. of students	Marks obtained	Percentage
1.	1	1	2
2.	3	2	6
3.	8	3	16
4.	20	4	40
5.	18	5	36

Graphical Presentation of Table-1

Table -1 and figure No.1 indicate that 2% students obtained 1 mark, 6% students obtained 2 marks, 16% students obtained 3 marks, 40% students obtained 4 marks, and 36% students obtained 5 marks.

Table - 2
Result of Q.2 (Find out what the underlined words refer to.) Total Marks: 10

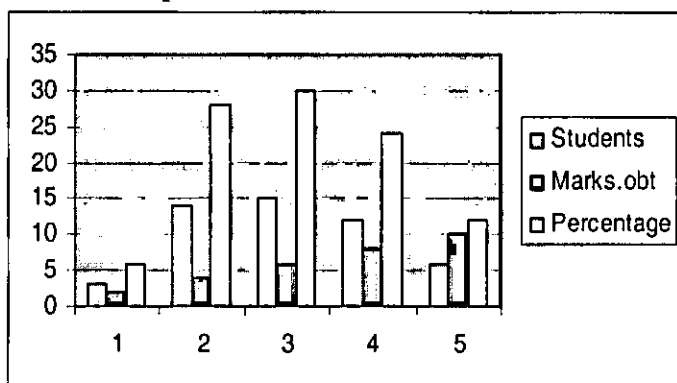| S. No.	No. of students	Marks obtained	Percentage
1.	3	2	6
2.	14	4	28
3.	15	6	30
4.	12	8	24
5.	6	10	12

Graphical Presentation of Table - 2

Table - 2 and figure No.2 indicate that 6% students obtained 2 marks, 28% students obtained 4 marks, 30% students obtained 6 marks, 24% students obtained 8 marks, and 12% students obtained 10 marks.

Table - 3
Result of Q.3 (Give the meaning of the following words.) Total Marks: 10

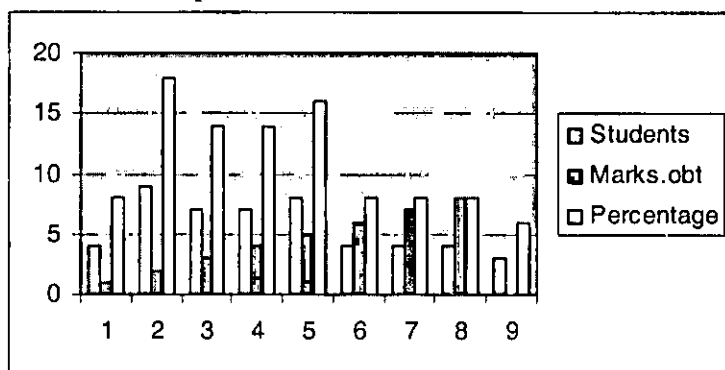| S. No.	No. of students	Marks obtained	Percentage
1	4	1	8
2	9	2	18
3	7	3	14
4	7	4	14
5	8	5	16
6	4	6	8
7	4	7	8
8	4	8	8
9	3	0	6

Graphical Presentation of Table-3

Table -3 and figure No.3 indicate that 8% students obtained 1 mark, 18% students obtained 2 marks, 14% students obtained 3 marks, 14% students obtained 4 marks, and 16% students obtained 5 marks,8% students obtained 6 marks,8% students obtained 7 marks,8% students obtained 8 marks,6% obtained zero marks.

Table - 4
Result and total of Q.4 (Pick True False Statement Marks: 05)

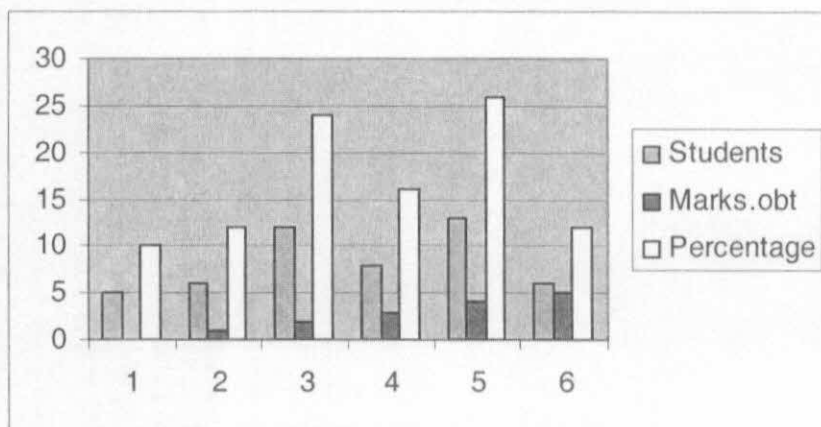| S. No.	No. of students	Marks obtained	Percentage
1	5	0	10
2	6	1	12
3	12	2	24
4	8	3	16
5	13	4	26
6	6	5	12

Graphical Presentation of Table-4

Table - 4 and figure No. 4 indicate that 10% students obtained Zero mark, 12% students obtained 1 mark, 24% students obtained 2 marks, 16% students obtained 3 marks, and 26% students obtained 4 marks, 12% students obtained 5 marks.

Table - 5

Table - 5
Result of Q.5 (Match the Column) Total Marks: 10

S. No.	No. of students	Marks obtained	Percentage
1	5	0	10
2	1	1	2
3	4	2	8
4	1	3	2
5	6	4	12
6	2	5	4
7	13	6	26
8	3	7	6
9	15	10	30

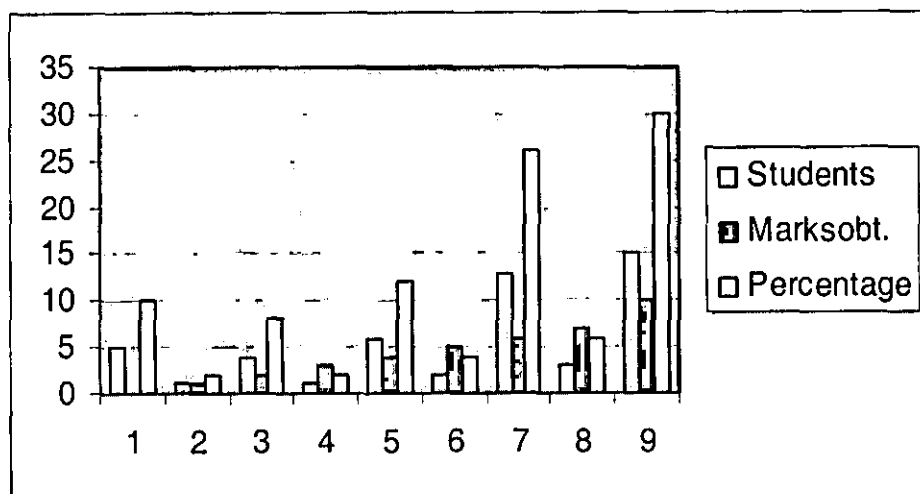**Graphical Presentation of Table-5**

Table - 5 and figure No. 5 indicate that 10% students obtained zero mark, 2% students obtained 1 mark, 8% students obtained 2 marks, 2% students obtained 3 marks, 12% students obtained 4 marks,4% students obtained 5 marks,26% students obtained 6 marks,6% students obtained 7 marks,30% obtained 10 marks.

Table - 6
Result of Q.6 (Complete the spelling.) Total Marks: 10

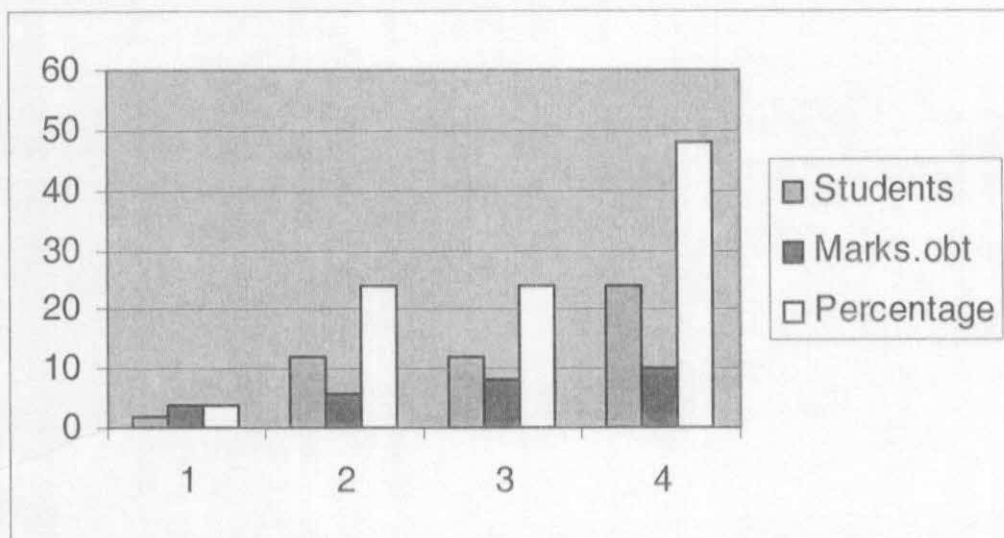| S. No.	No. of students	Marks obtained	Percentage
1	2	4	4
2	12	6	24
3	12	8	24
4	24	10	48

Graphical Presentation of Table-6

Table - 6 and figure No. 6 indicates that 4% students obtained 4 marks, 24% students obtained 6 marks, 24% students obtained 8 marks, 48% students obtained 10 marks.

PART - 2

Table - 1
Result of Q. 1 (Read the passage and answer the questions.)

Total Marks: 30

S. No.	No. of students	Marks obtained	Percentage
1	11	0	22
2	2	2	4
3	2	3	4
4	2	4	4
5	3	5	6
6	3	6	6
7	1	7	2
8	1	8	2
9	3	9	6
10	5	10	10
11	2	11	4
12	1	12	2
13	3	13	6
14	2	14	4
15	2	15	4
16	1	16	2
17	1	17	2
18	1	23	2
19	2	24	4
20	1	25	2
21	1	27	2

Table - 1 of Part Two indicate that 22% students obtained have no response, 4% students obtained 2 marks, 4% students obtained 3 marks, 4% students obtained 4 marks, and 6% students obtained 5 marks, 6% students obtained 6 marks, 2% students obtained 7 marks, 2% students obtained 8 marks, 6% obtained 9 marks, 10% obtain 10 marks, 4% obtain 11 marks, 2% obtain 12 marks,6% obtain 13 marks, 4% obtain 14 marks, 4% obtained 15 marks, 2% obtained 16 marks, 2% obtained 7 marks, 2%obtained 23 marks, 4% obtained 24 marks, 2% obtained 25 marks and 2% obtained 27 marks.

Table - 2

Result of Q. 2 (Choose appropriate answer)

Total Marks: 20

S. No.	No. of students	Marks obtained	Percentage
1	1	0	2
2	4	5	8
3	7	10	14
4	1	13	2
5	1	14	2
6	12	15	24
7	1	16	2
8	1	18	2
9	22	20	44

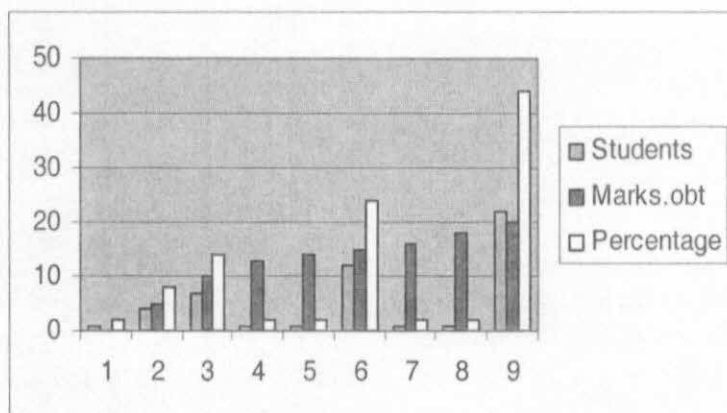**Graphical Presentation of Table-2**

Table - 2 and figure No.2 of Part Two indicate that 2% students have no response, 8% students obtained 5 marks, 14% students obtained 10marks, 2% students obtained 13 marks, 2% students obtained 14 marks, 24% students obtained 15 marks, 2% students obtained 16 marks, 2% students obtained 18 marks and 44% obtained 20 marks.

Conclusion

The data reveals that the government school students have problems in macro processing and micro processing in reading comprehension.

Discussion

The research was conducted on "The investigation of Macro Processing and Micro Processing in Reading Comprehension of Government Secondary School students".

The results reveal that students of government schools have problems comprehending a text i.e. in Macro Processing and Micro processing. The most important element in Micro processing is constructing the meaning of the difficult words for further understanding but results shows underdeveloped skill of student in this regard.

The students have showed lower scores in some portion of the test and in some the results were good in making a sense of sentences for the completion of Match the columns (Micro processing) and finding the main idea of the paragraph (Macro processing).

Many possible causes of these weakness were revealed. The number of students in the class is very high which increases the student - teacher ration. Teacher can not pay individual attention to the students to pin point their grammatic mistakes hence improvement is not made by the students. The another major reason of weak micro and macro processing skill is that it is a general observation that foundation for English language of Government school is weak when they move to the higher grades the difficulty level of the contents also increases. It becomes difficult for the student to comprehend the general or abstract concept in English at higher levels.

Moreover, it was observed that the physical conditions of the classroom were not appropriate. Over crowding of the students in a small room is another major hindrance in teaching-learning process.

Recommendation

- For the problem of poor concentration, teacher should engage students in difficult material at that time when the mind is fresh and active. The selection of the study place should be appropriate to focus the attention.
- For words difficulty, analyze word parts and use background knowledge. Underline difficult words while reading and then consult dictionary.
- Use the technique of "Read Aloud" and fully concentrate while reading for the problem of Confusing sentences. And then instruction to express each sentence in your own words in very simple and easy way.

- And if students having no background knowledge, then it should be compulsory for students that not to skip introductory information while reading and read earlier chapter for the purpose of getting background information.
- The students should guess the meaning of the unfamiliar words.
- The reading comprehension may be improved if students are motivated to discuss problems with classmates.
- The comprehension can also be improved if large amount of time is spent to reading material, teacher directed instruction, and opportunities should be given to students to meet with teacher if there is any trouble or share difficulties with classmates. (Westwood,1997)

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ADULT ILLITERACY: THE ROOT OF AFRICAN UNDERVELOPMENT

By
*Dr. (Mrs.) C.N. Ojogwu**

Abstract

All African nations belong to the category of Third World countries. UNDP Human Development Index uses factors like per capita income, health of the people, and educational attainment to classify the countries. Adult literacy and gross enrolment ratios are indicators of educational status. This paper highlights Nigeria, a typical African country, so as to illustrate the problems posed by adult illiteracy to national development. Statistical data are used to show the low levels of adult literacy with disparities between males and females, even urban and rural areas, and between different zones of Nigeria and the continent. Enrolments and completion rates in adult literacy programmes are presented. Nigeria's policy on adult and non-formal education as reflected in the Nigerian Constitution (1999), National Policy on Education (2004 edition), Decree 17 on the National Commission for Mass Literacy, Adult and Non-Formal Education (1990), and the Universal Basic Education Law (2004) is analysed to assess the extent of programmes' implementation and attainment of desired goals. The conclusion is that a lot of needs are required to be done to eradicate adult illiteracy. Because of not paying adequate attention to mass literacy and adult education, look much hampering. Suggestions are made for partnership and collaboration between governments, NGOs and the private section in seeking viable solutions.

Introduction

Without any exception, the African countries, are generally categorized among "Third World countries" which are characterized by underdevelopment of their human and natural resources and the poor quality of life of the majority of their citizenry. There is a general belief that education is an instrument for social,

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* The writer is associated with the Department of Adult Education, Faculty of Education, University of Benin, Benin City, Edo State.

economic and political development. Evidence in support of this assertion can be found in the relationship between the level of educational development and the high standard of living in developed nations of the world, such as the United States of America, Britain, Canada and Japan. They are industrialized, having modern economics and democracies mainly because they have well educated, enlightened and skilled adult populations. Conversely, African countries remain underdeveloped mainly due to large percentage of illiterates and unskilled workforce within the adult population.

The UNESCO World Report (UNESCO 1991 and 1995) showed that the continents of Africa and Asia harboured the largest percentage of adult illiterates in the world. It is also in the two continents and South America that we find almost all the poor, underdeveloped nations. The main thrust of this paper is to show how Africa can step out of the stigma of underdevelopment to join the elite class of the developed countries when it seriously tackles the problem of adult illiteracy. Surely, many African governments have heavily invested to expand the access to formal education and increased enrolment rates at primary, secondary and tertiary levels of education. However, although there exist laudable policies and programmes for adult and non-formal education with a major emphasis on the eradication, or at least reduction of adult illiteracy, there appears to be a growing gap between theory and practice, policy and implementation.

Africa is a big continent having more than 52 countries, so there is some risk in generalizations. Since there are glaring differences between countries, such as North Africa and Sub-Saharan Africa, as well as between Anglophone and francophone, African nations. The dimensions of the dichotomy occur at the cultural, religious, educational, economic and political levels, and the countries are at different levels of underdevelopment. It is for these reasons that this paper will use the Nigerian situation as a case study. In some respects, Nigeria is a good sample. There is also a great diversity among the people in terms of religion, ethnic groups with over 250 languages, and differences in stages of educational development. Indeed, some states of the federation are officially classified as "educationally disadvantaged states" due to their low enrolment ratios and high adult illiteracy rates.

Nigerian Policy in Adult and Non-formal Education

Every major educational policy or programme on education, produced by the government of Nigeria, has devoted some attention towards education of adults, non-formal education, and eradication of illiteracy. The Constitution of the Federal Republic of Nigeria (FRN, 1999), included in section 18 on Education

Objectives, the provision of free adult literacy programmes. In section 6 of the National Policy on Education (FRN, 2004 edition), Mass Literacy, Adult and Non-formal Education was the subject-matter. The Federal Ministry of Education in its Education Sector Status Report (FME 2004), examined in chapter 8, the progress made by the country in the implementation of policies and porgrammes on adult and non-formal education. To demonstrate how serious it was in the desire not only to reduce the rate of adult illiteracy in the country, but also to ensure that those adults who did not go beyond primary school education, remain literate and improve themselves educationally. The government enacted a law by Decree 17 of 1990 on the establishment of the National Commission for Mass Literacy, Adult and non-formal education.

