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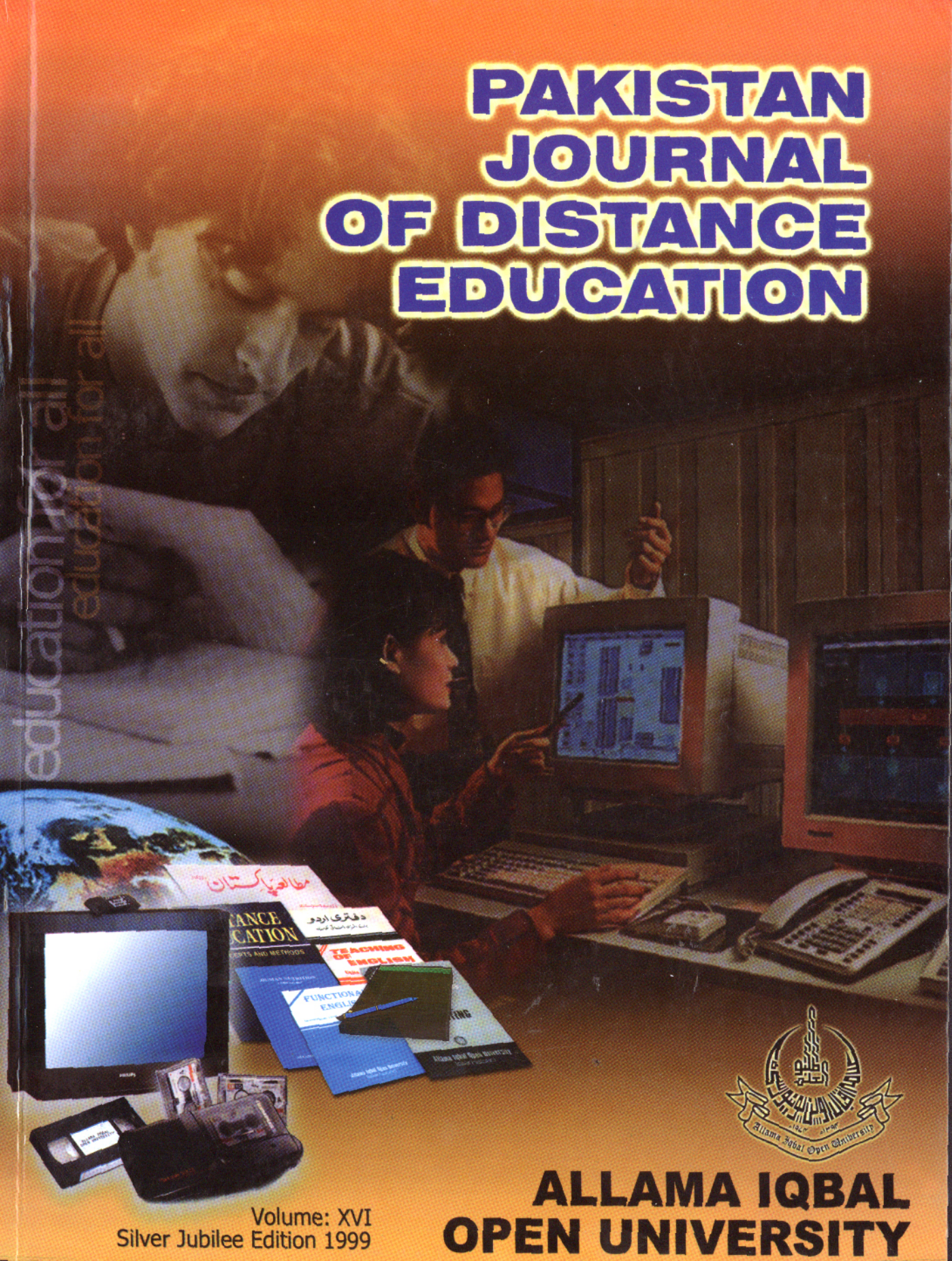

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ALLAMA IQBAL OPEN UNIVERSITY

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TO THE READER

Pakistan Journal of Distance Education is dedicated to the distance-learning system repidly growing in Asia and the world over. The Journal welcomes studies, research and review papers dealing with past, present and future perspectives of distance education, with a view to awakening further interest in the newly growing discipline and opening new vistas of research.

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EDITORIAL

AIOU: The First University Of Its Kind In Asia

Education is regarded as the most essential element for human progress and prosperity. It generally implies the mere training of a person in a certain skill or knowledge. In a broader sense, education is a much wider term than conceived hitherto. It aims at producing good behaviour which normally covers the whole conduct of life, not merely punctuality, obedience, respect for elders and concern about the feeling of others but also the way in which a person lives, the part he plays in public life, the manner in which he spends his leisure and the treatment he meets out to others. So we can say that following are the two most important aspects of education: (I) To prepare an individual for a vacation (ii) To provide him an environment in which he can develop a sound personality.

In the present stage of our struggle for progress and advancement, the formal way of education has not proved to be of much help in eradicating illiteracy on a wider scale. To impart education on a wider scale, it is required to develop such an effective system in which learners don't have to go far away to get education, and secondly it should be financially affordable for the students. To achieve this aim, the Allama Iqbal Open University was established under the Parliamentary Act 1974. While coming into existence, AIOU was destined to play a vital role to help create right kind of leadership; to produce leaders not only in the scientific and technological world, but also leaders in the social and economic spheres, leaders of commerce and industry, leaders of literature and religious knowledge.

In early 1970s, AIOU had successfully started a comprehensive programme for working out the mechanics of filling up the existing gaps in educational sphere and meeting the urgent requirements of social, economic, intellectual and spiritual existence. During the two decades, this institution has made a substantial contribution towards the educational progress in Pakistan. AIOU has, undoubtedly, such a long and glorious record of service to its credit. It has played a significant role in giving new dimensions to Pakistan's education system. It is reckoned among the world's best open universities.

The AIOU has the credit to be the first University of its kind in Asia and second in the world, the first one was established in England in 1969. The University has a country-wide network with plenty of regional centres. It has a wide potential to train teachers. over 85 thousand primary teachers have got PTC diploma from this university, while 30 thousand teachers have obtained CT diploma and 25 thousand acquired B.Ed degrees.

In the beginning, the focus of AIOU remained merely on such students who could not get their formal education. After being highly applauded for its distance learning system, the University introduced higher education to a level of Ph.D. Now, the University's educational range is not limited to only domestic housewives or government or private sector's employees. It has broadened its range to M.Sc (Physics), Intermediate (Pre-engineering & Pre-medical), B.Sc (Computer sciences). Moreover, AIOU has introduced some revolutionary programmes, such as Business Administration. AIOU has also provided Pakistanis living abroad with an excellent opportunity to continue their education without leaving their destination and facing any dislocation.

AIOU has tried its level best to facilitate the students with modern communication equipment. It has installed 50 e-mail and internet connections. AIOU is putting on air its educational media material on PTV-2 which is bearing out its transmission through satellite to more than 45 countries. Today, the AIOU is the biggest University of Pakistan in terms of students enrolment which in each semester runs upto million plus.

For the rapid progress, global recognition and spread of education in every nook and corner of the country, the credit certainly goes to the noble and learned Vice Chancellor, Dr Anwar Hussain Siddiqi. After assuming office in 1997, he devoted his God-gifted abilities to uplift the academic level of AIOU and even to broaden the canvas of sophisticated activities. Besides, he paid full attention towards management side and cleansed the campus from all illegitimate elements. It is because of his sincere efforts and sustained endeavours that Allama Iqbal Open University is reckoned among the world's best universities and even is regarded as the guiding light for millions of Pakistanis. Through his lofty deeds and prestigious performances, Dr Anwar Hussain Siddiqui has given a lesson to all and sundry through the couplet of Allama Iqbal:

When knowledge fortifies one's self,
It Gabriel's envy does become;
And if it's fortified by love,
Then Israfil's trumpet calls does come!