The national policy on mass literacy, adult and non-formal education "encourages all forms of functional education given to youths and adults outside the formal school system such as functional literacy, remedial and vocational education (FRN, 2004:25). For the facilitation of efforts to eradicate adult illiteracy, the policy is that "Mass literacy programmes shall be provided free to the beneficiaries". Federal state and local governments are charged with the responsibility of organizing and funding adult literacy programmes. The nation-wide mass literacy campaigns are organized from time to time with the slogan of *"each-one-teach one"*, or *"fund-the teaching-of-one"*. Perhaps the nation realized rather belatedly the importance of having an educated and enlightened citizenry for acceleration of the pace of national development.

It is not enough to invest in the education of children who are the leaders of the future. We need also to focus on the education of illiterate adults who constitute the bulk of leaders of today, and who make critical decisions and choices on the development of the future. After all, whether parents even allow their children to go to school may depend on their literacy level and their appreciation of the educational value. Moreover, it has become apparent to people that the good jobs and political positions of power and wealth are basically reserved for the educated ones in the society. Poverty is associated with illiteracy, and there is much evidence in Nigeria to show that the children of the educated parents tend to get better opportunities in education and upward social mobility. There is, therefore, much logic in the argument that educated adults should empower their families to develop socially and economically, while modernized, enlightened families form the bedrock of the community and national development.

Adult Literacy Situation in Nigeria

The following tables reveal the level of general literacy in Nigeria, as well as the level of adult literacy compared to the situation in Sub-Saharan Africa and some selected countries, which are in the same Economic Community of the African States zone:

Table - 1
Literacy Rates among Nigerian Groups

		Male	Female	MF
				(Percentages)
a.	Nigerian national rate	86	65	75
b.	Urban literacy rate	98	79	88
c.	Rural literacy rate	75	52	63
d.	Northern states rate	72	60	66
e.	Southern states rate	88	80	84
f.	Gross enrolment ratio (Primary Education)	94	69	82

Sources: National Population Commission, Abuja, 2002.

Table - 2
Adult Literacy Rates in Nigeria and sub-Saharan Africa Geo Political Zone

	Rates	Percentage
a.	Nigerian adult literacy rate	52
b.	Nigerian male adult literacy rate	63
c.	Nigerian female adult literacy rate	41
d.	South-Western states adult literacy rate	55
e.	South-Eastern states adult literacy rate	60
f.	Northern states adult literacy rate (Male)	42
g.	Northern states adult literacy rate (Female)	22
h.	Sub-Saharan Africa adult literacy rate	57
i.	Cameroon adult literacy rate	72
j.	Ghana adult literacy rate	68

Source: Federal Ministry of Education: Education Sector Status Report, 2004.

The National Population Commission Analytical Report of 1998, and the Multiple Indicator Cluster Survey of 1999 are the main sources of statistical data on the literacy profile of Nigerian adults. According to a Federal Ministry of Education Report (FME 2004:55) The National Population Commission "found a literacy level of 57% among Nigerians, and showed that 85% of the illiterate population was under 35 years of age". There was a higher adult literacy rate in urban areas than in the rural areas. Within the urban population, a high percentage

of the males than of the females were literate. In the rural areas, the figures were 52% males and only 42% for females. The level of adult literacy was higher in the South of the country than in the North. Here we must take notice of the fact that in the North, there are many people who can read and write Arabic for purposes of Islamic religion though they cannot read and write in either English which is the national lingua franca, nor their indigenous language.

Illiteracy among adults is the central focus of this paper. The National Population Commission Statistics of 1998 showed that adult literacy rate was 55% for the South-West zone and 60% for the South-East. In the Northern zones, adult literacy rates were about 22% for females and 42% for males. Two obvious conclusions can be drawn from these figures. The first is the great disparity between literacy rates of adult males and females. Such disparities also exist in the formal school system in favour of the males. The second conclusion is that the educational gap between the North and the South is a serious one which must be addressed. No wonder then that the National Primary Education Commission and Decrees of 1988 and 1993 classified almost all the Northern States of the Federation as "educationally disadvantaged states". It is of course the failure to have access to primary or basic education that has produced the large percentage of adult illiterates across the country. To take care of the educational needs of nomad, Decree 41 of 1989 was enacted. Decree 30 of 1989 addressed the issue of women education and discrimination against them.

Nigeria's low adult literacy rate is surprising when we consider the fact that the missionaries brought Western education into the country as far back as 1842 when the first school was established in Badagry. Moreover, since independence from colonialism in 1960, impressive developments have taken place in the formal education sector. Forty-five years later, we still have about 51% of our adults as illiterate. The Federal Government has lamented the low level of adult literacy. It observed that "Nationally, Nigeria's literacy rate of 49% is far below the average of 57% for sub-Saharan Africa" (FME 2004). The rates are far higher in countries like Cameroon (72%) and Ghana (68%). These neighbouring West African countries, one francophone and the other Anglophone, also have higher literacy rates for females than that of Nigeria. Consequently, the issue of adult illiteracy in Africa generally, and in Nigeria particularly is a challenge to the government, adult educations, public and private sectors. Prospects of national development will remain in jeopardy, as long as about half of the adult population remain illiterate.

A brief comment on the disparity between literacy rates in English-speaking and French-speaking African countries is appropriate here. UNESCO

(1991) revealed that the average literacy rate in the Anglophone countries was lower than in the francophone countries. Nwagwu (1999) in her analysis of female participation in education in Africa, noted that female enrolments in formal education were higher in francophone countries and the adult female literacy rate was also higher. She attributed this to the French colonial policy of assimilation which motivated the citizens to learn how to read and write the French language and imbibe the French culture. In Nigeria, as in many Anglophone West African countries, the people have developed the functional use of *pidgin English* which is a hybrid or mixture of English words and phrases with indigenous African languages.

The challenge, therefore, is how to reduce the rate of adult illiteracy in Nigeria, and prevent children and youths currently in the formal school system from relapsing into illiteracy in future. Earlier in this paper, I have remarked that there are many adult Moslems who can read and write the Holy Quran in Arabic. While such ability is useful for religious purposes, it does not necessarily equip such people to participate fully and meaningfully in national development activities. There are plans by governments in the North to integrate the Quranic schools into the mainstream of the national education system. This should be encouraged as it will help to reduce the level of adult illiteracy in that part of the country.

For the people of Nigeria, English remains the official language of education, even for government offices and business affairs. Inability to master the English language limits a citizen's capacity to contribute to national development. Nevertheless, the National Policy on Education (FRN, 2004) makes it mandatory for students in primary and secondary schools to team their local language and one of the three major Nigerian languages, Hausa, Igbo and Yoruba. The latter prescription is one of controversy because of the multi-linguistic nature of the complex population.

The National Policy on Education, and the National Commission for Mass Literacy, Adult and Non-formal education have prescribed the use of either English or the local language, or both, in adult education classes. Interestingly, most adult learners prefer to be taught how to read and write in English. They are of course aware of the handicaps they face in society and in business affairs because of their illiterate status. In politics, though they have the right to vote, they cannot be elected into even local government councils without a legally prescribed minimum educational qualification. What is being done to address the problem of adult illiteracy will be discussed later in this paper.

Manifestations of Underdevelopment

The central theme of this paper has been the argument that African underdevelopment is basically a product of a society in which a sizeable number of adult population is illiterate. The unsatisfactory level of literacy has implications for poverty alleviation, job creation, reduction of unemployment, participation in economic and political activities, and empowerment of women who constitute about 50% of the population of some countries. The Nigerian experience has been used as a case study. It is a country with immense natural resources in terms of petroleum and gas reserves, large fertile land for agriculture, a favourable climate, and the biggest concentration of black people in the world, yet it remains underdeveloped. It is likely to maintain this unenviable status until it is able to develop its human capital not only through the formal education system, but also by strategizing on how to eliminate adult illiteracy.

The linkage of African underdevelopment to the critical mass of adult illiterates is informed by the fact that identified indices of underdevelopment are intimately associated with the quality of adult population in a nation. Nduka (2006), a renowned philosopher and social critic in Nigeria, has produced a long list of the reasons for the continuity of African underdevelopment affairs. We shall examine a few of them. First, he blamed the colonialism and neo-colonialism. However, he also blamed African leaders who, after independence in their countries, lived for themselves instead for their people who elected them. Secondly, there were military coups here and there, ostensibly to rescue the people from bad and corrupt governments. But the emergence of the military only worsened the plight of the people because the military leaders were not accountable to anyone.

The underdevelopment of Africa, with Nigeria as a typical example, is also traceable to the character of the population. There was high population growth rate of above 3% in Nigeria in the 1970's and this has reduced to 2.8% in recent years due to better education, public enlightenment and a National Policy on Population for Development (FRN 1988). An outcome of underdevelopment is low life expectancy, high infant and maternal mortality rates (Yisa, 1988). In Nigeria, as in many African countries, more than half the population live below poverty line, that is, less than US dollar a day. Nduka (2006:53) citing Adam Curle, posited that "the hallmark of an underdeveloped society is its dead weight of poverty, ignorance and disease". The UNDP Human Development Index uses three indicators of development. These are the per capita income, the health of the people as represented by life expectancy, and educational attainment as reflected by rate of adult literacy and gross enrolments in the education system.

Poor performance in each of the above indices means that Nigeria has a long road to travel before it can join the league of developed nations of the world. The status of adult literacy has also been blamed for Nigeria's failure to develop into an industrialized, strong, integrated, virle and democratic nation. The existence in the body politic of such negative tendencies and forces as tribalism, nepotism, bribery and corruption on the part of both the electorate and the elected or appointed leaders seem to be a reflection of the level of unenlightenment and illiteracy among the populace. Nduka (2006) also blamed underdevelopment on 'Africans' traditional systems of thought. There is a relationship between culture and patterns of thought, although not lacking in logic, African traditional thought, values and attitudes are very much influenced by religious beliefs and mysticism as the people try to comprehend extra-ordinary experiences and phenomena in their environment.

An educated and enlightened adult population will come to appreciate the impact of science and technology in the developmental process without necessarily abandoning their religious beliefs, for Africans as a group are great believers in the power of God Almighty, no matter their religious affiliations. There is no doubt that the elimination of adult illiteracy will rub off positively on the children of the adults. If parents are empowered enough to vote for only leaders of integrity who have the welfare and progress of the country as their main reason for entry into politics and government, then the education system will be properly organized and supported by governments, and mass literacy, adult and non-formal education will also receive appropriate attention and funding. These are pre-requisites for climbing out of underdevelopment affairs.

The Way Forward

Being aware of the large number of illiterate adults in the population, and in recognition of the importance of an educated, well informed and enlightened citizenry in any plans for socio-economic development, federal and state governments have put in place policies and programmes for mass literacy, adult and non-formal education. Notable among these are provisions in the country's constitution and the national policy on education for free adult literacy education. The commission of mass literacy, adult and non-formal education was established in 1999 with branches in every state, to ensure the effective implementation of policies and programmes. Much has been achieved, but there is still a lot of problems and challenges to be tackled for more comprehensive coverage and results.

The available research evidence shows that in many cities and some rural areas of Nigeria, adults are eager to overcome the handicap of illiteracy by attending evening adult literacy classes. However, very few of them attend long enough to become permanently literate. According to the Federal Ministry of Education (FME, 2004), drop-out rates are high. For instance, out of the 1,142, adult learners who enrolled in 1996, only 814,143 stayed on to complete their respective programmes. This means a completion rate of 71.2% or drop-out rate of 28.8%. Total enrolment in literacy classes between 1997 and 2000 shows some increase from year to year, though not an impressive progress. For example, total enrolment in 1997 was 1,155,532 with 557, 366 of them being females, that is 48.2%. By the year 2000, total enrolment rose to 1,406, 954 with 705,156 or 50.1% being females while 705, 156 or 49.9% were males (FME 2004:56) Okovoh (2004) found from her study of the adult literacy programme in Delta State that more women than men completed their courses and earned certificates.

Many reasons have been adduced for the slow pace of progress in adult literacy programmes. Asuka (2005) was of the opinion that sporadic, ineffective literacy campaigns were to be blamed and he advocated mass communication as a process of adult education in Nigeria. Ojogwu (2001) said that many adults complained of the distances they had to travel in the evening to the adult literacy centres, and most importantly, the irrelevance of some of the lessons to their personal needs. Some women blamed poor attendance on family chores, and in some cases the refusal of their husbands to allow them go out and return late in the might, especially in these times of insecurity and violent crimes. There are also complaints of shortages of reading materials and adult education teachers. Many of the organizers are primary school teachers who are often poorly remunerated and hence are not adequately motivated to participate regularly and with commitment. Moreover, some of them have not been trained to teach adult learners and so cannot inspire the adults.

Perhaps the most potent instrument for the eradication of adult illiteracy in Nigeria is the Universal Basic Education which incorporates not only a nine-year basic, free and compulsory primary and junior secondary school education, but also free adult literacy education. The UBE Act was passed by the National Assembly in 2004. Consequently, we may have to wait for some years before we can assess implementation success. Charles and Iheme (UNESO 2002) have urged the private sector to participate more proactively in the programme of "Education for All". The UNDP (2002) on its part said that real development in the third world countries cannot be achieved unless there is partnership between developed and developing nations, and between the public and private sectors of the economy. Education for all and elimination of adult illiteracy will most likely
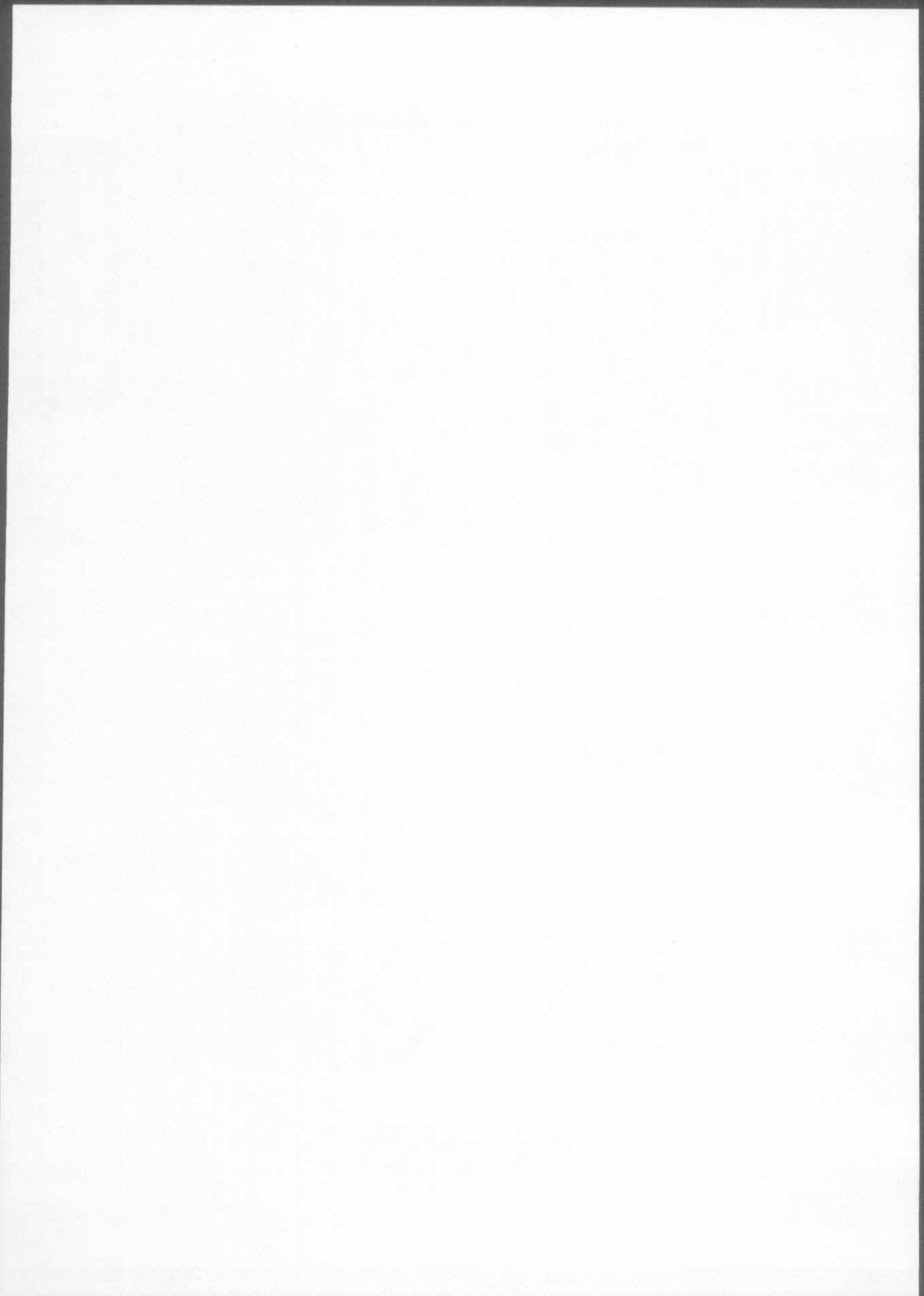
translate into better food, better health, more employment prospects, and ultimately better quality of life for the people which is the essence of national development.

In conclusion, as African nations, with Nigeria as a typical example, put in place policies and programme to accelerate socio-economic development and attainment of Millennium Development Goals by 2015, we should remember that it is difficult to develop when a large percentage of the population is illiterate. Ignorance and illiteracy limit the peoples' capacity and to contribute towards national development. In all efforts to eradicate adult illiteracy, special attention must be paid to women and the rural areas because about half of the population are females, and the majority of the citizens live in the rural areas. Finally, there is great need for partnership and collaboration between governments, non-governmental organizations, and the private sector in any formulation and implementation of policies and programmes towards attainment of the goals of education for all and national development.

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NON-FORMAL EDUCATION:
A PRIORITY OF THE YOUTH IN PAKISTAN

By
Dr. Nabi Bux Jumani*
Nazar Abbas Nazar**

Abstract

Non-formal education is being used as an important vehicle for improving living standards and national development throughout the world. In Pakistan, many attempts were made by both government as well as non-governmental organizations for launching non-formal education projects. The present study was designed to explain the concept and importance of non-formal education in Pakistan, identifies educational needs of unemployed adults and specifies problems faced by unemployed persons and to suggest possible solutions through non-formal education. The study was spread over two sections of the populations, i.e. trained unemployed adults and representatives of some public as well as non government sector organizations where non-formal education is being imparted. For the purpose of data collection, two questionnaires were developed. The ways to get enhance opportunities through non-formal education are also suggested for youth which may help them as well as policy makers to launch non-formal education programme so that youth can play an effective role in national development.

Non-Formal Education

With the increase in the population and needs of the people, formal system failed to cater the demands of the people. As such a need for an alternate method has generally emerged. Thus, non-formal education is one of the alternate systems. The word non-formal is derived by using the prefix, non to formal. Coombs, P.H. (1973) defines non-formal education as "any organized educational activity outside the established formal system whether operating separately or as an important feature of some broader activity that is intended to serve identifiable clientele and learning objectives".

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* The writer is working as Assistant Professor, Faculty of Education, Allama Iqbal Open University, Islamabad.

** The writer is a Research Fellow of Allama Iqbal Open University, Islamabad

Non-formal education (NFE) is being offered through different modes. One of its modes is correspondence education, out of which distance education has developed as a system in itself. Distance education is accompanied by educational components such as printed course materials, creating face-to-face interaction medium for student guiding and assisted with communication technology. Non-formal education is usually defined through its relation to formal and informal education. It takes place outside the conventional structures of the formal education or training systems. It is organized for certain purposes for a difference from informal education. It is the process of gaining skill and knowledge and the process of multiplication of those skills between the member of our youth organizations and by making an impact on the society around us. (Young European Socialists, 2003)

Non-formal education could not get due importance in most of the countries of the world on many grounds. One of the reasons may be: "Due to the fact that it does not have any link with the formal certification system, NFE is not always given the same level of recognition as formal education". (Youth Forum Socialists, 2003) People need education to acquire a broad base of knowledge, attitudes, values and skills on which they can build their future, even if they do not receive formal instructions. Non-formal education programmes on Adult Literacy are valuable for them to learn, to respond to new opportunities to adjust to social and cultural changes and to participate in the political, cultural and social activities.

The education programmes are normally considered as basis for economic development and political independence. Such development requires the participation of both men and women. Young and old, either directly through economic and social groups. Every society has used adult-education processes to continue the development for the maintenance and progress of that society; and the perception of the kind of adult required is different for each society. Non-formal education is vital in the transformation of humanity, in the development of community, culture and the family.

The importance of non-formal education is increasingly recognized by the educational planners of the developing countries. Coombs. P.H. (1968) states that:

> *The poorer countries now face a priority task of non-formal (adult) education which years ago confronted today's industrialized countries. It is to bring to the vast numbers of farmers. workers, small entrepreneurs, and others who have never seen the inside of a formal classroom and perhaps never will a spate of useful skills and knowledge which they can properly apply to their own and their nations developments.*

Hence, in order to increase the literacy rate for national development, it is becoming more and more apparent that education must be given to all peasants, workers and rural masses of Pakistan. In almost all the five-year plans and National Education Polices much emphasis had been given on adult education keeping in view of its importance for social change and national development. Non-formal education has unique role. It can make the neglected farmers, workers and their families more productive and effective in their work, in their social and personal relationships and as citizen.

Pakistani Scenario

Serious problems and frustrations have arisen from the mismatch between education and employment opportunities. There is a wide spread unemployment and low-level of productivity resulting from the indifferent policies and programmes in respect of human resources development and utilization in the country. The responses of education system to adult unemployment are many and varied. As the position on unemployment Labor Force B Rural /Urban Areas (No. in Million) is evident from the below given table:

	Unemployment Labor Force			Unemployment Rate (%)		
Year	Total	Rural	Urban	Total	Rural	Urban
1995	1.84	1.14	0.70	5.37	4.80 ·	6.90
1996	1.88	1.16	0.72	5.37	4.80	6.90
1997	2.29	1.47	0.82	6.12	5.65	7.17
1998	2.31	1.37	0.94	5.89	4.98	7.95
1999	2.37	1.40	0.96	5.89	4.98	7.95
2000	3.17	1.94	1.23	7.82	6.94	9.92
2001	3.24	1.97	1.27	7.82	6.94	9.92
2002	3.57	2.19	1.38	8.27	7.55	9.80
2003	3.65	2.23	1.42	8.27	7.55	9.80
2004	3.72	2.28	1.44	8.27	7.55	9.80
2005	3.52	2.09	1.43	7.69	6.74	9.70

Source: Economic Survey of Pakistan 2004-2005

The above quoted table reveals that unemployment has increased from 7.82 percent in 2000 to 7.69 percent in 2005. Similarly unemployment in rural areas, which was 6.94 percent in 200, has risen to 6.74 percent in 2005, while urban unemployment has deceased from 9.92 percent in 2000 to 9.80 percent in 2005.

The unemployment is defined as all persons of ten years age and above, who during the period under reference were: (a) Without work i.e. were not in

paid employment or self-employed. (b) Currently available for work i.e. was available for paid employment or self employment (c). Seeking work i.e. had taken specific steps in a specified period to seek paid employment or self employment. According to this definition, about 3.52 million people in the labor force were estimated to unemployed in 2005 compared to 3.72 million 2004. (Economic Survey of Pakistan, 2004-05)

For the individual who is unemployed, being unemployed means being denied access to the formal economy and having neither motivation nor encouragement to work. The most obvious effect of this is the financial one and the lack of status of an employed person. The large majority of people out of work nowadays is clearly employable and clearly wants a job.

Being unemployed means having reduced opportunity to acquire the symbols of material success. Most unemployed people live on reduced incomes relative to previous earnings or compared to those with jobs. In addition to financial penalties, unemployment brings with it a variety of physical, psychological and social consequences (Senior and Naylor, 1987, p.20). Having a paid job is also important for newer cultural values; enhancing ones' economic and psychological independence and younger people, self fulfillment, empowerment, effectiveness and autonomy all part of what might be called the values of expressive.

Unemployment

Being an unemployed is clearly a problem from the point of view of the individual and his or her family. Its effects, however, spread even further. Opportunities grow fewer and people put up, with thing that they are unable to change unemployment is the result of worldwide recession, wrong economic policies and poor commercial competitiveness due to high wages, and the inflexibility of the workface. Both education and training are required to equip youngsters and adults to undertake necessary work to provide services, for example, the technical and vocational education initiative now introduces strictly vocation training to youngsters. It is a means to increase personal growth and assets, to build more abilities and empower people in their actions. Any education provision for unemployed adults should engage nitrating in order to have ready the skills required for present and future fobs and occupations. Whereas, Senior and Naylor (1987, p.48) has pointed out the following needs:

a. Take into account the different assumptions about the nature of unemployment.
b. Reflect the needs, which are common to the majority of unemployed people.
c. Appreciate the individuality of unemployed people.

Education needs of unemployed adults are as follows:

a. Welfare rights/ unemployment related issues
b. Life and study skills /self –help.
c. Subject based classes/discussion (e.g. history, economics, psychology)
d. Interest classis/coursed (creative writing, visual arts, media music, drama, physical exercise, health, recreational pursuits, arts and crafts (non-vocational)
e. Foreign language
f. Competing
g. Employment skills (e.g. craft/technician/office training, management skills, back to work for women)
h. Small business
i. Job getting (e.g. job search, application, interview)
j. Educational/ training advice/counseling)

Opportunities

The level of education is not the sole parameter, which determines the earning differentials among individuals. These differentials also exist due to the interaction among the quality of education, ability scores, age, experience, training, productive skill and knowledge of individuals. Educational opportunities are generally better availed by those living in urban areas, belonging to general castes and those with higher per capita income. Employment is the situation in which remuneration in cash or kind is received in exchange for active, direct, personal participation in the production process. The employment opportunity for different levels of educated labor force depends on a number of economic variables, their growth pattern and supply and demand conditions of labor force. It is believed that with rising educational levels and productive efficiency employment opportunities tend to increase.

Inequality in employment and earrings may exist by sex, race, tribe, region, rural-urban location stratum of labour market in which an individual is employed, and the economic background of the individuals. Thus, the variation in employment and earning opportunities is the outcome of an extremely complicated interaction of various factors and also caused by imperfections in labour market, and variations in organizational pattern of activities. Therefore, inequalities unemployment and earning opportunities between different groups of populations reflect the differences in educational opportunities. These are determined by several socio-economic variables. Employment and income opportunities available to rural urban population differ significantly.

There are basically two reasons. First, employment opportunism available in rural areas are far less than in the urban areas and second, even in the limited jobs available in rural areas, earning leverage lower than in urban areas. Thus, the rural educated persons have to depend on urban areas for employment to a large extent. Total number of employed person in urban areas has increased from 13.2 million in 2003 to 13.4 in 2004. Total number of employed person in rural areas has increased from 27.36 million to 27.91 million in 2004. (Economic survey of Pakistan 2003-04)

Earnings are found to be significantly higher in the case of individuals having higher educational levels and longer durations of work experience as compared to individuals with lower values of these variables. Differential in earning at signings at similar level of education are postulated to reflect variations in age and working experience among individuals. Earning of individuals at any level of education has the tendency to increase at a slower rate. But the tendency of earning is found steeper with higher educational level. Every increment in education leads to a higher rate of increment in earning in case of comparison. Inter-group differences i.e. Male/Female differences and Rural/Urban differences in earnings are widely prevalent among men and women, rural and urban workers, among people from different social groups, and different economic status.

The Study

A descriptive study/survey method was adopted for the study which according to Sax (1979) describes currently existing conditions so that these could be modified later on as a result of the research. The objectives of the study were: to explain the concept of non-formal education, to highlight the existing position of unemployed in Pakistan, to specify problems faced by the unemployed peoples in Pakistan and to suggest possible solution through non-formal education to the problems faced by the unemployed adults in Pakistan

In survey studies, the researcher sees the impact of one or more variables on a sample to generalize it on population from which it was drawn. Researcher may use one or more data collecting tools for the purpose. Two type of questionnaires were developed to collect data from different categories of population consisted of 5-point rating scale statements, multiple choice items and open-ended questions.

Possible statements were developed keeping in view the objectives of the study for eliciting opinion on Likert-type scale. It was kept in view that each

statement must express a definite idea/position. For multiple choice questions, efforts were made to incorporate all possible items and respondents were given option to tick more than one response. Three questions were open-ended in each questionnaire so that respondents could respond freely in their own words.

The population of the study comprised all trained unemployed adults of and the officers of Govt. Institutions and non government organizations in Islamabad providing non-formal education.

Results

The youths were jobless after getting certain trainings/skills through non-formal education. The lack of opportunities was the main obstacle in the way of getting jobs. Skill oriented non formal courses improves individual's abilities in a shorter span of time. People liked to be trained by NGOs to contribute their role in national development. Less job opportunities was the only reason of unemployment. The non-formal education was helpful in vocational training. Adult education developed positive attitude in adults The unemployment was due to shortage of relevant skills. The unemployment was increasing due to over-population.

Non-formal education brought permanent change in adults and made them more progressive. The training established proper linkage among the acquisition of knowledge, skills and development for job requirements.

Recommendations

The following are the recommendations:
- In Pakistan, the shortage of skilled manpower is actually less quantitative and more qualitative; therefore institutions must be equipped with latest and modern techniques to improve the level of quality as well as quantity.
- Government should enhance industrial networks for sustained development necessary to eradicate poverty and unemployment.
- Motives and incentives for unemployed adults may be introduced/ improved.
- The process on non-formal education must be organized through coordination of the Government and Community participation.
- Close coordination may be established between Educational and the Industrial / Agricultural Services Sector. Market need based

training programs may be organized. Industrial/agricultural organizations and associations should be closely associated with educational institutions so that uneducated youth may be provided market oriented non-formal education.

Redundant labour can be retrained when rationalization and streamlining of Industries took place.

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EFFECTIVENESS OF MODULAR TEACHING IN ENGLISH AT SECONDARY LEVEL

By

*Ghulam Behlol**

Abstract

This paper defines the concept of Modular teaching, explores differences between Module and lecture method, checks the effectiveness of Modular teaching in the academic achievement of students in English at secondary level and its impact on the academic achievement of low and high achievers. Pre-test post-test design was used to check the effectiveness of the independent variable. The students, studying in IX class and taken in the sample were divided into control and experimental group on the basis of pre-test. Post-test was administered to find out the differences between the mean scores of dependent and independent variables by applying t-test. The treatment effects of low and high achievers were tested by applying ANOWA. The study shows Modular teaching ensures the active participation of the learner in the learning process which makes him/her able to take the charge of learning for creative and reflective thinking. It is more structured and targeted as compared to the lecture method that develops independent habit of learning among the students. Modules are self contained package that cater the needs of students on the basis of individual differences, by breaking the content of the complex task into parts to bring it at the level of the students. It has been proved that the students of different abilities learn better by the Modular teaching as compared to the traditional methods of the study.

Introduction

Education is the process of identification and promotion of individual potential for the progress and betterment of the society. It teaches man how to live on earth, fly in the sky and dive into the depth of the sea. It is the only powerful machine for eliminating the forces of ignorance, barbarity and oppression. It provides passage to more promising future, providing the skilled manpower needed for economic prosperity and modernization. Teacher is a person

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* The writer is working as Deputy Headmaster, FGSS School, Talhar, Islamabad.

responsible for steering the education ship to its destination. He is a linchpin of the education system who implements the education reforms and policies. In fact, the quality of education depends upon the quality of teacher education. (Education Policy, 1998-2010)

The emphasis of teaching in this era is on individualized instruction, because human beings are different from each other in many ways. It is not possible to teach every body in the same way as is done in by following the traditional methods of teaching. One of the most significant features of the present scientific movement in education is the recognition of the great differences among children. The early Greek scholars recognised individual differences in intelligence, temperament, interest, and physical traits. (Chand, 1990) In the last two decades classroom communication has considerably changed with the application of educational technology and knowledge of individual differences in teaching-learning process with its emphasis on individualising instruction. (Chauhan, 1992)

Individualized instruction is the accommodation of the unique abilities, goals, learning rates and learning styles of each student. It places the responsibility of learning on the students themselves. (Collette and Chiapetta, 1986). In our country the classrooms are overcrowded, so the teacher cannot give individual guidance. To meet this problem, Waheed (1995) proposed that: "there are some other methods such as independent study, laboratory method, project method, problem-solving method through which student can learn their lesson themselves according to their own pace but the Modular teaching is most effective of all of them."

In this respect, Modular teaching is an important strategy for caring the needs and abilities of different students. It is one of the most widespread and recognized teaching learning techniques in the advanced as well as in the developing countries of the world. It is used almost in all subjects, especially in language teaching. All kinds of subjects are being taught through the Modules. Modules not only help in instructions but also develop the self-study habits due to individualized study and satisfy the individual differences of the students. According to Sharma (1990) "Module possesses the qualities to encourage the individuals to learn independently, each Module have distinct training element, including practice and experience and possibly a further educational element." UNESCO Regional office for Education in Asia and Oceania (1987) had suggested the following components of a Module such as, Title, Background, Introduction, Pre-requisites, Overview. Objective of the Module, Learning Activities (Unit No. 1, Unit No, Unit No. 3, Learning material about each unit, Formative test ,Summative test of the Module.

Let us now review some of the definitions of Modules and Modular instruction:

- Barbara and Barbara (1973) define Module as it "is *a* self-contained, independent unit of a planned series of learning *activities* designed to help the student to accomplish certain well-defined objectives".
- Kalbouss (1975) defines: "Modules are self-contained units for accomplishing specific tasks contributing to the accomplishment of overall task".
- Dieterich (1971) defines flexible or Modular scheduling is an organization for instruction which provides classes of varying size, varying length, and varying frequency
- Kulkarni (1986) says: "The term Module is derived from Modus in Greek language which refers to a mode of working with some instructional material. In the context of educational technology, a Module indicates an instructional plan, which is usually larger than a class hour or a session but smaller than a course plan." Again he describes: "Usually the term Module refers to an instructional plan which involves more than one medium not only print but also audio tapes, slides, visits or discussions, etc."

Difference between Modular and Lecture Method

One may argue that all the principals identified of Modular teaching conform to the principals of lecture method. The lecture method includes reading by the students; completing the home work, writing the papers, and taking the exam, etc. These all activities require active participation from the students. (Ali, 2005) The textbook always provides rationale for their content in an introductory chapter and lectures frequently supplement test objectives with their own statement of course objectives. Textbooks and readers are always divided into units and chapters, and typical lecture covers a series of well defined topics. The typical lecture course has at least a mid term, a final exam, home assignments and papers. They all provide feedback to the students. Finally, the students are permitted in the limit imposed by the length of a course and examination dates to do the course work at their own pace. (Cross, 1976; Ruskin, 1974)

Then, the question arises as: What is the difference between this innovative and Modular strategy? The point is explained with the help of following points:

- The difference between the two strategies is not of kind but of emphasis and degree that play an important role in the teaching learning process, and these differences are not insignificant.

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- In Modular instruction the teacher is encouraged to analyse and articulate in specific, detailed, concrete, and behavioral terms the various aspects of teaching. On the basis of this analysis the teacher implements the plan for maximizing learning. But, in lecture-method the teacher comes to class and delivers the lecture and returned.
- In lecture-method the students' role, by and large, is passive whereas in Modular teaching they play a fully active role in their learning.
- The complex task is divided into parts in Modular teaching to bring it at the level of students whereas in traditional courses there are units explaining concepts according to the nature of subjects that is not easy for the students.
- Modular instruction needs the vigorous implementation of the pre-test and post-test for measuring the effectiveness of Modular teaching, but no such pattern exists in lecture method.
- The learning material given to the students in Modular course is simple, to the point and up to the standard of the students whereas in lecture course these principals are given consideration but not with the sane degree of emphasis.
- In Modular instruction the students are informed as clearly and precisely as possible what they are expected to learn and how the students demonstrate to the teacher that the required learning has occurred. In the lecture method the students are typically told considerably less about learning situation and the teacher's expectations. They are assigned readings, expected to attend the lectures, and told that they will be tested on this material. In this respect lecture method creates ambiguity for the students.
- Most of the researches conducted regarding the comparison effectiveness of Modular and lecture method, pointed out that M.I is more effective and preferred by the students. They are more involved, harder in, learn more from and have a decided preference for it.(Cross,1976;Ruskin,1974)

The Modular instruction is highly structured as compared to traditional methods. It provides sense of security to the learner. It discourages the short cut and make the students able to go ahead with depth learning.