Dr. Mahmood-ur-Rahman
Editor

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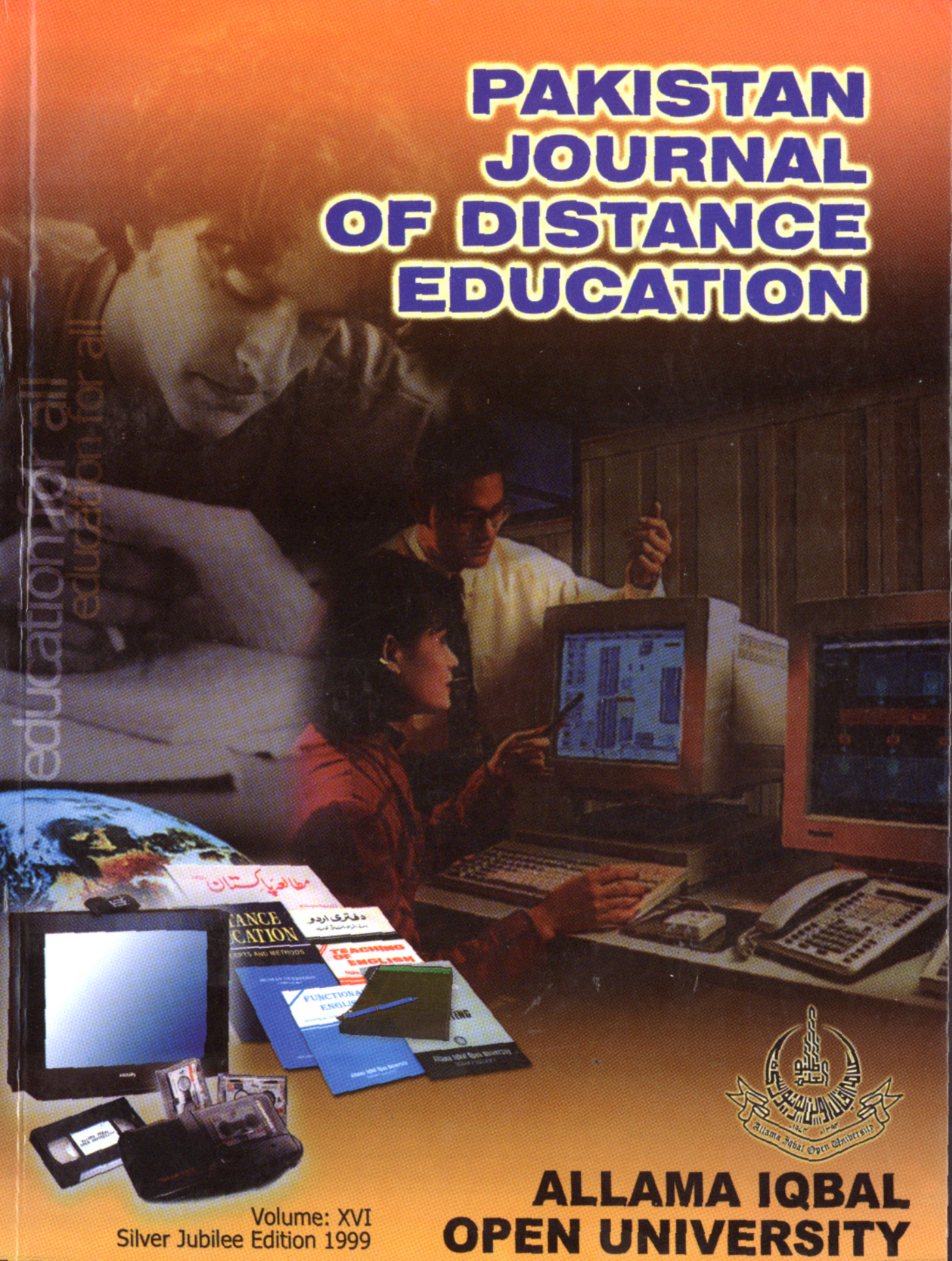

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ALLAMA IQBAL OPEN UNIVERSITY

Allama Iqbal Open University
Unique in terms of distance education

By

I. Ghaznavi

It is an excerpt from an extensive interview of Prof. Dr. Anwar Hussain Siddiqi; given to Mr. Ghaznavi and publisher in daily "Dawn", Karachi — a noted newspaper of Pakistan. For the general information of our distinguished readers, we are reproducing this interview which vividly highlights the role, achievements and future planning of AIOU.

Editor

Allama Iqbal Open University is a unique educational institution in Pakistan as it is operating on distance education system. Vice-Chancellor of Allama Iqbal Open University, Dr. Anwar Hussain Siddiqui, a man of great insight having command over law and economic affairs, obtained Ph.D. degree in Public Administration from USA in 1966. In an interview, Dr. Siddiqui, commenting on the difference of distance and face to face education system, said that majority of the people in Pakistan is still confused about the concept of distance education system. As far as curricula is concerned, it has absolutely no difference over type of educatin system.

Allama Iqbal Open University (AIOU), part of the University Grants Commission, was established under an Act of Parliament in 1974. Its degrees, diplomas and certificates have the same equivalence as any other university of Pakistan.

In distance education system the teaching system is decentralised and people are given instructions and guidance preferably where they live or at the nearest place.

This system is suited best to our society for a variety of reasons, as majority of our population still lives in the rural areas and it is difficult for

them to attend the formal educational institutions. Distance education system offers an opportunity to the people to educate themselves in spite of certain cultural barriers. This system also opens the window of opportunities for the working class as it operates in the evening.

Answering a question about the fee structure of the university, Dr. Siddiqui said, "AIOU is essentially a poor man's university and its clientele comprises persons from the lower-middle class, that is why our fee structure is designed to fit the budget of low income groups. We do not charge fee upto intermediate levels and fee structure for the professional institutions operating in public as well as private sectors.

We know that people cannot afford even the existing fee of the university, therefore we have levied a charge of Rs.10/- per student, per course in the university. We have enrolled about one million students in different courses. This enabled us to collect an amount of Rs.10 million this year. We won't let any student leave the university because of financial constraints," he added.

Briefing on the development of the university during the last three years, the Vice-Chancellor said that, by the grace of Almighty Allah the University will be completing its 25 years in November this year. To mark this occasion various activities have been planned.

During these 25 years, AIOU has come a long way from a very humble start and now AIOU has been rated as the largest university in Pakistan and one of the largest and biggest Open University of the world.

"Our annual budget is about Rs.600 million out of which about Rs.90 million is for development. It is worth mentioning that the government is only contributing Rs.85 million annually, so AIOU has attained the status of self sufficiency."

The university in 1997 established an endowment fund with an amount of Rs.150 million. The amount has now increased to Rs. 410 million, out of which Rs.70 million is being spent only on the development.

The university has been completely computerised and all of its regional campuses are linked with each other electronically. "We have provided internet connections to our faculty members. University has plans to start teaching on the internet and very soon our teachers will have their

own web pages and this will revolutionize the entire teaching system," the Vice-Chancellor said, adding the university is sending its faculty members abroad for Ph.D.