Review of Previous Researches

Kalbouss (1975) has recommended that Modular teaching method is more useful for teaching Russians and other languages to the students who have not an experience for language because of lack of talent for foreign language learning, poor preparation for given course, poor teaching or for whatever reasons, and can

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effectively used in employing some other modern methods such as individualized instruction, computer assisted teaching, teaching machine, Keller plan, etc. Dieterich (1971) says flexible or Modular scheduling is an organization for instruction, which provides classes of varying size, varying length, and varying frequency. Included in the system is provision for large lecture section, small inquiry groups, and extensive independent study. This flexible scheduling demands a role of the teacher as a guide instead of tyrant, act as a resource person, better utilization of the time of teacher and better utilization of talent. It provides opportunity to student's deeper involvement with their own education, more individual attention and responsibility for their own learning and handling of their learning by themselves.

Fitzgerald (1977) and Cross (1976) say that Module develops mastery learning habits among the student. It is easy to check its effectiveness and its content can be altered. It also specifies that a Module is a unit of not just for information instruction. The Modular units encompasses all of the aspects of teaching and learning situation, i-e., tests, objectives, and so on, not just the materials from which the student is to learn.

Creager and Murray (1971) say that the "information explosion," and large number of actual and potential (e.g., part-time and evening) students, shrinking financial resources, and growing dissatisfaction with our mass educational system, all make it necessary to search for more effective and individualized instruction. While designing and implementing high-quality Modular instruction, it will no doubt prove challenging and time consuming to the most instructors. It offers many advantages and exciting possibilities. Because of its flexibility, its adaptability to large number of students, and its emphasis on individualized learning, Modular instruction has become one of the most promising alternatives in higher education.

Barnes et al (2000) and Ali (2005) state that Modular teaching is more effective for the education of low ability students. They are greatly motivated and inspired through this approach. Their study has found that the performance of low ability-students has been accelerated through this method .In this respect Modular teaching can be more effective in public sector institutions where the students of mixed ability groups are enrolled.

Farooq (1997) points out the advantages of Modular instruction; that is essentially self-contained and each student can proceed at his own pace and is free to skip any portion which is considered to be easy for him. It also gives freedom to repeat any portion, provides target oriented learning opportunity, ensuring

active participation of students in the learning process. He has also recommended its applicability and effectiveness at different levels in the study of different subjects.

Muthukrishna (2002) states that all children have equal rights of education. The state may not directly or indirectly discriminate any or more grounds including race, gender, sex, colour, pregnancy, marital status, ethnic or social origin, age, disability, religion, conscience, belief, culture or language. In this respect Modular teaching is an important step for removing all types of barriers and providing equal opportunities to the students. It is also useful for promoting the latest trend of inclusive education because it focuses on modifying structure, methodology and curriculum to suit the learner.

Sharma (1999) says that feed back system in Modular design consolidates the learning process and provides an opportunity to the students to reflect on the material.

Modular research conducted in the subject of "Mechanical Physics" by the National Institute of Science and Technical Education has also proved that Modular teaching is more effective for teaching this subject. These Modules are developed on the basic principles of competency based curriculum. The entry knowledge of students is used as a baseline for further introduction of the concepts. These Modules are successfully implemented at B.Ed level for technical education students. (Govt. of Pakistan, 1999)

Farooq (1997) says that single subject Module is more beneficial for comprehension of conceptual learning. They discuss all the areas of a topic in detail, which is helpful in the process of conceptual learning. It enables the students to explain difficult concepts in behavioral form to be easily understood by the students.

According to Lowman (1986), deficiency model of Module is useful to identify the gaps between what is and what should be. The teacher realizes that the students are consistently facing difficulty in learning certain topics or chapters of the book. He, therefore, decides the need of a more effective learning resource. He has recommended that specific Modules are more effective learning resource for the successful completion of learning process for the students who are facing problems in interacting with some specific topics. In this respect, it works as a complementary source in making teaching learning process effective.

Romiszowski (1984) says that Module encourages autonomy in learning. There is a major shift from teacher to student that makes the climate exclusively learner-centered. This is an important step for developing the habit of independent learning among the students. It provides learning autonomy confidence and motivation for the learner.

Valletutti and Salpino (1985) say that Modules have an important role in staff development in at least two respects. Firstly, they provide teachers with well-designed, carefully structured lesson material, which serve as a mode of effective instructional design. Secondly, they can be specifically designed for the teachers. With regard to the latter aspect, package can be produced on such aspects as instructional planning, teaching learning method, and student evaluation so on. Such package can be developed as a part of self-development programme.

Modules are ideal for distance teaching since they are readily transportable. They can be tailored according to the requirements of a wide range of subjects' areas by improvising using films, tapes and other non-print media. Modules are useful not only for the distance education of trainees, but also for staff development at a distance. Teaching staff of widely separated institutions to ensure attainment of necessary teaching competencies can use sets of Modules. (Ghafoor and Bhatti, 1987)

The Study

This study was conducted to explain the concept of Modular teaching, to find out its effectiveness as a method and to give recommendation for improving the methods of teaching English at secondary level. In order to test the relative effectiveness of independent variable and instructional paradigm, the choice for the most suitable design was the basic subject. Pre-test, post-test equivalent group design was considered most suitable for this study. The number of factors identified by Campbell and Stanely which affect the internal-external validity such as history, motivation, testing, instrumentation, statistical regression, were controlled.

Objectives of the Study

The objectives of the study were as under:
1.   To explain the concept of Modular teaching by review of literature.
2.   To check the effectiveness of Modular teaching in the academic achievement of students in English at secondary level.

3. To find the impact of Modular teaching on the academic achievement of low and high achievers.
4. To determine whether Modular teaching is more effective than traditional method.
5. To find out the difference between Modular teaching and lecture method.
6. To give recommendations for the improvement and promotion of suitable methods of teaching English.

Procedure of the Study

a. *Population of the study*
The aim of this study was to explain the concept of Modular teaching and to find out its effectiveness as method of teaching in English at secondary level. Therefore, the teachers teaching English at secondary level and the students studying were the population of the study.

b. *Sample of students*
Two sections A and B of 9th class from randomly selected schools of Rawalpindi district were taken as a sample of the study. The sample students were re-divided into two groups, i.e. experimental and control group. Both the groups were equated on the basis of pre-test. In this way, every student was equated with the other student on the basis of scores. Each group consisted on 30 students each.

c. *Sample of Teachers*
Two teachers, almost similar in respect of educational qualification, age training and teaching experience were selected from the sample school. One teacher was randomly assigned to the control group and other to the experimental group. All the other condition remained the same except seven days training provided to the teacher on the concept of Modular teaching. It was provided on the following aspects of teaching:

- *What is Modular teaching and Individualized learning strategies?*
- *Activity based learning.*
- *Lesson planning and lesson evaluation.*
- *Effective use of reinforcement techniques.*
- *Role of a teacher as a resource person as a facilitator.*
- *Learner centered environment and remedial teaching.*
- *Seating arrangement learning activities; classrooms rules.*
- *How to solve work sheet problems.*

d.   *Instrument of the Study*

The pre-test post-test were the instruments of this research study. The pre-test was administered to the control and experimental group to collect the base line data for measuring the effects of independent variable. The control and experimental groups were equated on the basis of pre-test. After the treatment was over, the same pre-test was used as a post-test after changing the arrangement of the items on the pattern of even odd numbers to the subjects of both experimental and control groups. The purpose of this test was to measure the achievements of students constituting the sample and to test the effectiveness and validation of Modular teaching. The same post-test was administered as a surprise test after seven weeks to test the retention level of the control and experimental group.

The researcher constructed the test after thorough review of the techniques of test construction and consulting with the experts. The table of specification was also prepared to check the content validity of the test. The reliability of the test was checked by applying test retest method to test external reliability and the internal validity was tested by applying split half method by applying Spearman-Brown prophecy formula.

The items of the test were constructed keeping in mind the competency level of the students and the local situations. The researcher has been teaching English to lower secondary classes for the last 14 years. Therefore, the actual situations that exist in the classroom were fully kept in mind while preparing the test. After incorporation of the suggestions of the experts, it was pilot tested in three institutions and some of the items were modified on the basis of difficulty index and indiscrimination index to make them valid, clear, direct and targeted.

The test includes completion items, multiple choice items, true false items, short questions, matching items and closed descriptive writing. These items test the listening skill, semantic aspects of vocabulary, forming words from the given alphabets, stylistics, syntax, use of verbal phrases. The grammatical area includes noun, verb, adjectives, spellings, rearranging the sentence, preposition, and to transform sentences from present into past and future tenses, descriptive writing with the help of given information.

Time allotted for the test was one hour and 20 minutes and total scores were 100.The four language skills were covered in an integrative way through different items. The test is general in nature and also has relevance with sample lessons of the textbook of 9th class.

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Collection of Data

The experimental and control group received different treatments. The experimental group was taught through Modular teaching and control group received the treatment of traditional method. There were 30 students in control and 30 students in experimental group. The experiment continued for 14 weeks. After five weeks the same pre- test was administered as a surprise test to measure the retention level of the students. At the end of experiment, pre-test was administered as a post-test by applying split half method to the subject sample to measure there over all achievements. Pre-test served for base line data, whereas the post-test was served to measure the achievements of the students as a result of treatment.

Procedure of the Analysis of Data

Raw scores obtained from pre-test, post-test and retention test presented in a tabular form for the purpose of interpretation. For the manipulation of data, the means, standard deviations and differences of means were computed for each group. Significance of difference between the mean scores of both the experimental and control groups on the variable of pretest scores, post-test scores and retention test scores were tested at 0.05 level by applying t-test. To examine the treatment affects for high and low levels of achievement of both the groups, analysis of variance was applied. For this purpose the students of both groups was divided into two halves. I.e. high achievers (above the mean score) and low achievers (below the mean score). This division was made on the basis of pre-test scores.

Hypotheses of the Study

Following are the hypotheses of the study:
1. There is no significant between the mean scores of experimental and control group on pre-test.
2. There is no significant between the mean scores of high and low achievers of the experimental and control group on pre-test.
3. There is no significant between the mean scores of experimental and control group on post-test.
4. There is no significant between the mean scores of high and low achievers of the experimental and control group on post-test.
5. There is no significant between the mean scores of experimental and control group on retention test.
6. There is no significant between the mean scores of high and low achievers of the experimental and control group on retention test.

7.	There is no significant difference between experimental and control group on interaction effect of treatment on the performance of high and low achievers on post-test test.

8.	There is no significant difference between experimental and control group on interaction effect of treatment on the performance of high and low achievers on retention test.

Discussion and Analysis

The significance of difference between mean score of experimental and Control Group as a whole, high achievers of control and experimental group, and low achievers of the experimental and control group on pre-test.

Pre-test	Levene's test		T.test				
Group	F	Sig	T	Df	p. value	Mean Difference	Std. Error Mean
Ex+Con group	.077	.78	.213	58	.832	.66	3.12
High. A of ex+con Group	.590	.449	.467	28	.644	1.13	2.42
Low. A of ex+con Group	.075	.786	.083	28	.934	.2	2.4

The table 1 shows the difference between the mean scores of experimental and control group as a whole. The difference between the high achievers and the low achievers of control and experimental on pre-test. The degree of freedom of the control and experimental group as a whole was 58, of high achievers of the control and experimental group was 28 and the low achievers was also 28.The mean difference were found .66, 1.13 and .2 respectively on 0.05 level. The standard error mean of the control and experimental group as a whole was 3.12, of the high achievers of the control and experimental was 2.42 and of the low achievers of the control and experimental group was 2.4. The p.value was found .832 of the control and experimental group as a whole, .644 of the high achievers of the experimental and control group and .934 of the low achievers of the control and experimental group on 0.05 level that are highly insignificant. The significance of the levene's test proved appropriateness of the application of the t-test. Hence the null hypothesis on the pre-test that "there is no significant difference between the mean scores of experimental and control group, high achievers of the control and experimental and control group, and low achievers of the control and experimental group" were accepted and it was declared that the performance of control and experiment group as a whole low and high achievers on pre-test was found equal.

These findings would work as a base line data of the study to find out the significance of the independent variables.

Table - 2
The significance of difference between mean score of experimental and Control Group as a whole, high achievers of control and experimental group, and low achievers of the experimental and control group on post-test

Post-test	Levene's test		T-test				
Group	F	Sig	T	Df	p. value	Mean Difference	Std. Error Mean
Ex+Con group	.061	.806	3.103	58	.003	11.26	3.63
High. A of ex+con Group	0.61	.806	3.751	28	.001	12.06	3.21
Low. A of ex+con Group	1.23	.27	3.52	28	.001	10.46	2.96

The table 2 shows the difference between the mean scores of experimental and control group as a whole, difference between the high achievers and the low achievers of control and experimental on post-test. The degree of freedom of the control and experimental group as a whole was 58, of high achievers of the control and experimental group was 28 and the low achievers was 28.The mean difference were found 11.26, 12.06 and 10.46 respectively on 0.05 level. The standard error mean of the control and experimental group as a whole was 3.63, of the high achievers of the control and experimental was 3.21 and of the low achievers of the control and experimental group was 2.96. The p.value was found .003 of the control and experimental group as a whole, .001 of the high achievers of the experimental and control group and .001 of the low achievers of the control and experimental group on 0.05 level that are highly significant. The significance of the levene's test proved appropriateness of the application of the t-test. Hence, the null hypothesis on the post-test that "there is no significant difference between the mean scores of experimental and control group, high achievers of the control and experimental and group, and low achievers of the control and experimental group" were rejected and it was declared that the performance of control and experimental as whole low and high achievers on post-test was found highly significant. The performance of experimental group on post-test was better than the control group.

These results are also supported by the study conducted by Pareek and Rao (1981) and Ali (2005) that the Modular approach creates interest in the

individuals and they are able to demonstrate higher achievement as compared to the students taught by traditional methods of teaching.

These results are supported by Shipley *et al* (1989 and Ali (2005) that Modular approach has equal benefits for high and low achievers. It is also supported by Valletutti and Salpino (1985) even by Ali (2005) who have reported that low achievers are benefited most from the Modular teaching.

Table - 3
The significance of difference between mean score of experimental and Control Group, high achievers and low achievers on retention test.

Post-test	Levene's test		T-test				
Group	F	Sig	T	Df	p. value	Mean Difference	Std. Error Mean
Ex+Con group	0.19	.89	3.15	58	.003	11.46	3.63
High. A of ex+con Group	.000	.984	3.76	28	.001	11.20	2.97
Low. A of ex+con Group	1.65	.209	3.80	28	.001	11.73	3.08

The table 3 shows the difference between the mean scores of experimental and control group as a whole, difference between the high achievers and the low achievers of control and experimental on retention test. The degree of freedom of the control and experimental group as a whole was 58, of high achievers of the control and experimental group was 28 and the low achievers was 28.The mean difference were found 11.46, 11.20 and 11.73 respectively on 0.05 level. The standard error mean of the control and experimental group as a whole was 3.63, of the high achievers of the control and experimental was 2.97 and of the low achievers of the control and experimental group was 3.08. The p.value was found .003 of the control and experimental group as a whole, .001 of the high achievers of the experimental and control group and .001 of the low achievers of the control and experimental group on 0.05 level that are highly significant. The significance, of the levene's test proved appropriateness of the application of the t-test. Hence the null hypothesis on the Retention test that "there is no significant difference between the mean scores of experimental and control group, high achievers of the control and experimental and group, and low achievers of the control and experimental group" were, rejected and it was declared that the performance of control and experimental as whole; low and high achievers on Retention test was found highly significant.The performance of experimental group on Retention test was better than the control group.

The subjects who were taught by Modular approach retained more due to the intensity of Modular teaching and the low ability students are highly motivated. These results are also supported by Ali (2005);Preedy (1989); Barnes et al(2000);Block (1987)

Table - 4

ANOVA (2+2) showing difference between treatment affects for high and low achievers of experimental and control group on the posttest and retention test.

Sources of variation on post-test	Type III sum of squares	Df	Mean squares	F	Sig
Experimental.G Control. G	1904.067	1	1904.067	26.49	.000
Lower achievers. High achievers	7437.067	1	7437.067	103.49	.000
Interaction	9.6	1	9.6	.134	.716
Error	4024.00	56	71.85		
Corrected total	13374.73	59			
Sources of variation on Retention test	Type III sum of squares	Df	Mean squares	F	Sig
Experimental.G Control.G	1972.26	1	1972.26	28.67	.000
Lower achievers. High achievers	7661.40	1	7661.40	111.38	.000
Interaction	1.067	1	1.067	.016	.901
Error	3852.00	56	68.78		
Corrected total	13486.73	59			

The table 4 shows that the p.value obtained from both the sources of variation: between subject and within subject of the high and low achievers of control and experimental group was found highly significant. It was found .000 between the experiment and control group of the high achievers and low achievers on 0.05 level. The p.value of interaction affect was found .716 which is above the level of .005 level. It means that the performance of low achievers of the experimental group is significantly better than the performance of low achievers on the control group. In the same way the performance of high achievers on the experimental group was found significantly better than the high achievers in the control group. Hence, the hypothesis that "there is no significant difference between treatment affects of high achievers and low achievers on post-test" was rejected and it was declared that the performance of high and low achievers of the experimental group was found highly significant.

The second part of the table shows that the p.value obtained from both the sources of variation: between subject and within subject of the high and low achievers of control and experimental group was highly significant. It was found .000 on 0.005 level of experiment and control group. The p.value of interaction affect was found .901 which was above the level of .005 level. It means that the performance of low achievers of the experimental group was significantly better than the performance of low achievers in the control group. In the same way the performance of high achievers on the experimental group was significantly better than the high achievers in the control group. Hence, the hypotheses that "there is no significant difference between treatment affects of high achievers and low achievers on retention test" was rejected and it was declared that there is significant difference between high and low achievers of experimental and control group.

Findings of the Study

From data analysis the following findings were drawn out:

1. Table 1 shows the significance of difference between the mean scores of control and experimental group as whole; low and high achievers on pre-test. There was no significant difference were found between the performance of control and experimental group as a whole and difference between the high and low achievers of the experimental and control group. Hence, the null hypothesis on the pre-test that "there is no significant difference between the mean scores of experimental and control group as a whole; high and low achievers on pre-test" was accepted.

2. Table 2 shows the significance of difference between the mean scores of control and experimental group as whole; low and high achievers on post-test. There were significant difference were found between the performance of control and experimental group as a whole and difference between the high and low achievers of the experimental and control group. Hence, the null hypothesis on the post-test that "there is no significant difference between the mean scores of experimental and control group as a whole; high and low achievers on post-test" was rejected.

3. Table 3 shows the significance of difference between the mean scores of control and experimental group as whole; low and high achievers on Retention test. There were significant difference were found between the performance of control and experimental group as a whole and difference between the high and low achievers of the experimental and control group on retention test. Hence, the null hypothesis on the post-test that "there is no significant difference

between the mean scores of experimental and control group as a whole; high and low achievers on post-test" was rejected.

4.   Table 4 shows that the p.value obtained from both the sources of variation: between subject and within subject of the high and low achievers of control and experimental group was found.000 on 0.05 level on posttest which is highly significant. The p.value of interaction affect was found .716 which is above the level of .005 level. Hence, the hypothesis that "there is no significant difference between treatment affects of high achievers and low achievers on posttest" was rejected.

The p.value obtained from both the sources of variation of the high and low achievers of control and experimental group was found .000 on 0.05 level on retention test which is highly significant The p.value of interaction affect was found .901 which was above the level of .005 level. Hence, the hypotheses that "there is no significant difference between treatment affects of high achievers and low achievers on retention test" were rejected.

Conclusions

Following are the conclusions of the study:
1.   The study shows that Modular teaching develops life long, independent learning habits in the learner having self-determination, self-direction and self respect. The learner does not fully depend on others but on himself. This attitude makes him/her able to take charge of his learning process that facilitates him in learning. As a result, the students in the experimental group out scored the students who were in the control group on the posttest.
2.   Modular teaching allows the learner to proceed at his own pace on the basis of his/her individual abilities and capacities. He is free to skip any portion, which is considered to be easy for him. It also gives freedom to repeat any portion, provides target oriented learning opportunity, ensuring active participation of students in the learning process. It has been proved that learners do not achieve at the same rate and are not ready to learn at the same time .Because of this, the performance of the students taught by the experimental method was found significantly different than the performance of the students in the control group.
3.   Modular teaching is more effective for the education of low ability students. They are greatly motivated and inspired through this approach. This study has found that the performance of low ability

students has been accelerated through this method .In this respect Modular teaching can be more effective in public sector institutions where the students of mixed ability groups are enrolled.

4. Feedback system in Modular design consolidates the learning process and provides an opportunity to students to reflect on the material. The study shows that Modular teaching develops creative and innovative thinking among the students.

5. Module is more beneficial for comprehension of conceptual learning. They discuss all the areas of a topic in detail, which is helpful in the process of conceptual learning. It enables the students to explain difficult concepts in behavioral form to be easily understood by the students.

6. Modular teaching keeps the students on the track and do not allow them to deviate from the topic. All the learning activities revolve around the objectives that are given in the start of the unit; and in this way they are greatly helpful in improving the teaching learning process in the class room. As result, the study shows the performance of the students taught by the experimental method was significantly better than the performance of the students taught by the traditional methods.

7. Modular teaching can be administered in any social setting convenient to the learner. It is beneficial for teaching different subjects at various levels because it gives wider opportunities to the learner to interact the material by employing different methods. It has the advantages to be used anywhere outside the institution, can be administered to single or group user, can be easily revised and upgraded, transported one place to an other place, economical to prepare, flexible and can be implemented through variety of scheduling. It can be used in varying size of classes, varying length, and varying frequency. Included in the system, has the provision for large lecture section, small inquiry groups, and extensive independent study. It has made the students able to show mastery performance on the posttest.

8. The role of the teacher in Modular teaching is of as a guide instead of tyrant, act as a resource person, better utilization of the time of teacher and better utilization of talent. It provides opportunity to student's deeper involvement with their own education.

9. Modular teaching is useful to identify the gaps between what is and what should be. The teacher realizes that the students are consistently facing difficulties in learning certain topics or chapters of the book; therefore, he decides the need of a more effective

learning resource. Specific Modules are more effective learning resource for the successful completion of learning process for the students who are facing problems in interacting with some specific topics. In this respect, it works as a complementary source in making teaching learning process effective.

10. Modular teaching is found more effective than the traditional method because Modules provide well-designed, carefully structured lesson material, which serve as a mode of effective instructional design. They can be specifically designed for teachers. With regard to the instructional planning, teaching learning method and student evaluation so on. Such package can be developed as a part of self-development programme.

11. In Modular instruction the success of the course depends on the success of the students learning. It is not only the beauty of the course that is evaluated by the educationists. In this way the whole focus of the system is centered on the mastery learning. The learning experiences are oriented towards the performance of the students, not towards the teacher. It involves active participation of all the students that makes it useful for the students having different abilities.

12. Pre-test post-test in Modular teaching checks the effectiveness of instruction and determines the readiness for the instructional programme. They also find out the pre-requisite skills needed for the instructional package. In this way the students that are taught through this method feel more ease and confidence to study the material and improve their performance.

13. The retention level of the experimental group was high than the control grouped. The subjects who were taught by Modular approach retained more due to the student centred approach of Modular teaching.

Recommendations

Following are the recommendations of the study:

1. The study proved that Modular teaching is more effective than the traditional methods of teaching English. Therefore; the policy makers should take steps to implement Modular teaching in the system of education at secondary level in Pakistan.

2. Modular approach should be introduced gradually as support programme for teaching difficult topics; and the full fledged

Modularizing programme should be implemented on the basis of feed back and availability of material and intellectual resources.

3. Curriculum developers should be trained to formulize the curriculum on basis of Modular approach and support material should be provided accordingly. For this purpose, the workshops should be arranged for them.

4. Textbooks should be developed on Modular approach by the concerned authority (Directorate of staff development or provincial bureau of curriculum wing) and should be validated by the experts.

5. The teachers should be made aware of theoretical aspects Modular approach and training programme should be launched to train the teachers to teach the students through Modular teaching.

6. Government may provide facilities and funds for the institutions to adopt the Modular approach at secondary level.

7. Sufficient books should be available in the school library on Modules and Modular approach. The Head of the educational institutions have been provided special funds to perform this responsibility.

8. The head of institutions and administrators at district level should monitor implementation of the new methodology and facilitate teachers in the class room.

9. Science teachers may use Modular approach in the teaching learning process for the better learning and to discourage rote memorization.

10. Further researches may be conducted in the subject of Physics, Chemistry, Mathematics, Computer science, Pakistan studies, Urdu, English and Islamic studies on the same pattern. Some other variables such as attitude, background status of the student, level of intelligence should be controlled.

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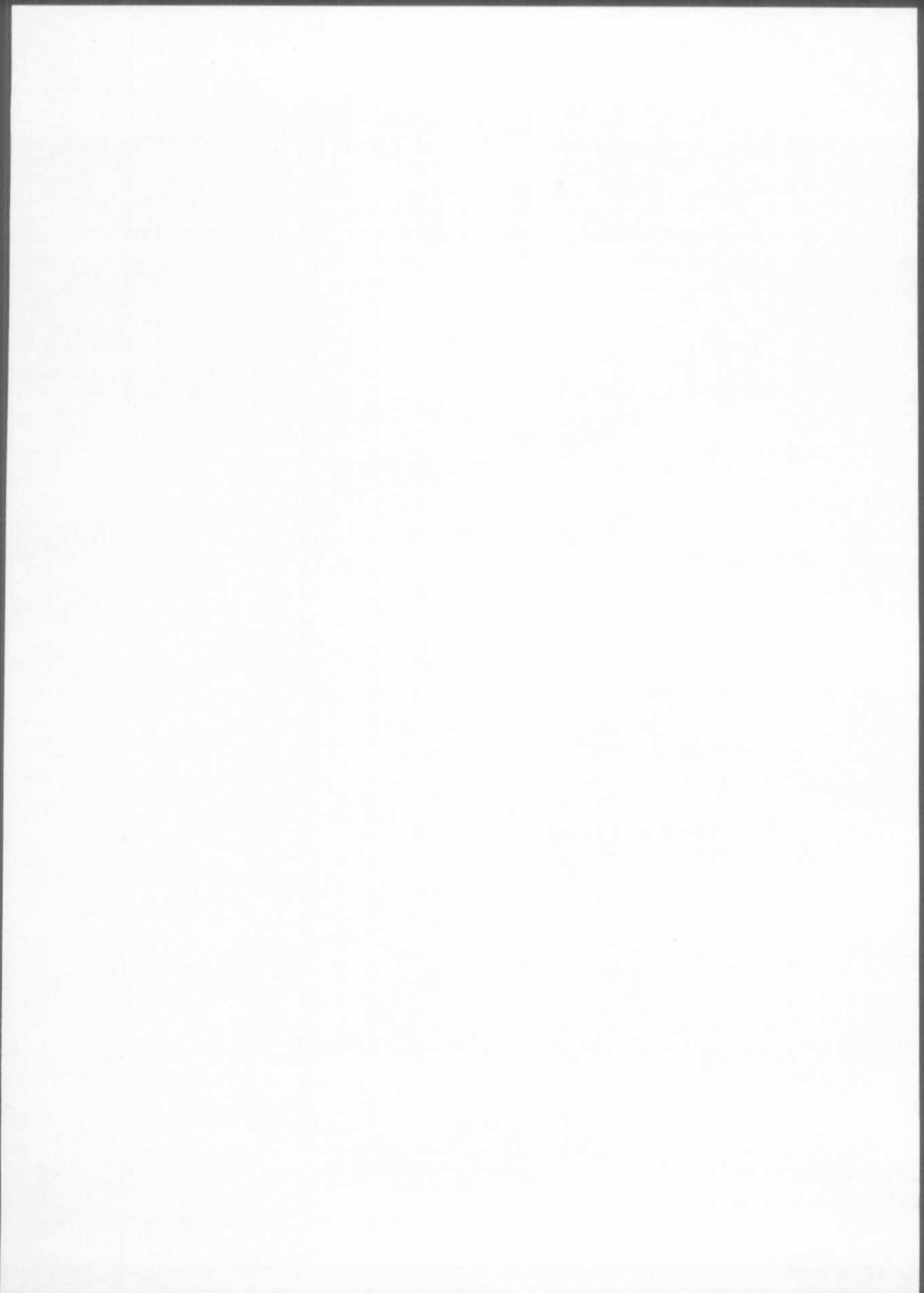
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NON-FORMAL EDUCATION:
A PRIORITY OF THE YOUTH IN PAKISTAN

By
*Dr. Nabi Bux Jumani**
*Nazar Abbas Nazar***

Abstract

Non-formal education is being used as an important vehicle for improving living standards and national development throughout the world. In Pakistan, many attempts were made by both government as well as non-governmental organizations for launching non-formal education projects. The present study was designed to explain the concept and importance of non-formal education in Pakistan, identifies educational needs of unemployed adults and specifieʳ problems faced by unemployed persons and to suggest possible solutions through non-formal education. The study was spread over two sections of the populations, i.e. trained unemployed adults and representatives of some public as well as non government sector organizations where non-formal education is being imparted. For the purpose of data collection, two questionnaires were developed. The ways to get enhance opportunities through non-formal education are also suggested for youth which may help them as well as policy makers to launch non-formal education programme so that youth can play an effective role in national development.

Non-Formal Education

With the increase in the population and needs of the people, formal system failed to cater the demands of the people. As such a need for an alternate method has generally emerged. Thus, non-formal education is one of the alternate systems. The word non-formal is derived by using the prefix, non to formal. Coombs, P.H. (1973) defines non-formal education as "any organized educational activity outside the established formal system whether operating separately or as an important feature of some broader activity that is intended to serve identifiable clientele and learning objectives".

* The writer is working as Assistant Professor, Faculty of Education, Allama Iqbal Open University, Islamabad.
** The writer is a Research Fellow of Allama Iqbal Open University, Islamabad

Non-formal education (NFE) is being offered through different modes. One of its modes is correspondence education, out of which distance education has developed as a system in itself. Distance education is accompanied by educational components such as printed course materials, creating face-to-face interaction medium for student guiding and assisted with communication technology. Non-formal education is usually defined through its relation to formal and informal education. It takes place outside the conventional structures of the formal education or training systems. It is organized for certain purposes for a difference from informal education. It is the process of gaining skill and knowledge and the process of multiplication of those skills between the member of our youth organizations and by making an impact on the society around us. (Young European Socialists, 2003)

Non-formal education could not get due importance in most of the countries of the world on many grounds. One of the reasons may be: "Due to the fact that it does not have any link with the formal certification system, NFE is not always given the same level of recognition as formal education". (Youth Forum Socialists, 2003) People need education to acquire a broad base of knowledge, attitudes, values and skills on which they can build their future, even if they do not receive formal instructions. Non-formal education programmes on Adult Literacy are valuable for them to learn, to respond to new opportunities to adjust to social and cultural changes and to participate in the political, cultural and social activities.

The education programmes are normally considered as basis for economic development and political independence. Such development requires the participation of both men and women. Young and old, either directly through economic and social groups. Every society has used adult-education processes to continue the development for the maintenance and progress of that society; and the perception of the kind of adult required is different for each society. Non-formal education is vital in the transformation of humanity, in the development of community, culture and the family.

The importance of non-formal education is increasingly recognized by the educational planners of the developing countries. Coombs. P.H. (1968) states that:

> *The poorer countries now face a priority task of non-formal (adult) education which years ago confronted today's industrialized countries. It is to bring to the vast numbers of farmers. workers, small entrepreneurs, and others who have never seen the inside of a formal classroom and perhaps never will a spate of useful skills and knowledge which they can properly apply to their own and their nations developments.*

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Hence, in order to increase the literacy rate for national development, it is becoming more and more apparent that education must be given to all peasants, workers and rural masses of Pakistan. In almost all the five-year plans and National Education Polices much emphasis had been given on adult education keeping in view of its importance for social change and national development. Non-formal education has unique role. It can make the neglected farmers, workers and their families more productive and effective in their work, in their social and personal relationships and as citizen.

Pakistani Scenario

Serious problems and frustrations have arisen from the mismatch between education and employment opportunities. There is a wide spread unemployment and low-level of productivity resulting from the indifferent policies and programmes in respect of human resources development and utilization in the country. The responses of education system to adult unemployment are many and varied. As the position on unemployment Labor Force B Rural /Urban Areas (No. in Million) is evident from the below given table:

Year	Unemployment Labor Force			Unemployment Rate (%)		
	Total	Rural	Urban	Total	Rural	Urban
1995	1.84	1.14	0.70	5.37	4.80	6.90
1996	1.88	1.16	0.72	5.37	4.80	6.90
1997	2.29	1.47	0.82	6.12	5.65	7.17
1998	2.31	1.37	0.94	5.89	4.98	7.95
1999	2.37	1.40	0.96	5.89	4.98	7.95
2000	3.17	1.94	1.23	7.82	6.94	9.92
2001	3.24	1.97	1.27	7.82	6.94	9.92
2002	3.57	2.19	1.38	8.27	7.55	9.80
2003	3.65	2.23	1.42	8.27	7.55	9.80
2004	3.72	2.28	1.44	8.27	7.55	9.80
2005	3.52	2.09	1.43	7.69	6.74	9.70

Source: Economic Survey of Pakistan 2004-2005

The above quoted table reveals that unemployment has increased from 7.82 percent in 2000 to 7.69 percent in 2005. Similarly unemployment in rural areas, which was 6.94 percent in 200, has risen to 6.74 percent in 2005, while urban unemployment has deceased from 9.92 percent in 2000 to 9.80 percent in 2005.

The unemployment is defined as all persons of ten years age and above, who during the period under reference were: (a) Without work i.e. were not in

paid employment or self-employed. (b) Currently available for work i.e. was available for paid employment or self employment (c). Seeking work i.e. had taken specific steps in a specified period to seek paid employment or self employment. According to this definition, about 3.52 million people in the labor force were estimated to unemployed in 2005 compared to 3.72 million 2004. (Economic Survey of Pakistan, 2004-05)

For the individual who is unemployed, being unemployed means being denied access to the formal economy and having neither motivation nor encouragement to work. The most obvious effect of this is the financial one and the lack of status of an employed person. The large majority of people out of work nowadays is clearly employable and clearly wants a job.

Being unemployed means having reduced opportunity to acquire the symbols of material success. Most unemployed people live on reduced incomes relative to previous earnings or compared to those with jobs. In addition to financial penalties, unemployment brings with it a variety of physical, psychological and social consequences (Senior and Naylor, 1987, p.20). Having a paid job is also important for newer cultural values; enhancing ones' economic and psychological independence and younger people, self fulfillment, empowerment, effectiveness and autonomy all part of what might be called the values of expressive.

Unemployment

Being an unemployed is clearly a problem from the point of view of the individual and his or her family. Its effects, however, spread even further. Opportunities grow fewer and people put up, with thing that they are unable to change unemployment is the result of worldwide recession, wrong economic policies and poor commercial competitiveness due to high wages, and the inflexibility of the workface. Both education and training are required to equip youngsters and adults to undertake necessary work to provide services, for example, the technical and vocational education initiative now introduces strictly vocation training to youngsters. It is a means to increase personal growth and assets, to build more abilities and empower people in their actions. Any education provision for unemployed adults should engage nitrating in order to have ready the skills required for present and future fobs and occupations. Whereas, Senior and Naylor (1987, p.48) has pointed out the following needs:

    a.   Take into account the different assumptions about the nature of unemployment.

    b.   Reflect the needs, which are common to the majority of unemployed people.

    c.   Appreciate the individuality of unemployed people.