"Most of our campuses are operating in rental buildings, threfore we have embarked on an ambitious plan of acquiring land and building our Regional Campuses according to our requirements. We have inauguarted our Multan campus. Campuses of Mirpur AJK, Dera Ismail Khan, Quetta, Sargodha, Faisalabad and Muzzafarabad are in advance stages. This has been made possible by our endowment fund. On the main campus we have constructed a mosque, common facility building. Hostel building project is being finalised," he further added.

Dr. Siddiqui further said that during the last three years, we have introduced 16 post-graduate programmes Soon we have plans to introduce many Ph.D. programmes.

Talking about the future of the university and the Audio-Video Centre of the university, Dr. Siddiqui said, "we have well equipped Audio/Video centre at the main campus with 55 highly qualified professionals in this section. We are hoping that in coming years we shall be having the license for our own television and radio channel like the Chinese University".

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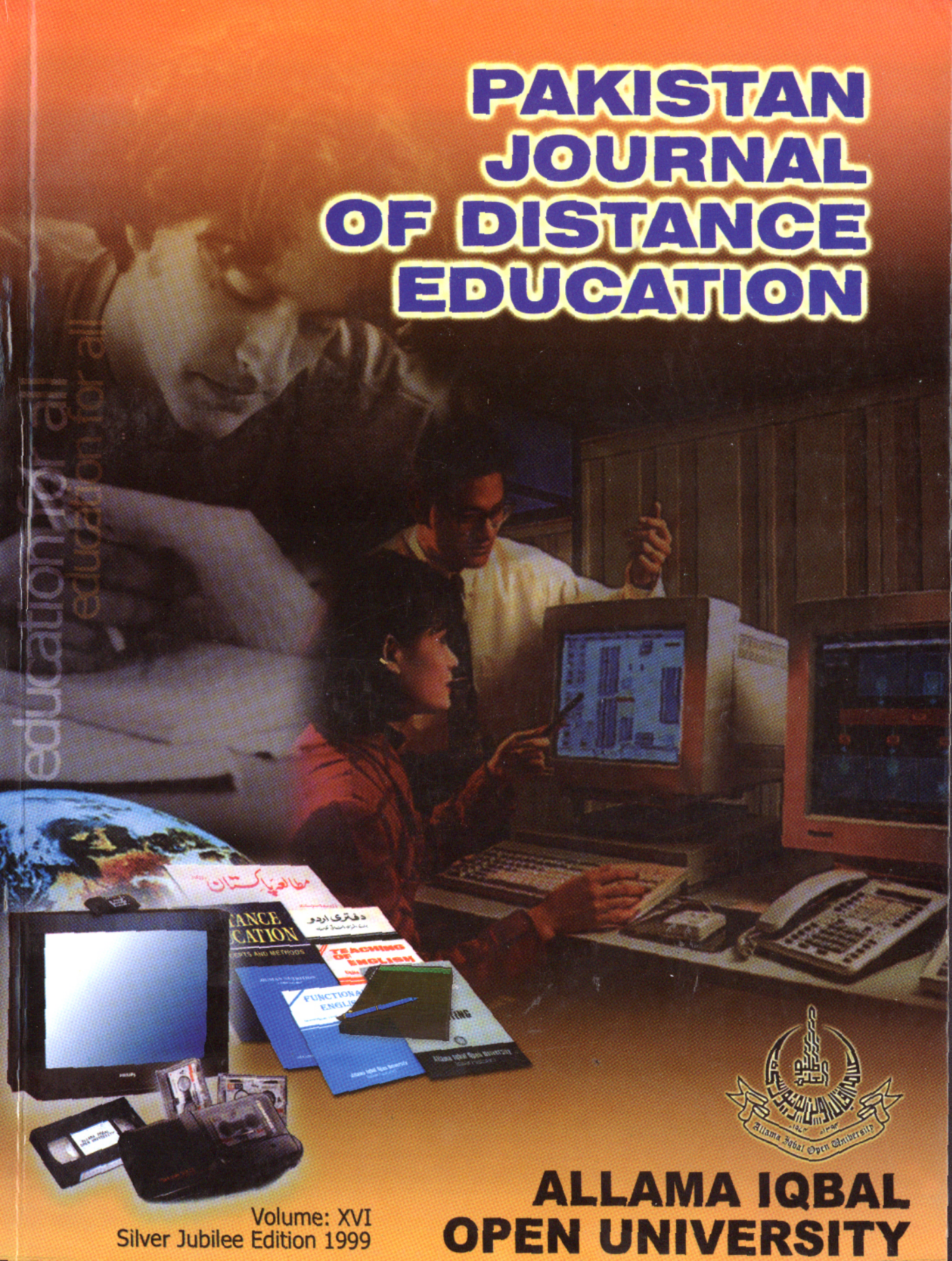

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ALLAMA IQBAL OPEN UNIVERSITY

Distance Education In Northern Areas

By

Bashir Ahmed*

Originally this article has been written in Urdu. It reveals how AIOU is spreading the rays of learning and knowledge in our Northern-Areas ---full of mountains, valleys, terrenes, glaciers and gardens. To let the English-knowing people be acquainted with this very valuable achievements of AIOU, we have requested Mr. Amjad Ali, our competent colleagues to render this script into English.

Editor

The Federally Administered Northern Areas (FANA) lie amidst the towering mountains of Karakoram, Hindu Kush, Himalayas and Pamir. The areas also have a number of large glaciers viz: Siachin and Baltoro. FANA are spread over 72,496 sq. km. with a population of about one million. It attracts thousands of adventurers, mountaineers, research scholars and aesthetes of the world towards its geographical, political and defensive significance, natural beauty, unique culture, ancient history, multilinguality, world-fame terrenes and the gigantic glaciers. About 80% tourists come to this country only because of splendid scenario of northern areas.

INTRODUCTION OF NORTHERN AREAS

Much before the birth of Pakistan, *Dogras* happened to be the rulers of Northern Areas. After independence, the unarmed but en-

* The writer is working as Assistant Regional Director, AIOU, Gilgit.

ergetic people of the area waged a war against the tyrant rulers and had broken the shackles of slavery. Then they decided to affiliate with Pakistan on the basis of Islamic identity. Some of its areas (like Kargil and Ladakh) are still under oppressive control of India. Presently, Northern Areas are administratively controlled through two Divisions e.g. Gilgit and Baltistan, which subsequently are divided into three and two Districts respectively. Before partition, there were merely fifty primary and three middle schools in this widespread area. After independence and having annexed with Pakistan, different Governments sizably increased the commutation that augmented the educational facilities to the area. The present position of the educational institutions, established by the Government and various aided agencies, is shown as under:

TABLE – A

S.No.	NAME OF INSTITUTION	NUMBER
1.	Universities	Nil
2.	Degree College (Male)	02
3.	Degree College (Female)	Nil
4.	Inter College (Male)	04
5.	Inter College (Female)	03
6.	College of Education (Male)	01
7.	College of Education (Female)	01
8.	High Schools (Male)	04
9.	High Schools(Female)	14
10.	Middle Schools (Boys)	109
11.	Middle Schools (Girls)	24
12.	Primary Schools (Boys)	459
13.	Primary Schools (Girls)	99
14.	Agha Khan Education Services	122
15.	Fauji Foundation	02
16.	Social Action Programme	250
17.	Municipal School	01

18.	Army Schools	08
19.	Private Schools	44
20.	Deeni Madaris	10

After all, the above figures could not redress the educational thirst of the people. The literacy rate is far behind as compared to the other areas of the country. While talking about the problems faced by the people in the filed of education, following facts may be kept in mind:

(a) Insufficient number of educational institutions;

(b) Due to shortage of educational staff and scarcity of educational facilities standard and even quality of education is low;

(c) Syllabi are obsolete;

(d) Lack of infrastructure facilities and poverty is also major hindrance in getting full advantage of already existed educational institutions; and

(e) Lack of higher educational institutions, etc.

START OF DISTANCE EDUCATION SYSTEM

This situation certainly demands change in a defunct formal education system. In these areas, getting education at Intermediate and Graduation level is much difficult to achieve. In the past, only rich people were able to seek higher education by going to other areas of country.

By comprehending the lack of educational opportunities for common people of the Northern Areas, Allama Iqbal Open University had established its Regional Offices in Gilgit and Skardu in the years 1983 and 1988 respectively. Since the introduction of ***Distance Education System***, getting higher education on economical rates is accessible for all.

People from all lifestyle are getting cheaper and standard education at their doorsteps. The AIOU is trying its best to facilitate the people of Northern Areas through implementing its slogan ***Education for All***. The University has established the following Educational Centres for dissemination of education amidst the people of the region:

TABLE - B

S.No.	CATEGORIES	NUMBERS
1.	Regional Centres	02
2.	Study Centres	14
3.	Exemplary Study Centre	03
4.	BCS Study Centre	01
5.	Technical Workshop	01
6.	Examination Centres	15
7.	Part-time Tutors	160

With the provision of these educational facilities, the people can choose variety of disciplines i.e. from general education to specialized education. The AIOU is providing such types of courses, which enable them to become beneficial for the society. As a result, people are giving preference to distance education rather than formal education. We can rightly say that in Northern Areas distance education is the only antidote for eradicating the educational backwardness of the people.

FEMALE EDUCATION THROUGH DISTANCE EDUCATION

An acute shortage of educational facilities for dissemination of female education in Northern Areas is evident in **Table – A** above. Customs and traditions of the area have doubled the hindrances in imparting education to the women. However, it is also a fact that unacquainted educational system and syllabus make it impossible for the female to get education. It is also not possible for female as that of men to get education by going to other areas of the country. Since the introduction of *Distance Education System* in the area, it becomes possible for female to get education in all disciplines. *Distance Education System* does not defy in ob-

servance of their customs and traditions. This system also provides opportunities to women to contribute their share in boosting up individual as well as societal prosperity. Women are widely profiting their share from the society through Distance Education. It is because of this fact that their literacy ratio is 45%, which is quite aspiring and even amazing.

TEACHERS TRAINING THROUGH DISTANCE EDUCATION

A comprehensive knowledge of the subject is still the primary qualification for those who teach others, whether formally or informally. The teachers hold a central place in the field of education. They must transmit to new generations the cultural heritage of a society—the knowledge, skills, customs, and attitudes acquired over the years. However, if teachers are not well trained, how the above objectives of education could be acquired. At present, unfortunately, there is a single institution in the whole Northern Areas both for men and female. As far as the syllabus of the Institution is concerned, it is very old and obliterated. No other facilities have been provided by this Institution. With the inception of Distance Education in Northern Areas through AIOU, positive and distinctive steps have been taken in the field of teachers training. The AIOU is offering various teachers' training courses in a very effective manner and at a very reasonable cost such as Primary Teachers Orientation Course (PTOC); Primary Teaching Certificate (PTC); Certificate in Teaching (CT); Arabic Teachers Training Course (ATTC); Bachelor in Education (B.Ed.); and Masters in Education (M.Ed.). Educationists are of the view that AIOU courses are of national and international level. These courses are very conventional in teaching of staff; hence, these have become indispensable part in the field of teaching by meeting 85% requirement of educational field. Following are salient features of teachers' training courses in the Northern Areas:

(a) Through introducing teachers' training courses, the un-trained teachers and other related people, till now deprived of all facilities, can be trained in their respective fields.

(b) Traditional Syllabus of teachers' training is being replaced by such modern courses only because they have conformity with the needs of the present era.

(c) Even the women teachers are getting training for the first time through these courses.

(d) Teachers' training courses are entirely field based.

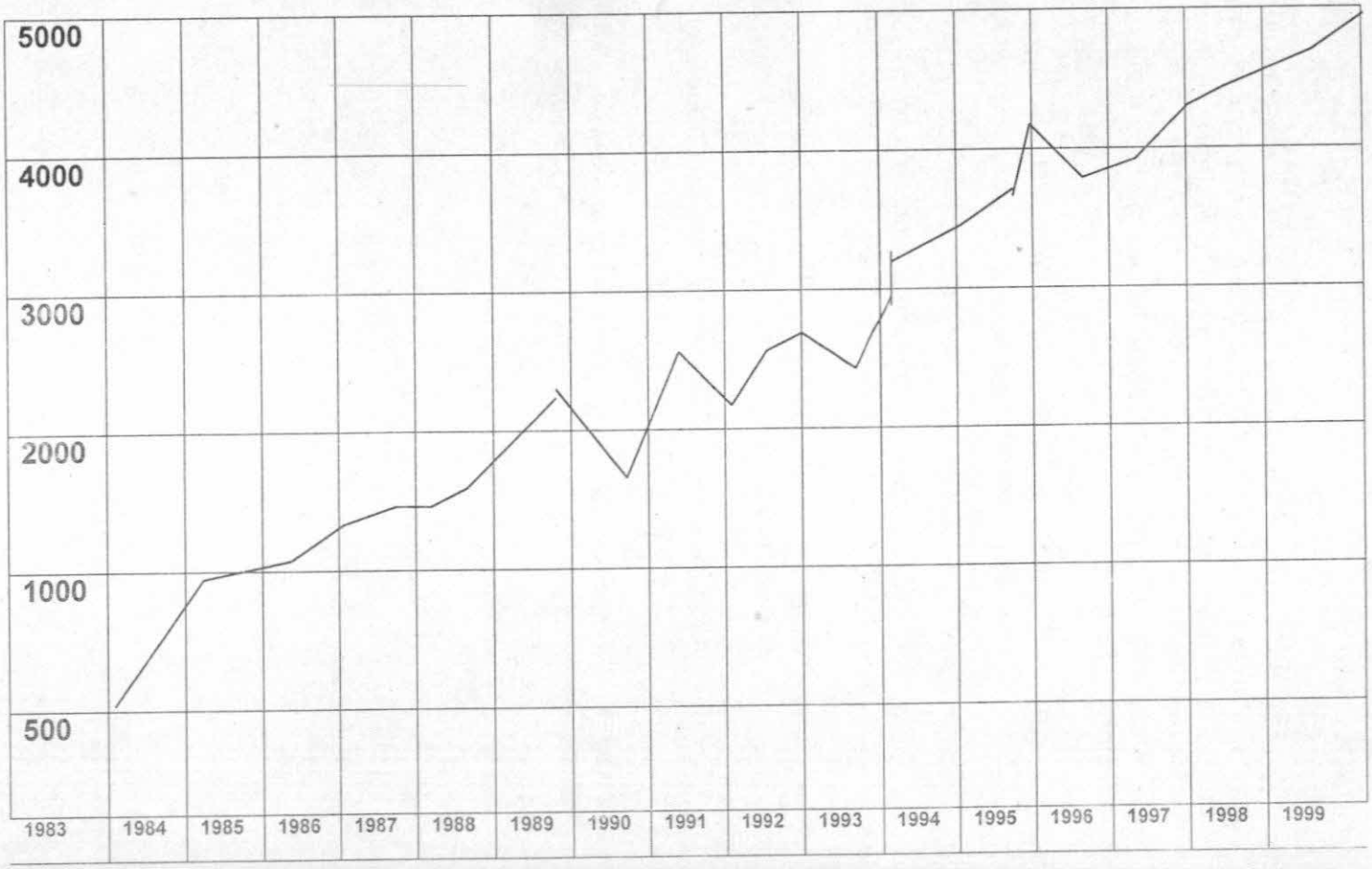
(e) Education Department is getting double benefits by the introduction of these courses; firstly, by getting their teachers trained abundantly; secondly, the teachers are performing their jobs without any break.