Education needs of unemployed adults are as follows:

a. Welfare rights/ unemployment related issues
b. Life and study skills /self –help.
c. Subject based classes/discussion (e.g. history, economics, psychology)
d. Interest classis/coursed (creative writing, visual arts, media music, drama, physical exercise, health, recreational pursuits, arts and crafts (non-vocational)
e. Foreign language
f. Competing
g. Employment skills (e.g. craft/technician/office training, management skills, back to work for women)
h. Small business
i. Job getting (e.g. job search, application, interview)
j. Educational/ training advice/counseling)

Opportunities

The level of education is not the sole parameter, which determines the earning differentials among individuals. These differentials also exist due to the interaction among the quality of education, ability scores, age, experience, training, productive skill and knowledge of individuals. Educational opportunities are generally better availed by those living in urban areas, belonging to general castes and those with higher per capita income. Employment is the situation in which remuneration in cash or kind is received in exchange for active, direct, personal participation in the production process. The employment opportunity for different levels of educated labor force depends on a number of economic variables, their growth pattern and supply and demand conditions of labor force. It is believed that with rising educational levels and productive efficiency employment opportunities tend to increase.

Inequality in employment and earrings may exist by sex, race, tribe, region, rural-urban location stratum of labour market in which an individual is employed, and the economic background of the individuals. Thus, the variation in employment and earning opportunities is the outcome of an extremely complicated interaction of various factors and also caused by imperfections in labour market, and variations in organizational pattern of activities. Therefore, inequalities unemployment and earning opportunities between different groups of populations reflect the differences in educational opportunities. These are determined by several socio-economic variables. Employment and income opportunities available to rural urban population differ significantly.

There are basically two reasons. First, employment opportunism available in rural areas are far less than in the urban areas and second, even in the limited jobs available in rural areas, earning leverage lower than in urban areas. Thus, the rural educated persons have to depend on urban areas for employment to a large extent. Total number of employed person in urban areas has increased from 13.2 million in 2003 to 13.4 in 2004. Total number of employed person in rural areas has increased from 27.36 million to 27.91 million in 2004. (Economic survey of Pakistan 2003-04)

Earnings are found to be significantly higher in the case of individuals having higher educational levels and longer durations of work experience as compared to individuals with lower values of these variables. Differential in earning at signings at similar level of education are postulated to reflect variations in age and working experience among individuals. Earning of individuals at any level of education has the tendency to increase at a slower rate. But the tendency of earning is found steeper with higher educational level. Every increment in education leads to a higher rate of increment in earning in case of comparison. Inter-group differences i.e. Male/Female differences and Rural/Urban differences in earnings are widely prevalent among men and women, rural and urban workers, among people from different social groups, and different economic status.

The Study

A descriptive study/survey method was adopted for the study which according to Sax (1979) describes currently existing conditions so that these could be modified later on as a result of the research. The objectives of the study were: to explain the concept of non-formal education, to highlight the existing position of unemployed in Pakistan, to specify problems faced by the unemployed peoples in Pakistan and to suggest possible solution through non-formal education to the problems faced by the unemployed adults in Pakistan

In survey studies, the researcher sees the impact of one or more variables on a sample to generalize it on population from which it was drawn. Researcher may use one or more data collecting tools for the purpose. Two type of questionnaires were developed to collect data from different categories of population consisted of 5-point rating scale statements, multiple choice items and open-ended questions.

Possible statements were developed keeping in view the objectives of the study for eliciting opinion on Likert-type scale. It was kept in view that each

statement must express a definite idea/position. For multiple choice questions, efforts were made to incorporate all possible items and respondents were given option to tick more than one response. Three questions were open-ended in each questionnaire so that respondents could respond freely in their own words.

The population of the study comprised all trained unemployed adults of and the officers of Govt. Institutions and non government organizations in Islamabad providing non-formal education.

Results

The youths were jobless after getting certain trainings/skills through non-formal education. The lack of opportunities was the main obstacle in the way of getting jobs. Skill oriented non formal courses improves individual's abilities in a shorter span of time. People liked to be trained by NGOs to contribute their role in national development. Less job opportunities was the only reason of unemployment. The non-formal education was helpful in vocational training. Adult education developed positive attitude in adults The unemployment was due to shortage of relevant skills. The unemployment was increasing due to over-population.

Non-formal education brought permanent change in adults and made them more progressive. The training established proper linkage among the acquisition of knowledge, skills and development for job requirements.

Recommendations

The following are the recommendations:
- In Pakistan, the shortage of skilled manpower is actually less quantitative and more qualitative; therefore institutions must be equipped with latest and modern techniques to improve the level of quality as well as quantity.
- Government should enhance industrial networks for sustained development necessary to eradicate poverty and unemployment.
- Motives and incentives for unemployed adults may be introduced/ improved.
- The process on non-formal education must be organized through coordination of the Government and Community participation.
- Close coordination may be established between Educational and the Industrial / Agricultural Services Sector. Market need based

training programs may be organized. Industrial/agricultural organizations and associations should be closely associated with educational institutions so that uneducated youth may be provided market oriented non-formal education.

Redundant labour can be retrained when rationalization and streamlining of Industries took place.

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EFFECTIVENESS OF MODULAR TEACHING IN ENGLISH AT SECONDARY LEVEL

By
Ghulam Behlol

Abstract

This paper defines the concept of Modular teaching, explores differences between Module and lecture method, checks the effectiveness of Modular teaching in the academic achievement of students in English at secondary level and its impact on the academic achievement of low and high achievers. Pre-test post-test design was used to check the effectiveness of the independent variable. The students, studying in IX class and taken in the sample were divided into control and experimental group on the basis of pre-test. Post-test was administered to find out the differences between the mean scores of dependent and independent variables by applying t-test. The treatment effects of low and high achievers were tested by applying ANOWA. The study shows Modular teaching ensures the active participation of the learner in the learning process which makes him/her able to take the charge of learning for creative and reflective thinking. It is more structured and targeted as compared to the lecture method that develops independent habit of learning among the students. Modules are self contained package that cater the needs of students on the basis of individual differences, by breaking the content of the complex task into parts to bring it at the level of the students. It has been proved that the students of different abilities learn better by the Modular teaching as compared to the traditional methods of the study.

Introduction

Education is the process of identification and promotion of individual potential for the progress and betterment of the society. It teaches man how to live on earth, fly in the sky and dive into the depth of the sea. It is the only powerful machine for eliminating the forces of ignorance, barbarity and oppression. It provides passage to more promising future, providing the skilled manpower needed for economic prosperity and modernization. Teacher is a person

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* The writer is working as Deputy Headmaster, FGSS School, Talhar, Islamabad.

responsible for steering the education ship to its destination. He is a linchpin of the education system who implements the education reforms and policies. In fact, the quality of education depends upon the quality of teacher education. (Education Policy, 1998-2010)

The emphasis of teaching in this era is on individualized instruction, because human beings are different from each other in many ways. It is not possible to teach every body in the same way as is done in by following the traditional methods of teaching. One of the most significant features of the present scientific movement in education is the recognition of the great differences among children. The early Greek scholars recognised individual differences in intelligence, temperament, interest, and physical traits. (Chand, 1990) In the last two decades classroom communication has considerably changed with the application of educational technology and knowledge of individual differences in teaching-learning process with its emphasis on individualising instruction. (Chauhan, 1992)

Individualized instruction is the accommodation of the unique abilities, goals, learning rates and learning styles of each student. It places the responsibility of learning on the students themselves. (Collette and Chiapetta, 1986). In our country the classrooms are overcrowded, so the teacher cannot give individual guidance. To meet this problem, Waheed (1995) proposed that: "there are some other methods such as independent study, laboratory method, project method, problem-solving method through which student can learn their lesson themselves according to their own pace but the Modular teaching is most effective of all of them."

In this respect, Modular teaching is an important strategy for caring the needs and abilities of different students. It is one of the most widespread and recognized teaching learning techniques in the advanced as well as in the developing countries of the world. It is used almost in all subjects, especially in language teaching. All kinds of subjects are being taught through the Modules. Modules not only help in instructions but also develop the self-study habits due to individualized study and satisfy the individual differences of the students. According to Sharma (1990) "Module possesses the qualities to encourage the individuals to learn independently, each Module have distinct training element, including practice and experience and possibly a further educational element." UNESCO Regional office for Education in Asia and Oceania (1987) had suggested the following components of a Module such as, Title, Background, Introduction, Pre-requisites, Overview. Objective of the Module, Learning Activities (Unit No. 1, Unit No, Unit No. 3, Learning material about each unit, Formative test ,Summative test of the Module.

Let us now review some of the definitions of Modules and Modular instruction:

- Barbara and Barbara (1973) define Module as it "is *a* self-contained, independent unit of a planned series of learning *activities* designed to help the student to accomplish certain well-defined objectives".
- Kalbouss (1975) defines: "Modules are self-contained units for accomplishing specific tasks contributing to the accomplishment of overall task".
- Dieterich (1971) defines flexible or Modular scheduling is an organization for instruction which provides classes of varying size, varying length, and varying frequency
- Kulkarni (1986) says: "The term Module is derived from Modus in Greek language which refers to a mode of working with some instructional material. In the context of educational technology, a Module indicates an instructional plan, which is usually larger than a class hour or a session but smaller than a course plan." Again he describes: "Usually the term Module refers to an instructional plan which involves more than one medium not only print but also audio tapes, slides, visits or discussions, etc."

Difference between Modular and Lecture Method

One may argue that all the principals identified of Modular teaching conform to the principals of lecture method. The lecture method includes reading by the students; completing the home work, writing the papers, and taking the exam, etc. These all activities require active participation from the students. (Ali, 2005) The textbook always provides rationale for their content in an introductory chapter and lectures frequently supplement test objectives with their own statement of course objectives. Textbooks and readers are always divided into units and chapters, and typical lecture covers a series of well defined topics. The typical lecture course has at least a mid term, a final exam, home assignments and papers. They all provide feedback to the students. Finally, the students are permitted in the limit imposed by the length of a course and examination dates to do the course work at their own pace. (Cross, 1976; Ruskin, 1974)

Then, the question arises as: What is the difference between this innovative and Modular strategy? The point is explained with the help of following points:

- The difference between the two strategies is not of kind but of emphasis and degree that play an important role in the teaching learning process, and these differences are not insignificant.

- In Modular instruction the teacher is encouraged to analyse and articulate in specific, detailed, concrete, and behavioral terms the various aspects of teaching. On the basis of this analysis the teacher implements the plan for maximizing learning. But, in lecture-method the teacher comes to class and delivers the lecture and returned.
- In lecture-method the students' role, by and large, is passive whereas in Modular teaching they play a fully active role in their learning.
- The complex task is divided into parts in Modular teaching to bring it at the level of students whereas in traditional courses there are units explaining concepts according to the nature of subjects that is not easy for the students.
- Modular instruction needs the vigorous implementation of the pre-test and post-test for measuring the effectiveness of Modular teaching, but no such pattern exists in lecture method.
- The learning material given to the students in Modular course is simple, to the point and up to the standard of the students whereas in lecture course these principals are given consideration but not with the sane degree of emphasis.
- In Modular instruction the students are informed as clearly and precisely as possible what they are expected to learn and how the students demonstrate to the teacher that the required learning has occurred. In the lecture method the students are typically told considerably less about learning situation and the teacher's expectations. They are assigned readings, expected to attend the lectures, and told that they will be tested on this material. In this respect lecture method creates ambiguity for the students.
- Most of the researches conducted regarding the comparison effectiveness of Modular and lecture method, pointed out that M.I is more effective and preferred by the students. They are more involved, harder in, learn more from and have a decided preference for it.(Cross,1976;Ruskin,1974)

The Modular instruction is highly structured as compared to traditional methods. It provides sense of security to the learner. It discourages the short cut and make the students able to go ahead with depth learning.

Review of Previous Researches

Kalbouss (1975) has recommended that Modular teaching method is more useful for teaching Russians and other languages to the students who have not an experience for language because of lack of talent for foreign language learning, poor preparation for given course, poor teaching or for whatever reasons, and can

effectively used in employing some other modern methods such as individualized instruction, computer assisted teaching, teaching machine, Keller plan, etc. Dieterich (1971) says flexible or Modular scheduling is an organization for instruction, which provides classes of varying size, varying length, and varying frequency. Included in the system is provision for large lecture section, small inquiry groups, and extensive independent study. This flexible scheduling demands a role of the teacher as a guide instead of tyrant, act as a resource person, better utilization of the time of teacher and better utilization of talent. It provides opportunity to student's deeper involvement with their own education, more individual attention and responsibility for their own learning and handling of their learning by themselves.

Fitzgerald (1977) and Cross (1976) say that Module develops mastery learning habits among the student. It is easy to check its effectiveness and its content can be altered. It also specifies that a Module is a unit of not just for information instruction. The Modular units encompasses all of the aspects of teaching and learning situation, i-e., tests, objectives, and so on, not just the materials from which the student is to learn.

Creager and Murray (1971) say that the "information explosion," and large number of actual and potential (e.g., part-time and evening) students, shrinking financial resources, and growing dissatisfaction with our mass educational system, all make it necessary to search for more effective and individualized instruction. While designing and implementing high-quality Modular instruction, it will no doubt prove challenging and time consuming to the most instructors. It offers many advantages and exciting possibilities. Because of its flexibility, its adaptability to large number of students, and its emphasis on individualized learning, Modular instruction has become one of the most promising alternatives in higher education.

Barnes et al (2000) and Ali (2005) state that Modular teaching is more effective for the education of low ability students. They are greatly motivated and inspired through this approach. Their study has found that the performance of low ability-students has been accelerated through this method .In this respect Modular teaching can be more effective in public sector institutions where the students of mixed ability groups are enrolled.

Farooq (1997) points out the advantages of Modular instruction; that is essentially self-contained and each student can proceed at his own pace and is free to skip any portion which is considered to be easy for him. It also gives freedom to repeat any portion, provides target oriented learning opportunity, ensuring

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active participation of students in the learning process. He has also recommended its applicability and effectiveness at different levels in the study of different subjects.

Muthukrishna (2002) states that all children have equal rights of education. The state may not directly or indirectly discriminate any or more grounds including race, gender, sex, colour, pregnancy, marital status, ethnic or social origin, age, disability, religion, conscience, belief, culture or language. In this respect Modular teaching is an important step for removing all types of barriers and providing equal opportunities to the students. It is also useful for promoting the latest trend of inclusive education because it focuses on modifying structure, methodology and curriculum to suit the learner.

Sharma (1999) says that feed back system in Modular design consolidates the learning process and provides an opportunity to the students to reflect on the material.
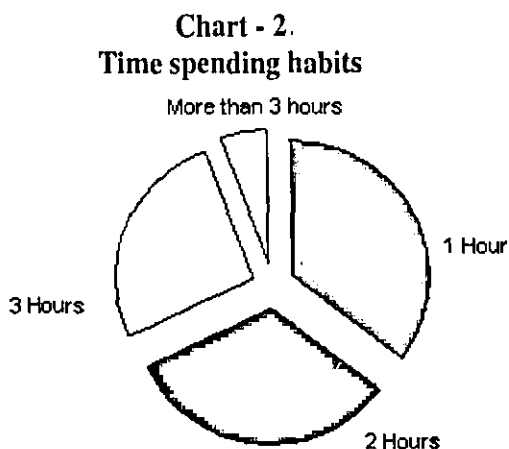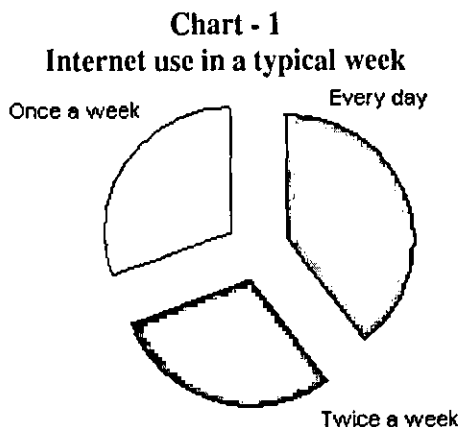
Modular research conducted in the subject of "Mechanical Physics" by the National Institute of Science and Technical Education has also proved that Modular teaching is more effective for teaching this subject. These Modules are developed on the basic principles of competency based curriculum. The entry knowledge of students is used as a baseline for further introduction of the concepts. These Modules are successfully implemented at B.Ed level for technical education students. (Govt. of Pakistan, 1999)

Farooq (1997) says that single subject Module is more beneficial for comprehension of conceptual learning. They discuss all the areas of a topic in detail, which is helpful in the process of conceptual learning. It enables the students to explain difficult concepts in behavioral form to be easily understood by the students.

According to Lowman (1986), deficiency model of Module is useful to identify the gaps between what is and what should be. The teacher realizes that the students are consistently facing difficulty in learning certain topics or chapters of the book. He, therefore, decides the need of a more effective learning resource. He has recommended that specific Modules are more effective learning resource for the successful completion of learning process for the students who are facing problems in interacting with some specific topics. In this respect, it works as a complementary source in making teaching learning process effective.

Findings and Discussion

The results illustrate that significant portion of the youngsters of Dera Ismail Khan city, having access to Internet — everyday 43%, once in a week 34%, and twice a week 23% (see chart 1). Thirty three percent of respondents regarded online communication as an opportunity to establish relationship with strangers.

Chart - 1
Internet use in a typical week

Once a week

Every day

Twice a week

Chart - 2.
Time spending habits

More than 3 hours

3 Hours

1 Hour

2 Hours

Findings reveal that majority of the respondents spending one to three hours daily on using the Internet (see chart 2). The sampled focus groups very significantly using the net at Internet Café followed by it use at homes and their friend's homes (see chart 3). Respondents appreciated online anonymity and the liberty to reveal selective personal information or even create an entirely different identity for them and expressed themselves freely. This is in the line with Joinson's (1998) suggestion that the perception of anonymity and its associated

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reduced self awareness contributed to disinhibition, although the relationship may seem 'less substantial' given the potential for dishonesty.
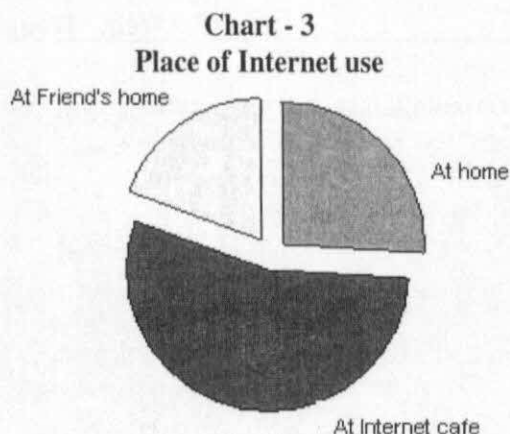
Chart - 3
Place of Internet use

At Friend's home

At home

At Internet cafe

Table - 1
Internet use and social interactions

	much	somewhat	not at all
Interaction with family	25*	34	41
Interaction with friends	35	29	36
Academic activities	23	37	40
Regular praying	12	20	68
Playing games	18	22	60
Newspaper reading	32	20	48
Television watching	17	32	51
Sleeping timing	31	24	45

*: figures indicating percentage n=200

One of the study's major areas was to explore and document the effect of Internet use on a person routine interaction with family members, other social and religious activities. Findings (Table 1) reveal that the adoption of Internet use has disturbed the native youngsters' sleep and prayers, interaction with friends and immediate family members, newspaper reading habits, frequency of television watching, and academic activities—home work. This condition strongly extends support to one of the study's hypotheses that "the more the access to Internet, the more its effect on the routine social interaction of the users.