TECHNICAL & HIGHER EDUCATION THROUGH DISTANCE EDUCATION

Keeping in view the absence of technical and professional institutions in Northern Areas, AIOU has come forward to launch its technical and professional courses through its Open Tech Programme. The University is determined to emphasize functional (job related) and technology-based courses, in these far flung areas.

As far as Higher Education is concerned, AIOU has factually played its conferred role of spreading education. It is offering courses from Matric upto Ph.D levels equally to all. An admission criterion is relaxed in some cases to the people of Northern Areas. Now, they are not behind from the people of other areas. AIOU's contributions in eradicating illiteracy from these areas are really historic event.

SEMESTER-WISE/YEAR-WISE COMPARISON OF ADMISSIONS IN NORTHERN AREAS



CONCLUSION

The Allama Iqbal Open University is unique and promising institution. Distance Education has a vast potential in promoting mass education in the Northern Areas. It can play an important role in implementing the set targets in the new Education Policy-1998-2010. To extend its given role of disseminating mass education, following steps need to be taken in the Northern Areas.

(a) *As the Regional System is the backbone of the University's teaching methodology, additional academic and support staff may be provided.*

(b) *There is a need to open new Regional offices/centres in the area to provide educational facilities to the people.*

(c) *Sufficient funds are required to be allocated for construction of new buildings.*

(d) *Allocation of more funds or provision of books may be made for the use of students at higher levels.*

(e) *Reference books, especially for the students of M.A., M.Phil and Ph.D, may be supplied to these Regional offices.*

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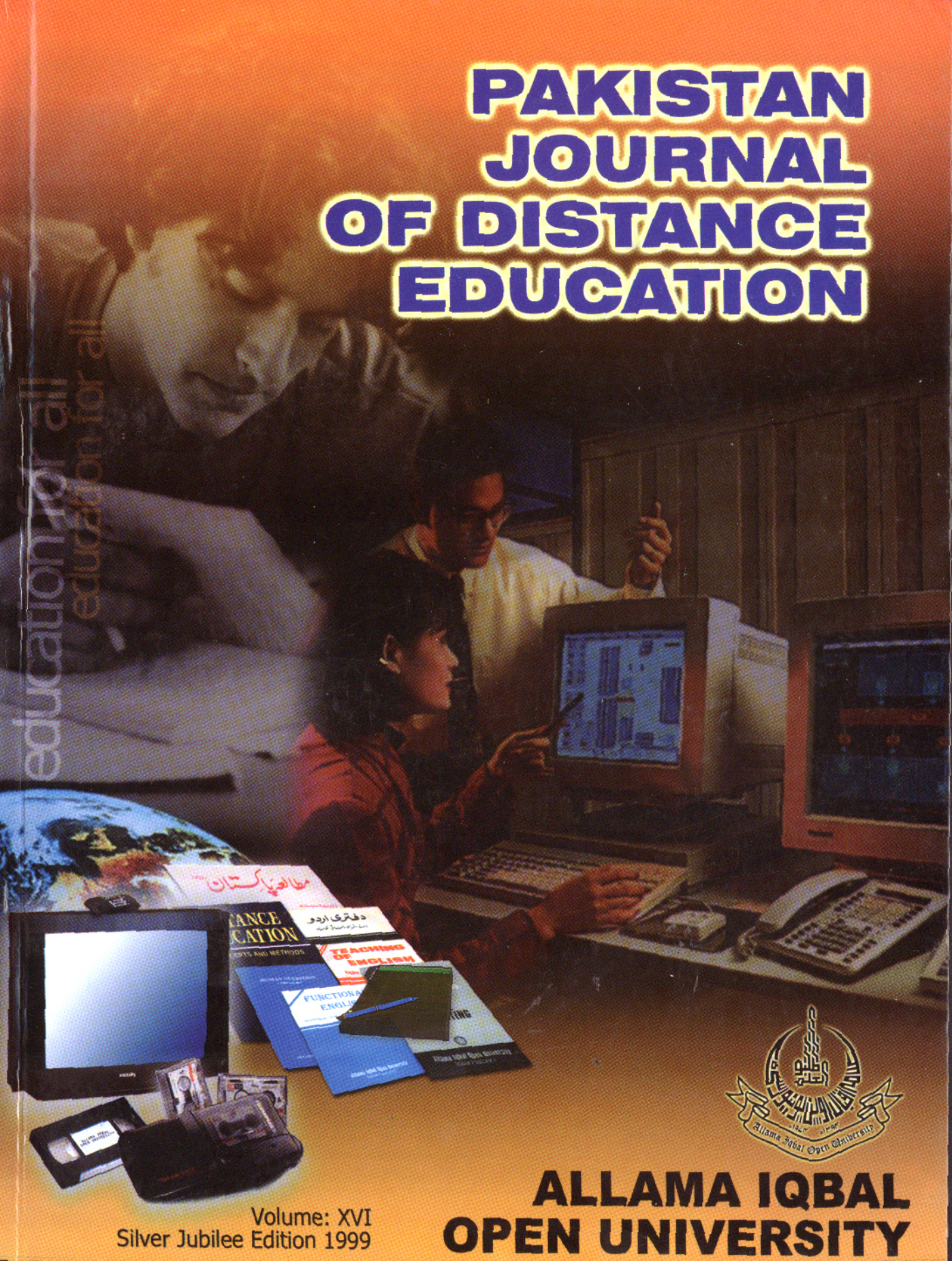

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Private Costs of Nigeria Certificate in Education By Distance Learning System Programme in EDO State, Nigeria

By

Clement Imoudu Imhabekhai*

This study seeks to establish the Private Cost incurred by participants in Nigeria Certificate in Education by Distance Learning system Programme in Edo State of Nigeria. A sample of 118 participants were randomly selected from the three contact centres of the programme. A questionnaire titled Distance Education Private Cost Questionnaire was developed and used in collecting data for the study. The analysed data revealed that the average private cost of NCE by DLS in Edo State is N11,150.25 but the APC vary according to location of centre, level of study and gender, Private Cost were higher according to degree of urbanisation of location and level of study. The study also show that APC for male participants is higher than the APC for female participants. Based on the findings, recommendations on ways of reducing the cost burden on participants on NCE by DLS programme are put forward.

C.I.I.

Introduction

The establishment of the National Teachers' Institute vide Decree No.7 of 1978 by the Federal Government of Nigeria was informed by the recognition of the relevance of training and retaining of teachers to the development of qualitative education in the country. This recognition and po-

* The writer is working as Lecturer in the Department of Adult Education, University of Benin, Benin City, Nigeria.

sition of the Federal Government of Nigeria are evident in the National Policy on Education of 1981 section 9 (3). According to the document:

> *.....teacher education will continue to take cognisance of changes in methodology and in the curriculum. Teachers will be regularly exposed to innovations in their profession. In-service training will be developed as an integral part of continuing teacher education. (Federal Government of Nigeria 1981)*

The Institute was charged with the responsibility of providing courses of instruction leading to the development, upgrading and certification of teachers as specified in the relevant curricula using distance learning techniques.

The Institute at its inception was saddled with the offering of remedial instructions to some unqualified primary school teachers who though had completed their teacher training programmes could not pass Teachers Grade II Certificate Examination. Then this, category of teachers were in large number in the Nigerian school system and as such were considered a serious impediment to the realisation of national educational objectives.

In 1990, the Institute commenced the Nigeria Certificate in Education (NCE) programme. The programme was initiated to meet the requirement of the National Policy on Education which stipulates that the NCE will ultimately become the minimum basic qualification for entry in the teaching profession. The programme was also intended to offer in-service training courses for serving teachers who do not possess the NCE in primary schools nationwide.

The NCE by distance learning system in Nigeria consists of self-instructional materials produced in cycles (year or level of study) and modules for each cycle. These materials are given to the participants to read at their own pace. However, contact sessions of varying durations are organised when schools are on vacation to give the participants opportunity of having face to face interaction with specialist course tutors throughout the four year period. Examinations and continuous assessment test are conducted as expedient for grading and certification.

The NCE by distance learning system is funded by the Federal Government of Nigeria. The Federal Government provides management and field personnel, provides infrastructural and instructional facilities. The participants bear some costs which include payment of the fees for admission forms, tuition, stationery, transportation, examination fees, project writing and other incidental expenses.

These costs borne by the individual and his household in the process of acquiring education are referred to as private costs. The costs are both direct and indirect costs borne by participants as opposed to costs borne by the providing institutions (government and their agencies and non-governmental organisations) often referred to as institutional costs. Private cost in education according to Salim (1993) is the part of investment in education which is made either by the student or the parents.

Private direct costs of education consist of actual expenditures on tuition fees, books and stationery, transportation, uniforms, etc. borne by the individual or his housed. Private indirect costs consist of forgone alternatives or what are usually referred to as opportunity cost. These include forgone income if the students are of working age and would have been gainfully employed were they not in school, leisure, companionship and more decent and comfortable accommodation at home for the hostel or rented apartment where the students live outside the family homes.

In NCE by distance learning system programme, the participants are serving teachers. They are on in-service training and therefore forgo on income within the duration of training. However, the students incur direct expenses in the course of acquiring education. It is the value of these expenditure that this study seeks to establish.

Methodology

The population of this study consist of participants currently enrolled in the NCE by Distance Learning System of the National Teachers' Institute in Edo State of Nigeria. The state is divided into three senatorial Districts politically, namely, Edo South, Edo Central and Edo North senatorial Districts. There are four contact centres for the programme. Edo South senatorial District has two centres both situated in Benin-City, Edo central has one centre situated in Ekpoma while Edo North has one centre situated at Auchi.

One contact centre was selected from Benin City and Auchi and Ekpoma centres were also used. The sample consist of 118 participants randomly selected from the three centres. Collection of data was facilitated through the use of a questionnaire titled Distance Education Private Costs Questionnaire (DEPCQ). The data collected were analysed by first computing the private costs of each respondent then computing total private costs for all the respondents and finally by finding the average private cost using the formula:

$$APC = \frac{TPC}{N}$$

that is, Average Private Cost (APC) = Total Private Costs (TPC) of all the respondents divided by the number of respondents.

Variations according to locations of contact centres, cycle of student and gender were examined through a comparison of the average private cost for each variable.

Findings and Discussions

This study shows that average private cost in the NCE by DLS in Edo State of Nigeria is N11,150.25. However, variations exist in APC in NCE by DLS according to location of contact centre. These variations are shown in Table below:

Table-1

Average Private Cost in NCE by DLS in Edo State by Location

Centre	N	TPC (N)	APC (N)
Auchi	51	562760.00	11,034.51
Benin-City (BHS)	37	431130.00	11,652.16
Ekpoma	30	321840.00	10,728.00
Total	118	1315730.00	11,150.25

$ 1 = N94.00
N = No. of Respondents
TPC = Total Private Costs
APC = Average Private Costs

As can be observed from Table 1, the Average Private Cost in NCE by DLS in Edo State is highest in Benin city with N11,654.16, closely followed by Auchi contact centre with N11,034.51 while Ekpoma has N10,728.00. The variations in APC according to location of contact centres can be attributed to the level of urbanization and development of each of the location towns.

Benin city is the capital of Edo state and perhaps the most urbanised of the three locations. It has more government infrastructures and private investment. On the other hand, Auchi functioned as a Divisional headquarter during the colonial era and now a local government headquarter with government departments and few private industries while Ekpoma only become a local government headquarter a few years ago.

Students in NCE by DLS pay the same fees (N5,990.00) for tuition, modules and examination. The variations in their APC is therefore accounted for by their incidental expenses like cost of transportation, stationary, cost of mid-day meal and snacks while taking tutorials at the contact centres, etc. The influence of transportation on private costs in education informs Onokerhoraye (1979) suggestion that social services must be located in such a way that total cost or effort of people in moving to the facilities be limited.

APC in NCE by DLS in Edo State also vary according to cycle (year) of study. These variations are shown in Table 2.

Table 2

Average Private Cost in NCE by DLS in Edo State by Cycle of Study

Cycle	N	TPC (N)	APC (N)
I	25	266,360.00	10,65.40
II	29	309,590.00	10,672.50
III	24	261,890.00	10,912.08
IV	40	477,890.00	11,947.25
Total	118	1315,730.00	11,150.25

$ 1 = N94.00

Table 2 shows that average private cost of NCE by DLS vary according to cycle (year level) of study Edo State of Nigeria. The APC for cycle I (year of enrolment or commencement) is N10,654.40 while the APC for cycle II is N 10,672.50 showing a very slight increase. The APC for cycle III is N10,912.08 which is higher than that of cycle II with N227.08 while the APC for cycle IV is N11,947.25 showing an increase of N1,035.17.

The sharp increase between cycle III and IV is accounted for by the fact that the cycle IV participants are final year students and ipso facto bear additional costs of writing, typing and binding their independent project reports. Costs according to Nwadiani (1992) rise educational level. Similarly, Ahmed (1997) argues that in formal education, unit cost rises with each successive level of education regardless of whether technical or vocational education.

The N11,150.25 average cost of NCE by DLS in Edo State as shown by this study reveals that the higher the level of education the higher the cost of education. While Olubor (1997) states that families or household spends about N7,192.01 per session for secondary education, Okoroh (1997) shows that APC for female education in Southern Nigerian Universities is N36,944.80. The APC for NCE by DLS is higher than the APC for secondary education while the APC for University education is higher than that of NCE by DLS in Edo State of Nigeria. This finding corroborates earlier studies mentioned above.

APC of NCE by DLS also vary according to gender. These variations are shown in Table 3 below:

Table 3

Average Private Costs in NCE by DLS in Edo State by Gender

Gender	N	TPC (N)	APC (N)
Male	22	253520	11,523.64
Female	96	1062210	11,064.25
Total	118	1315730	11,150.25

$ 1 = N94.00

Table 3 shows that the APC for male participants in the NCE by DLS programme in Edo State is N11,523.64 while the APC for female participants in the programme is N11,064.68. As can be observed, the APC for male participants is higher than the APC for female participants. This finding contradicts Nwawo (1995) where private costs of education was higher among females than among males.

Males APC is higher in this programme majority as a result of variations in residence vis-à-vis transportation costs. While a majority of the female participants reside within the precinct of the contact centres, majority of the male participants travel from the outskirts of the location of the contact centres. A majority of the female teachers participating in the programme are married to employees in both public and private sectors in urban centres. Such married female teachers often resist transfer to places distant from their marital homes. On the other hand, only very few females teachers travel rural areas to attend the programme.

Conclusions and Recommendations

This study has revealed that participants in Nigeria's National Teachers' Institute NCE by DLS programme in Edo state incur high private costs. These participants are serving teachers and by that fact are adults who have responsibilities for themselves as well as their dependants. In most cases, these participants are breadwinners of their families. Therefore, with high private costs in the programme, many participants are likely to experience varying degree of social and economic stress. They may have to order and re-order their priorities from time to time in which case other important responsibilities will have to be shelved for sometime.