Table - 2
Internet using purpose

	very freq.	frequently	rarely	never
E-mailing	63*	24	11	02
Web browsing	38	35	16	11
Making male friends	13	17	28	42
Making female friends	22	18	21	39
Getting entertainment	36	30	15	19
Purchasing goods	06	06	08	80
Acad./research purpose	30	27	26	17
General knowledge	30	27	26	17
Just kill the time	07	08	24	61
Sports	11	16	17	56
Improving English	30	15	18	37
News	23	25	17	35
Learning courses	19	17	21	43
Software downloading	23	25	22	30
Games	09	12	31	48
Getting visa	04	04	15	77
Match making	07	10	13	70
Picture galleries	18	22	30	30

*: figures indicate percentage n=200

The purpose of Internet use measured into multiple dimensions to pour users' minds out to various online communication links and various types of content. This is what Bennet (2001) describes as 'the strong and seductive pull toward the use in CMC', which is present due to 'the great anonymity and facelessness made possible in the text-based environment.' The results reveal that the focus group highly significantly using e-mailing for establishing relationship with strangers. Many respondents using the Internet for the purpose of getting entertainment, academic and research development, obtaining general knowledge and software down loading but not at significant level (see Table 2).

Similarly the target group obtained average score using the Net for the purpose of surfing making male and female friends, improving English language, learning different courses and picture galleries. While the same target group gained low scores on the index of Internet using purposes for purchasing goods through on line, just for killing the time, sports activities, using the Net for match making, playing games and getting visa.

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Research findings further show the positive or growing trend and thirst of the native Internet users in specific reference to academic and research content lead to significantly increase their knowledge in the fields of science, information about other countries issues, burning current world affairs and religious problems(see Table 3). While the respondents obtained average or low scores on the categories of sports, agriculture and sex content. This situation supports the researcher assumption that the users more score on the Internet use then the more their level increase in knowledge about different fields.

Table - 3
Internet contents and viewer's knowledge level

	a lot	somewhat	never
Science	60*	24	16
Sports	26	33	41
Sex	19	21	60
Agriculture	13	23	64
Current affair	53	31	16
Religion	44	39	17
Countries	49	36	15
Others	37	28	35

*: Figures indicate percentage n=200

The results of the index of reasons behind internet use reveal that the internet use is significantly ranked as a best sources of information and entertainment and also consider it as a trend which a person can not only enter in attracting world but also participate as an active player in a competitive technological world (see Table 4). The findings further lead us that the focus group highly significantly ranked the Net as a best source of information and the mechanism through someone can meet the today market demand. The same motivating the youthful to get familiar with the constantly changing communication phenomena and with sophisticated powerful entertainment based choices. Apart from Internet use is also considered significantly as a symbol of fashion, means that without access to computer (internet) considered as academic disadvantages. And that is why that the target sample does not agree that Internet use cause wasting of time and money.

Table - 4
Reasons of internet use

	agree	disagree	not at all
Best sources of information	91*	05	04
Wastage of time	28	49	23
Wastage of money	24	51	25
Just a trend	56	27	17
To meet the market demand	70	15	15
Status	65	16	19

*: figures indicate percentage n=200

The study results reveal some paradoxical position regarding the bombardment of sex and violent content however (see Table 5). The apparent justification is easily understandable because cursory exposure to Hollywood and Bollywood movies, one can conclude that the same have potential appeal to meet the psyche of the youthful. But the respondents' response action to sex and violent content don't replicate the social reality.

Table - 5
Internet use and interest in movies and music contents

Movies	much	Somewhat	Not at all
Action	35*	34	31
Romance	41	32	27
Sex	07	22	71
Violence	15	28	57
Dialogue	41	35	24
Story	22	15	63
Music			
Urdu	78	14	08
English	25	45	30
Arabic	08	25	67
Persian	32	25	43

*: Figures indicate percentage   n=200

One of the reasons behind their dishonesty in term of providing wrong information or their reluctant attitude toward sex and violent content was observed during data collection, that "Pindi Internet Café Scandal" alarmed the users to remain careful regarding such type of content. The findings further illustrate that the youngsters highly significantly taking interest in Urdu music as compared to English, Arabic and Persian music.
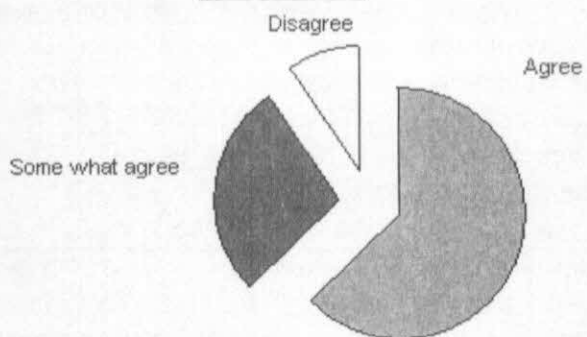
Chart 4

Disagree

Agree

Some what agree

Chart 5

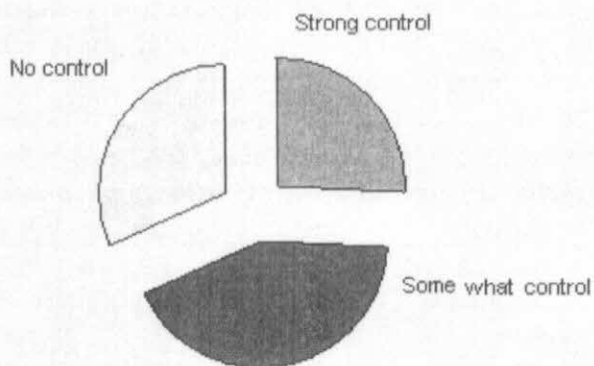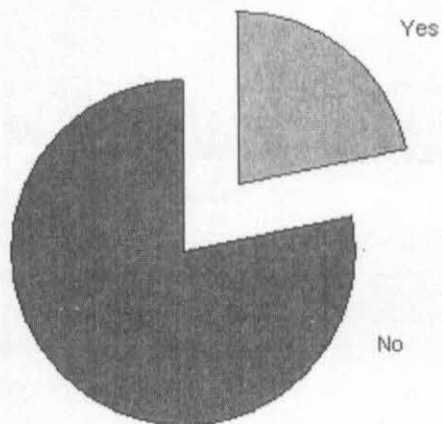Strong control

No control

Some what control

Chart 6

Yes

No

The figure of Chart 4 show that the focus group is significantly endorsed the assumption that frequent interaction with strangers and friends leads to increase relationship overtime. Similarly the results of Chart 5 illustrate that majority of the target youthful is in favor of control over the Net content. While the most noteworthy point to be considered for serious attention is that overwhelming majority of the selected sample is of the firm view that our national media don't possess the potential to compete the onslaught of foreign media content (see Chart 6).

From the observed empirical findings it can be concluded that the study's results significantly endorsed Watson's (2003) view that the Computer Network offers to the computer-explorer particularly the youth a new future. The same extended support to Bennett's (2001) view point that the connectivity between people, made possible by the spread of the Internet, has impacted strongly on People's lives and communication behavior. Findings also supported that the Internet has become impossible to ignore its effects on the ever-increasing number of people who are on the line even by the people of remote regions just like Dera Ismail Khan. That is why, mass communication researchers have overlooked not only the Internet but the entire field of CMC, staying instead with the traditional forms of broadcast, and print media that fit much more conveniently into models for appropriate topics and theories of mass communication. Research in-group communication, for example has been used to examine the group uses of E-mail networks (Sproull and Kiesler, 1991). Research conclusion furthermore proved correct the early studies initiated line of thought that CMC caused online relationships to be impersonal and shallow, and at the same time isolated people from their real life communities. Net use for education purpose has found positive. The youth are aware of the western culture, but the nature of adoption has observed very nominal.

The people of media communication, concerned as they are, for most of their work, with developments and issues that recent and increasingly global in significance, can use the Net to find out the very latest information. With the assistance of the Net, feedback becomes possible, enrichment through interactivity a very likely bonus. However, new theoretical models: "the emergence of new technologies," which combines aspects of both interpersonal interaction and mass media, presents something of a challenge to communication theory. With new technologies, the line between the various contexts begins to blur and it is unclear those models based on mass media or face-to-face context or adequate.

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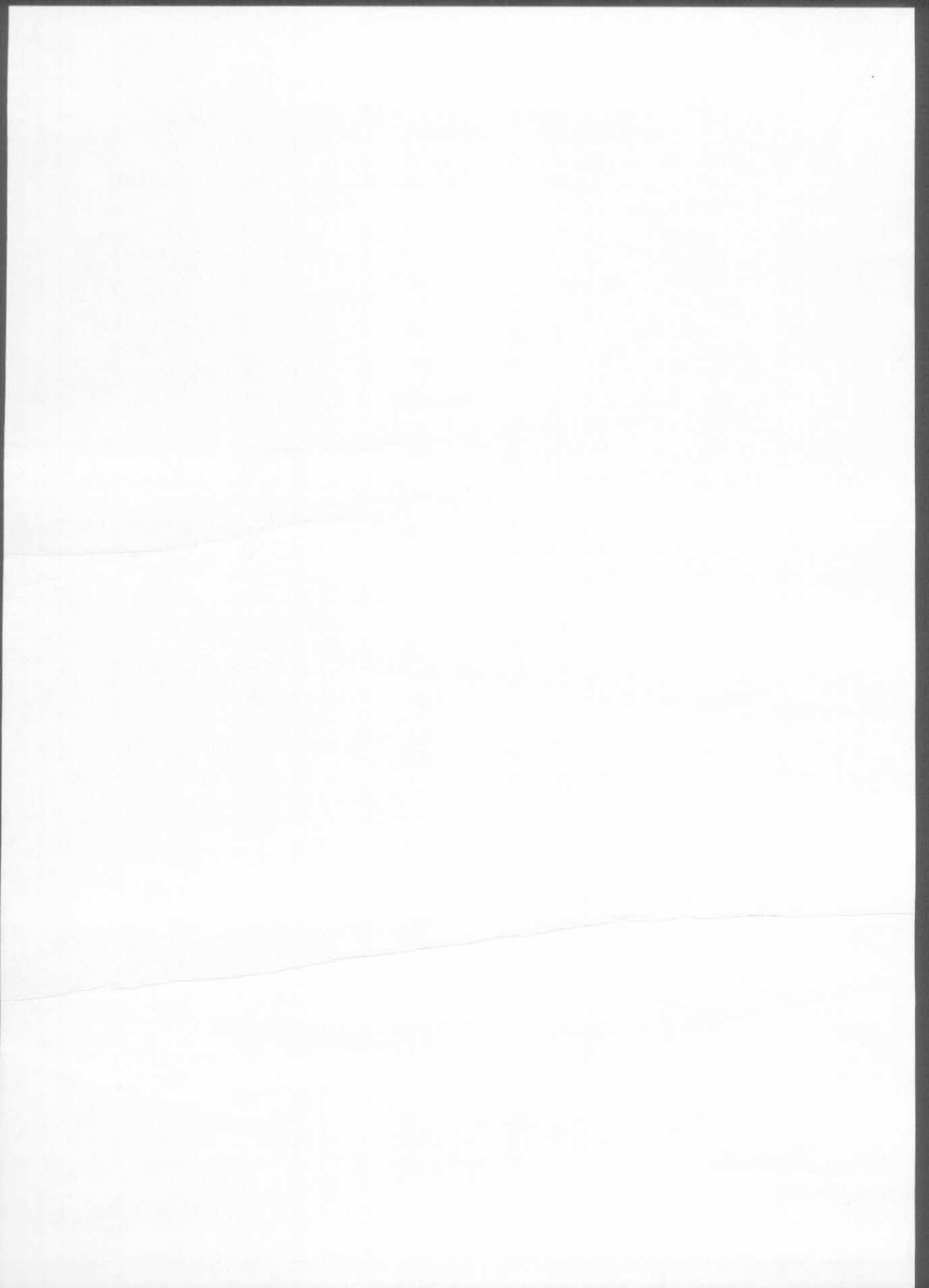
COMPARISON OF STUDY HABITS OF MALE AND FEMALE STUDENT-TEACHERS OF FEDERAL COLLEGE OF EDUCATION

By
*Aijaz Ahmed Gujjar**
*Muhammad Jamil Bajwa***

Abstract

Study habits mean theme setting of subject to be learned or investigated, and the tendency of pupils or students to study when the opportunity is provided to them. The students can't use effective study skills until they are not having good habits. One individual learn more quickly and thoroughly than other due to good study habits. The study was conducted in order to determine the difference between the study habits of male and female student-teachers. Three hundred student-teachers of Federal College of Education, Islamabad were taken by giving representation to all the students of all the programmes offered in the institution. A 29-item questionnaire on five stages scale was administered to the students. Data was analyzed by using SPSS XII. The male student-teachers are significantly better at skimming through pages before studying; they are also better at studying in advance before class. But on all the other skills, females are significantly better in listening actively in the class, regularity in attendance, noting down the lecture in the class, dividing the work into small and short range goals, underlining and highlighting important points of the text, taking interest in the lecture and discussing the lecture with class mates. On the whole, B.S.Ed (Bachelor of Science Education) having the highest score 3.84 on study habits scales and M.A (Master of Education) having the least score of 3.60 on the study habits scale and all the other classes are having the scores in between 3.60 to 3.84. Males are giving more time to self study, but female are giving more time to usage of net for study purpose.

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* The writer is working as Lecturer in Federal College of Education, Islamabad and is a Ph.D. Scholar in the Department of Education, Islamia University of Bahawalpur.

** The writer is working as Assistant Professor in National Institute of Science and Technical Education, Islamabad and is a Ph.D. Scholar at UIER, Arid Agriculture University, Rawalpindi.

Introduction

No one can deny the importance of teaching and learning in the whole process of education. This process can only become successful when the teachers fully know their subject matter and effectively communicate it to the students and while the students have a clear view of their abilities, have good study habits and are able to use effective study skills.

Learning how to study involves putting away the habits and ideas which have made study unpleasant and burden some, and talking on habits and ideas which make study more pleasant and fruitful. Why does one individual learn more quickly and thoroughly than other? The main reason for inefficiency in learning is ones carelessness and ineffective study habits. According to *New Standard Dictionary of Education,* study habits mean theme setting of subject to be learned or investigated, and the tendency of pupils or students to study when the opportunity is given. Effective and successful study consists of more than merely memorizing facts. It calls for knowing where and how to obtain important information and ability to make intelligent use of it. According to Crow and Crow (1992), the effective habits of study include plan/place, a definite time table and taking brief of well organized notes. To study successfully a student must decide what information is important and then form opinions concerning it. All these things must be done to the best of his ability in the shortest possible span of time. Because, knowledge is very important to every person, hence it is wise to learn how to study in the most effective way (World Book Encyclopedia, p.743). Experts are agreed that great success in the field of knowledge is attributed to good and consistent study habits. Like any other activity, skill and dedication are the key points for learning, how to learn. According to Azikiwe (1998), study habits are the adopted way and manner, while a student plans his/her private readings, after classroom learning. So, as to attain mastery of the subject, Lefrance (1983, p.11) emphasized that students' performance in examination could not be blamed merely on teachers and their methods of teaching, but useful study skills were also essential for success. Full concentration, curiosity, time management, organization of work and the use of proper learning strategies were regarded vital for developing good study habits. It does not require natural flair or a strong brain power to adopt good study habits; motivation and study skills can be learned in the same way that any other skills are learned by understanding and practice. Without proper study habits, students may waste their potential, time and effort. Working without schedule, having irregular breaks, taking improper notes and shuffling the book without purpose gains nothing. Mental self-management or metacognition is the art of planning monitoring and evaluating the learning process.

According to Azikiwe (1998), excellent study skills are a good asset for the learners because these acts assist the students to attain mastery in areas of specialization and consequent excellent performance, while the opposite constitute constraints to learning and achievement leading to failure. Sorenson (1991), while outlining the good basic study habits, stated that one must study with the primary intention of understanding. This requires one not to be hurry in getting through, instead sustained concentration is necessary.

Concentrating on this crucial aspect of learning, researchers investigated several useful techniques and tips for helping the students to get the best understanding of their course material in order to achieve full competence in the subject and high grades in examination. These methods include critical thinking, metacognition, reading text skill, time management, controlling reading difficulties, index system study, enhancing memory efficacy, concept mapping, thinking aloud and *MURDER* (Mood, Understand, Recall, Digest, Expand and Review) technique (Hayes, 1989).

According to Chastain and Thurbor, (1989) and Martin, (1985), there are many different types of effective studying techniques. One popular study technique is called the SQ4R method. The "S" and "Q" stand for "Survey" and "Question", and the "3R" stands for "Read", "Recite", "Relate" and "Review". This method is taught in many introductory psychology courses and is a good way to prepare for tests in almost any course.

Similarly, different methods of effective learning include:
a) Observation
b) Learning by doing
c) Reading and reviewing
d) Discussing with others
e) Experimenting
f) Thinking around new ideas and concepts
g) Reflecting on what the subject means
h) Thinking about practical applications
i) Listening and asking questions
j) Reformulating-putting something into one's words

According to Apps (1982), Reed (1996) Rooney and Lipume (1992), sound and persistent study habits reduce test anxiety, enhance student's ability, improve his performance and develop confidence in him. Learning is doing and it is an active process in which a student must be involved and participating in what he / she is trying to learn.