The participants are Grade II teachers. The average annual emoluments for each of them is about N20,000.00 and when they have to pay as much as N11,150.25 per cycle (year) in the programme, they will have very little money left for other social and economic responsibilities. They either have to borrow money (sometimes on interest) to meet their educational and other needs or depend on their spouses and other relations for support.

Investment in education like in any other field of human endeavour should attract appreciable margin of returns in form of improved earnings, job satisfaction and promotion prospects. Rate of returns on investment in

NCE by DLS to successful completers of the programme in Edo State of Nigeria does not match the quantum of the costs they bear immediately. For instance, completers already on salary Grade Level 07 which is the entry point for newly employed NCE holders into the teaching profession, are only given one step increase above their present step on the same salary Grade Level. Completers who are already on Salary Grade Level 08 and above do not have any increment. However, those completers who are below salary Grade Level 07 will be promoted to that level and even this is not automatic as they may still wait for sometime before the promotion is effected. Statutorily, all categories of NCE holders employed in public schools in Nigeria rise to salary Grade Level 13 while holders of Teachers Grade Two certificate terminate at Salary Grade Level 08. The possibility of rising to salary Grade Level 13 is the ultimate advantage to NCE by DLS successful completers.

Since the National Policy on Education (1981 edition section) 9 (59) states that the Federal Government shall accept full responsibility for funding the National Teachers' Institute, it is imperative that the tuition paid by participants in NCE by DLS programme Nationwide should be removed. Similarly, since corresponding higher institutions in Nigeria (Universities, Polytechnic and Colleges of Education) are tuition free, equity and justice demand that NCE by DLS programme should also be tuition free.

It is the opinion of this writer that social benefits of teacher education are higher than individual benefits, therefore, Governments (State and Local) should reimburse participants in NCE by DLS particularly on the cost of project writing. Other forms of financial assistance like scholarship, bursary and interest free loans available to other categories of students in the country can also be made available to distance education participants for equity and justice.

Transportation costs significantly contribute to the participants private costs in NCE by DLS programme. Therefore, additional contact centres should be created in Edo Central and Edo North Senatorial Districts to bring the programme closer to the participants and thereby reduce their transportation cost. The creation of additional centre in the areas will bring about judicious distribution of centres among the component political units of the state. It will also afford more people opportunity to participate and benefit from the NCE by DLS programme.

These recommendations may be useful to other countries where distance learning programmes of this nature are organised and where the findings of this study can apply. They can help to shape and reshape existing policies and programmes as well as serve as guiding principles for initiating new programmes where feasible.

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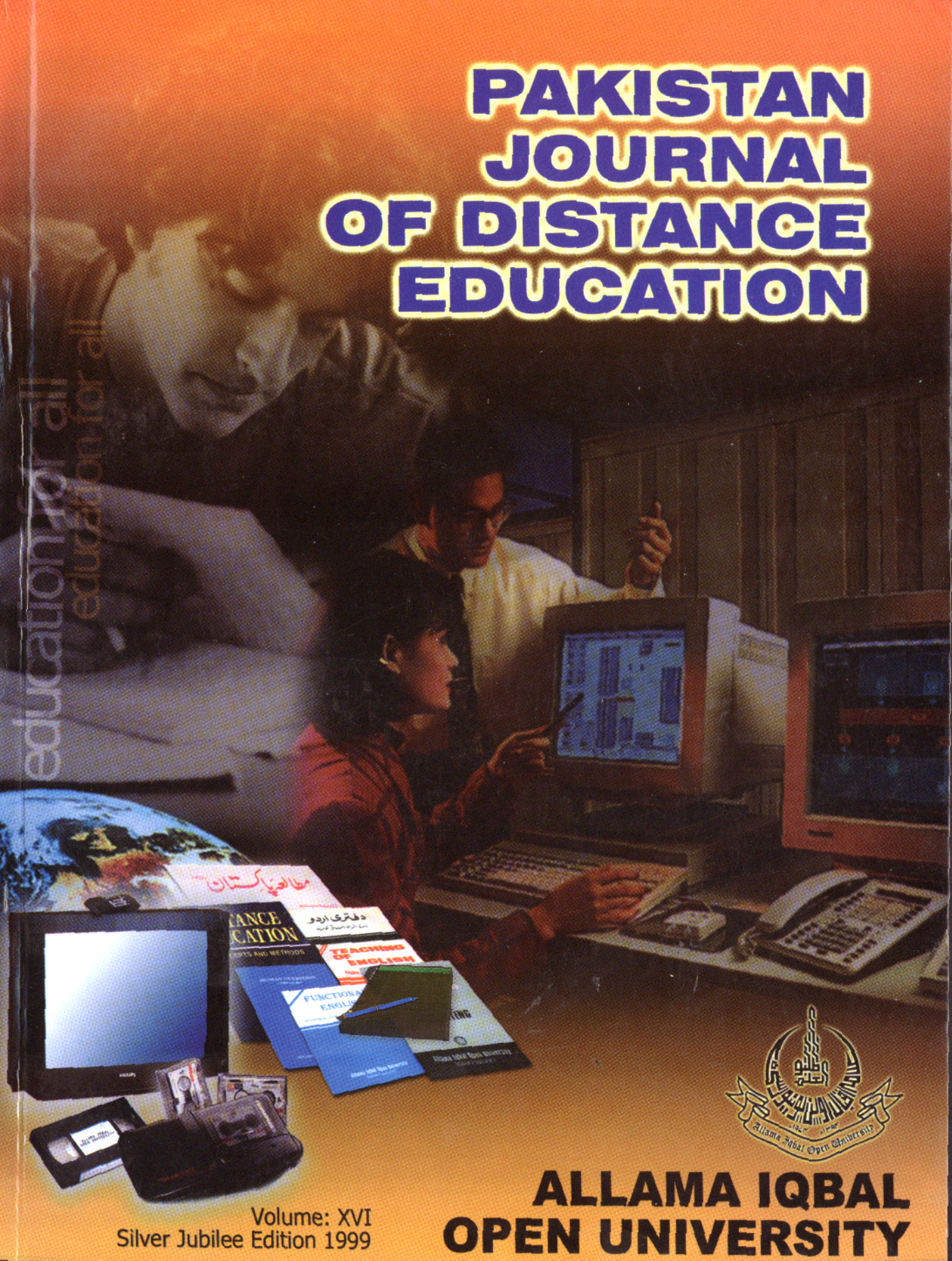

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ALLAMA IQBAL OPEN UNIVERSITY

Distance Education Insrtuctional Process Improvement Through Collegial Partnerships

By

Dr. Mussaret Anwar Sheikh*

The 1995 workshop on the Teaching of English to Young Learners at Salzburg Seminar, Austria was based on collegiality of community representatives from 25 countries, Pakistan being one of them and represented by me. The collegiality concept was new, but it seemed to work wonders with 25 different individuals from different cultures and communities. Seeing the success of this aspect of collegiality, I took up my interest further in 1997 by looking at the collegiality from the point of view of school teachers in the school system of UK under two projects. This analysis gave the perspective of primary schools teachers. Since the feedback of the school teachers collegiality concept was very positive in the current paper (1999), the collegiality concept application for the improvement of Distance Education (DE) instructional process is taken.

M.A.S

DE made its impact in the worlds' education system with the establishment of the first open university in UK called the *UK Open University*. This university became an international model for the world by providing educational opportunities to those who wished to study while working and at the same time were keen to enhance their education. DE instructional process, therefore, is very important for instruction to be effective in its truest sense.