The teaching learning situation in Pakistan is very much in a continuous dilemma. The survival of Pakistan lies in the fast development. Development cannot be postponed further. In order to contribute to national development, both males and females must play an equal role. Education is one of those fields, which is continuously facing declination for the past fifty nine years. The importance of adopting effective study habits by students in the whole process of learning has always been ignored.

With reference to investigating study habits, all students are important without any gender bias. Pakistan is an ideological and democratic country, demands gender balance between two sections of the population. Unfortunately, women candidates are much disappointed and or lagging far behind their male counter parts in many walks of life. Studies with reference to women's issues of literacy, education, health, economic opportunity, empowerment and security reveals that Pakistani women are most suffering than men in all of these areas to social development.

According to Mirza and Malik (2000), educational institutions are mirror of the society. The plight of women needs to excel in their academics pursuit in order to compete with their male counter parts, for which they need to adopt good study habits and effective study skills.

Nausheen (2002) suggested that proper investment of time in students' life is much important. The actual amount of study time required by an individual depends on his speed and efficiency in the work and his preparation and adaptability for each type of work in which he / she is engaged. Generally, it is expected that students spend two hours on self study for the total hours spent in class, especially at the higher level of education and these hours should be properly scheduled for a day or a week and deadline should be settled for each task. However, in Pakistan firstly students spare much time for self study and secondly resort to ineffective study skills because of which their performance not only examinations is affected badly, rather they are unable to develop understanding of the concepts, issues and ideas.

The present study pertains to surveying about the comparison of study habits of male and female student teachers of the Federal College of Education. Because more than 50 percent student-population of the country comprised of females and more than 70 percent student-population of the Federal College of Education is comprised of females and they must contribute to the development and must get its share in development. To achieve these goals female student-

16	Do you look for the main idea in what you read?	4.12	4.20	N S
17	Do you study in advance before attending the lecture?	3.51	3.09	.026
18	Do your teacher dictates notes during the class hour?	3.82	3.72	N S
19	Do you take interest in the lecture?	4.04	4.31	.038
20	Do you discuss the lecture with your class mates?	3.28	3.80	.001
21	Do you raise questions if appropriate?	3.76	3.51	N S
22	Do you use standard method of note taking (punctuation, spelling and grammar)?	3.70	3.47	N S
23	Do you try to take down everything that the teacher says?	4.05	3.79	N S
24	Do you take stand to do the task as commitment?	3.68	3.56	N S
25	Does your teacher provide feedback on assignment(s)/test(s)?	3.63	3.45	N S

A cursory look on the table reveals that female student-teachers of Federal College of Education are good at 50 percent skills over male student teachers and male student teachers are good at 50 percent skills over female student teachers. Female student-teachers are significantly better than male student teachers in listening actively in class, regularity in attendance, noting down the lecture during class, dividing the work into small and short range goals, underlining and highlighting important points of the text, taking interest in the lecture and in discussing the lecture with classmates. While on the other hand, the male student-teachers are significantly better than female student-teachers in skimming through pages before studying and studying in advance before class.

Table - 2
Comparison of cumulative mean scores of students of all the classes/ levels

S. No.	Classes/ Levels	Mean Score
1	Bachelor of Science Education	3.84
2	Master of Education (Science)	3.81
3	Diploma in Education	3.79
4	Master of Arts in Education	3.77
5	Bachelor of Education	3.74
6	Master of Education	3.60

The score of students of all classes / levels are arranged in descending order. As per their responses, student-teachers of Bachelor of Science Education level performed well on the study habit scale, while the student teachers of Master of Education level have shown the lowest score. Scores of other classes / levels fall in between the scores of these classes / levels. In a way this reflects upon the general academic atmosphere of the Federal College of Education.

Table - 3
Comparison of average hours spent by male and female student-teachers of the Federal College of Education on self study and preparation

S. No.	Statement	Male	Female
1	How many hours do you spend in studying daily?	2.63	2.29
2	How many hours do you spend in library every day?	1.38	1.10
3	How many hours in a day do you spend in leisure reading?	1.76	1.53
4	How many hours in a day do you spend on searching internet regarding your studies?	1.16	1.36

This table shows that male student-teachers are comparatively giving more time to self study, to library, in leisure reading than female student-teachers, but female student teachers are giving a little more time to the usage of net for study purpose than male student teachers.

Table - 4
Comparison of cumulative average hours spent by all classes/ levels of student-teachers of the Federal College of Education on self study and preparation

S. No.	Classes/ Levels	Mean Score
1	Master of Education	2.47
2	Master of Education (Science)	2.19
3	Master of Arts in Education	1.59
4	Diploma in Education	1.56
5	Bachelor of Science Education	1.49
6	Bachelor of Education	1.27

The score of students of all the classes / levels are arranged in descending order. As per their responses, student-teachers of Master of Education level give more time to self study and self preparation, while the student-teachers of Bachelor of Education level give the less time to self study and self preparation. Scores of other classes / levels fall in between the scores of these classes / levels. All the classes/ levels are giving less than average time to self study and self preparation. In a way this reflects upon the general academic atmosphere of the Federal College of Education.

Discussion

Education has become a very complex phenomenon because of expansion of knowledge and demand of that knowledge on the part of the students. The students are no more required to memorize facts and pieces of information. In almost all disciplines, students are required to demonstrate high ability to develop

understanding of the subject matter. Since the last few decades also the constructive approach in the learning has become a common place in educational institution in many parts of the world. Constructivism means that students should play active role in their learning and they should be provided with an opportunity to construct their own knowledge and meaning, instead of cramming. One of the requirements of constructivism is that students should adopt desired and good study habits so that they should learn independently. Reading and writing assignment are integrated part of good study habits. Similarly students are required to listen carefully to the lectures, take notes effectively and arrange their notes for better understanding. There are different strategies that make the study and learning more effectively. The students must know these effective strategies to make use of them while studying independently, because effective study habits and efficient work skills are necessary in a teacher training institution. So the students may make effective use of their time and be able to select and understand the important ideas. Most of the handicaps of individuals are caused by the failure to study in the best possible way. Right and good study habits can increase the interest and positive attitude of the students towards the studies. Investigations have shown that students can save from one fourth to one third of their times if they systematize their efforts in accordance with the chief principles of learning.

However, it is not denying the fact that in Pakistan, the students are not made aware of the requirements of higher education in terms of their role to carry out self study. Secondly, they are not given any orientation towards effective study skills. This process must be started at early level of education, because habits like attitudes are not developed overnight.

Results of the study reveal that student-teachers of Federal College of Education at all the levels lack good study habits as well effective study skills. They also do not give enough time to self study and self preparation. It was beyond the scope of this study to investigate into the causes of lack of good study habits and skills. Therefore, it is recommended that similar studies must be conducted to'find out the underlying cause. Moreover, the teachers should be made aware of effective study habits right from the school level and students should be provided with the awareness about effective study skills at all levels. It is highly desirable that developments of study skills in students should be made part of teachers professional development programme. More important element is the system of examination. Assessment and evaluation of students' achievement must be conducted in such a way which discourage students to rote and memorize the material; rather assessment should challenge the actual understanding of students; thereby molding their study habits.

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PERSONALITIES

ABDUL WAHID SINDHI
A Champion of Children's Literature

By
Dr. Mahmudur Rahman

In the early twenties, a national university known as Jamia Millia was founded in Aligarh by Maulana Muhammad Ali Jauhar, who was not satisfied with the British-based system of education that had been introduced there. In 1925, this institution was shifted to Delhi and two reputed persons, Hakim Ajmal Khan and Dr. Mukhtar Ahmad Ansari, struggled hard to consolidate it. It was under the able guidance of the noted educationist, Dr. Zakir Hussain (who later became the President of India), that the Jamia evolved into an innovative institution to impart education to the Muslims of the subcontinent.

Primary and secondary classes were started at the grass roots. To cater to the need of the students, a publishing house, better known as Maktaba-i-Jamia, was created which rendered laudable service to the cause of education of the young by producing children's literature. The books published by this organization were among the best produced for teenagers in the said period.

Mostly written by competent and experienced teachers of the Jamia who were well-trained, the publications met admirably the intellectual needs of the children by laying emphasis on the educational and informational dimension. In the team of writers at Jamia Millia, Dehi, there was a young man whose motherland was Sindh and his mother tongue was Sindhi. Yet, he wrote about fifty books in Urdu ranging from Islamic history and folk tales to religion and biography. All these titles are still considered to be outstanding gems in children's literature produced indigenously.

This man who made such a profound impact on Urdu literature for the young ones was none but Abdul Wahid Sindhi. Later he rose to be the editor of Sindhi journal *Naee Zindagi*, Karachi, owned by the government of Pakistan.

Abdul Wahid Sindhi was born in village Haleyjee Sharif, in district Sukkur, in 1905. He was educated initially at Ghotki and then he went to Jamia Millia, Aligarh for higher education. In 1933, Dr. Zakir Hussain appointed him as a teacher in the Jamia. He devoted the best period of his life to this institution. Since he was entrusted with the task of teaching primary classes, Sindhi Sahib used this opportunity to observe the habits, tastes and psychology of the young

generation. His intimate interaction with the teenagers gave him an insight into the intellectual needs of the youth, the kind of literature they love to read, and the language and style which they enjoy most. His long experience as a school teacher in Delhi equipped him for the task of book production for the young.

Abdul Wahid Sindhi had a talent for story telling. Before he embarked upon the task of writing stories, there was a great dearth of such material. Though Munishi Prem Chand, Tajwar Najibadi and Mohammadi Begum (mother of Imtiaz Ali Taj) had written some stories for children, their books were not in common use in the educational institutions, and as such were limited in their readership. Children from all over India were enrolled in the Jamia Millia and supplementary reading material for them was in short supply. Keeping in view the scarcity of children's books, Dr. Zakir Hussain, the Vice-Chancellor, encouraged Sindhi Sahib to fill the gap.

Abdul Wahid Sindhi took up this assignment in real earnest and a number of interesting and informative stories in Urdu flowed from the pen of this great scholar from Sindh. Keeping in view the different age groups of the readers, he graded his writing according to the age and taste of the children. His works are considered to be of qualitative excellence. His stories went a long way towards introducing into children's literature the original themes, innovative style and language, lively characters, suspense, an indigenous environment, and simple dialogues.

The main characteristics of Sindhi's stories are that the child himself is the central character. The themes of all the stories have a direct bearing on the actual life of the young readers. Nothing in the books is unfamiliar to them. His works are unique in their character, specially those written for the youngest age groups with graded vocabulary. His grasp of children's psychology remains firm and unrivalled.

Abdul Wahid Sindhi wrote stories, which lured the young readers, way back in the 1930s, some of the titles became hits in the subcontinent seven decades ago.

Sindhi also wrote books on issues of direct relevance to Islam. His most well-read book is the biography of the Holy Prophet (PBUH) entitled *Rasool Pak kon they*. It was originally written with the idea of being included in the syllabus of the Jamia Millia as a course book. But in view of its attractive narrative style, vivid descriptions and simplicity of language, this book came to be prescribed in all the primary schools of undivided India. This title has gained so much popularity that until now more than twenty editions have rolled out of the press.

Besides the above-mentioned title, he also wrote a number of books on religious topics which are very easy to read and simple to understand.

Abdul Wahid Sindhi also undertook the task of introducing children to the brave soldiers of Islam. His book *Islam kay mashoor sepah salar* is highly remarkable in this context. Although 70 years have passed since the said book was written for the students of Jamia Millia, Delhi, it still remains unmatched in its realistic presentation of historical facts and figures in a very lucid style. His other book of note is the one written on the famous admirals of Islam. These two books are so informative that they should be prescribed in all the primary schools of Pakistan.

It may not be out of place to mention here that during 1969-70, Dr. Mahmud Hussain, the founder President of Jamia Millia, Karachi, and Vice Chancellor of Karachi University, launched a journal *Sitara* for children from the Jamia. Its editorship was assigned to Abdul Wahid Sindhi, who had just retired from the Ministry of Information, Sindh, as editor of *Naeen zindagi.* He put all his energy into setting up the magazine. Under his able editorship, the *Sitara* attracted young readers and its circulation grew by leaps and bounds. But, due to some financial setbacks, the magazine had to be closed down and Abdul Wahid Sindhi, a talented writer for children, faded from the literary scene.

In 1980, when I was working as the incharge of general and children's books in the National Book Foundation, Islamabad, I went to Karachi and tried to persuade Sindhi Sahib to write books for the juvenile readers in his own inimitable style. To my great surprise he declined. The reason? He said that he felt he was not needed any more by the nation. He was of the view that after the emergence of Pakistan, he was never asked by the ministry of education to write books for children of the kind he had prepared at Jamia Millia, Delhi, under the patronage of Dr. Zakair Hussain, Prof. Muhammad Mujeeb and Dr. Abid Hussain. He looked highly frustrated.

That frustration and disappointment was devastating and Abdul Wahid Sindhi breathed his last on January 2, 1988 in Karachi. He had faded into oblivion and no news of his sad demise appeared in the national dailies. Thus, a champion of children's literature in Urdu was totally ignored by our mass media. He was a remarkable man. Sindhi was his mother tongue, but he wrote only in Urdu in the best period of his youth merely for a salary of Rs.30 per month and being thousands of miles away from his native place Sukkur, Sindh.
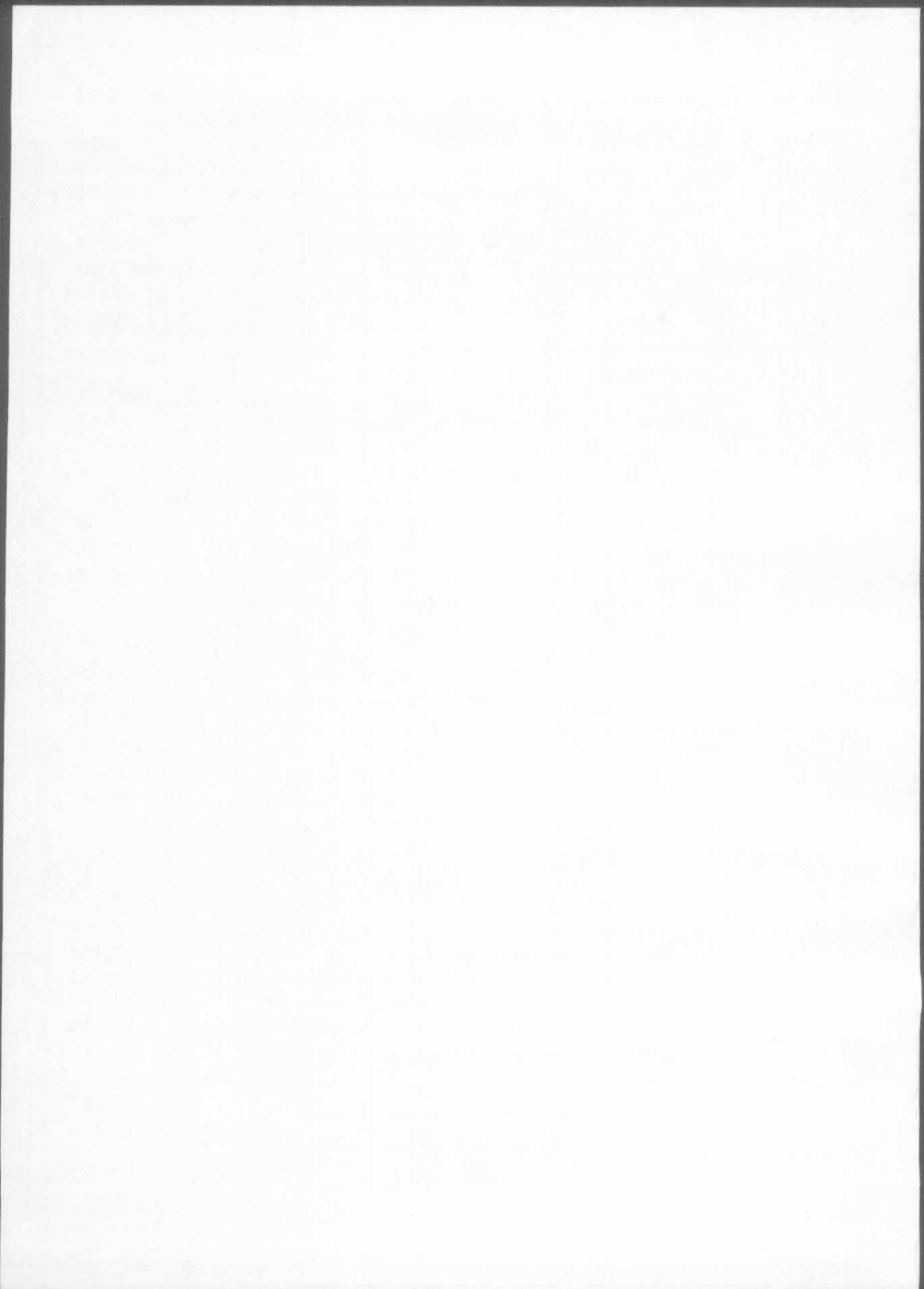
OBITUARY

THE TRAGIC DEATH

By
Dr. Mahmudur Rahman
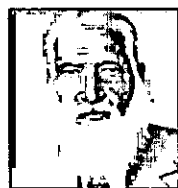
Prof. Muhammad Shafi was associated with a reputed university of Saudi Arabia. It was on the request of Higher Education Commission (Pakistan) that he joined Allama Iqbal Open University as a Foreign Professor.

It was on 25th September 2007 that Prof. Shafi was moving from Sector G-10 to his house when the speeding van crashed into his car. He suffered multiple injuries and was taken to PIMS, where his condition deteriorated and he died.

It just happened the last year
I came across a learned man
Who looked pious, noble as a whole
Known as one of English literati
He was none but Prof. Shafi!

He along with Barjis Baig
Had arranged a function here
For launching my book on a Sufi
Even he got it presided over
By the venerable Vice Chancellor!

Just a few months ago he had
Gone to Mecca for *Umrah*
On return this religious man
Came here with smell of *Haram*
Offered dates and *Aab-i-Zamzam!*

On 12th of Holy Ramazan
While travelling in a car
Which was crashed by a van
He suffered multiple injuries
And then died as *martyr*!

How tragic it now looks
How horrible it appears
Such venerable English Professor
Such epitome of simplicity
Such a pious personality
Had left us all in this 'versity
And gone to abode of eternity!