As the name implies, the teaching learning takes place at a distance with the students enrolled from different places and backgrounds.

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The teaching learning process of DE places more challenges on the instructional designers, and implementers. Since the DE instruction is for those students, who mostly enrol on their own accord, they are motivated both intrinsically and extrinsically. The instruction in DE is not just students and teachers. It is a much more than formal educational institutions teaching learning process. The course design involves the input of course developers, media producers, designers, and teachers/tutors who are the actual implementers in the outreach system. The inputs in the instructional package are; therefore, based on the partnerships of course developers, media producers, editors, publishers. In order to improve the instructional process the need for collegial partnerships is utmost.

In DE instructional process the task of both the teacher and students is different as compared to the formal education institutions. In order to make the instructional process in the DE effective, we need to look at the aspects that need improvement. Firstly, how should distance education be conceived for the improvement of teaching. For the improvement of DE, we have to look at the instructional process catering to the needs of the learners. In DE the transactions between the teachers and learners is of a different nature. The transactions are in the form of dialogues, structure and learner autonomy (Moore1990, p.10-11). Dialogues is the interaction between the learner and the teacher in relation to the content of the of the subject matter under study, educational philosophy of the educators , personality of educators and learners, environmental factors and means of communication. Structure is the responsiveness of educational objectives, teaching methodologies and evaluations of the learners (Wedemeyer, 1971). Student autonomy depicts the extent to which learners exercise responsibility over their learning process. The crux of these transactions between teacher and student is that teaching and learning cannot be improved if the self-understanding of both the teacher and learner is not looked into. Dialogue and learner autonomy are, therefore, central to the quality of teaching and learning in DE.

Dialogue

The notion of dialogue in DE should not be *mistaken* with discussions which lead to dialects and often result in debate with the usual accomplishment of defeating the opposition. For our purposes dialogue should be looked at as:

...is the creative process in which entirely new ways of thinking and acting will emerge. Dialogue is a space of deep thinking where there is nothing to provide, where well worn ways of thinking, and being can let go of. In a dialogue there is nothing to be solved and nothing to be defended (Qualters, 1995: p.50).

The dialogue notion is constituted by two important philosophical aspects. As there is nothing to solve or defend, politeness and mutual trust is enhanced. This helps to arrive at new ways of thinking and acting. Secondly, as a creative process dialogue lends itself to an ever evolving process of deep thinking and understanding. Based on the two notions the dialogue can affect the teaching learning process at a distance as follows:

- In order to nurture mutual trust and politeness the teachers have to expand their self-awareness in such a way as to have more empathy and sensitivity to the student needs and concern.

- The teacher and the student at a distance establish a level of intimacy and comfort so as to understand each others perspectives and interests and thus commit to co-operative learning.

Learner Autonomy

Moore (1993: p.20) makes a claim for learners autonomy whereby they engage intellectually with the content and interact with the course developer in the study guides, interact with the feedback on in-text activities or assignments, and media. Since the learners interact in the DE process intelligently and responsibly, they give evidence of self-direction. Self-direction does go to include an element of critical reflection. Mezirow states that the learner autonomy thus acquired helps the learners to become aware of the assumptions which underlie the learning process, reflect on them and then question about their validity. This helps the learners to reform their assumptions into new ways of thinking and acting (Qualters 1995.p.49).

Critical reflection moreover demands both of the teachers and learners at a distance 'to take risks to challenge ideas and explore new conceptions and perspectives' (Anderson and Garrison, 1995: p. 197).

Therefore, the process of improving the quality teaching and learning at a distance should be subjected to the integration of 'information acquisition, critical reflection and critical discourse' (Anderson and Garrison, 1995: p.138-139). It is because of this that Anderson and Garrison aptly believe that:

> *Distance education models which are based upon one-way media such as educational television, computer managed instruction, or text books, cannot be expected to facilitate a community of inquiry and, thus , will be less likely to provide opportunity to think critically. While some introductory and well defined courses will emphasise the presentation of basic information...some opportunity must be provided to support critical discourse and the development of a community of inquiry (1995: p.197).*

A teaching learning environment which allows learners autonomy along with the opportunities for self-awareness both for the learner and the teacher surely helps in the attainment of excellence. Allowing learner autonomy in the instructional process is not so easy. It poses creative challenges. The learners of distance education are often in solitary situations but they are definitely self directed. Therefore, it becomes obligatory for the providers of distance education to consider the course design process in the light of research findings, so that learner autonomy is realised through each individual's self direction. Pascarella (1996: p.20) research holds that students demonstrate greater self-reflection, critical awareness and 'cognitive gains' if they have received well organised instruction and course materials. The same research also contends that critical learner autonomy is fostered when students are offered courses that challenge their beliefs and values. Pascerella's findings very well lead the way for the improvement of the distance education materials and calls for the course developers to consider introducing problem-based learning, in the course content. Problem based strategies introduce content in the context of real world problems of complex nature. White says (1996: p.76) students are expected to identify what they know, what they don't know and must learn to solve a problem.

In order to promote and sustain effectiveness and excellence in the instructional process of distance education institutions what is needed is much more than the learner-centred participatory approach based on dialogue and learner autonomy. The practitioners of DE need to improve it with collegial support and practice of all those involved.

There are many problems confronting the DE institutions. At times it is the isolation and independence, at other times it is no interaction and team-orientation (Kinsella, 1995: p110). This isolation and no interaction among the practitioners of DE may give them a feeling that to seek advice or share some concerns about course design may indicate lack of professional competence. Therefore, to do away with this solitary notion it is imperative that the DE institutions have structures for continuous collegial support for the facilitation and improvement of instruction.

It is here that the notion of collegiality in DE institution comes in. Collegiality refers to non-judgemental process of dialogue, open communication, and collaborative interaction between colleagues, in this case it means practitioners of DE. This dialogue can take place in the form of dyadic, tryadic, or team partnership, with an atmosphere of mutual trust, confidentiality and support. Institutions based on collegiality will help the colleagues to experiment, fail, reflect, solicit help, revise and return to classroom or course design /development process without any hesitation to try again (Kinsella: 1995: p 112-113). Collegiality also encourages self reflection as far as their own professional practice is concerned. Self-initiated reflection implies that colleagues accept the fact that their own practices in the DE delivery system and course design should be carefully reviewed and analysed then pursued for improving or changing their practices. Thus in this way collegiality allows for the challenging of ideas and improving shared practices between colleagues of the same and different Institutions. Colleagues bonded through collegiality are inner motivated persons who work to seek reward intrinsic to teaching regardless of the institutional policies. Likewise, collegiality does not discourage academic competition between colleagues and institutions. It helps teachers to recognise their strengths as well as draw on the talents of each other. According to Harper, 'juxtaposing each participants necessarily limited vision against a peer's distinct and contextually bound experience... thus allowing each to push the limits of his/her own meanings that might better promote critical reflection'(1996:p.262). It is because of this fact of promoting shared perceptions that the establishment of consultation of DE course design will make sense Peterson and Finkelstein (1981:p.21) claim that improved teaching and learning at institutions stems out of a general climate of collegiality.

Collegiality does not necessarily mean team orientation. A course team in the DE institutions comprising of academics, editors, multimedia

experts, who as a team have co-operated in the course development process yet the team's effort become dysfunctional when it is not properly proactively planned and co-ordinated. The lack of co-ordination can be attributed to the course developers who are responsible for the mistrust, confidentiality support and accountability. In this way the rationale which shapes the concept of teamwork seems to be out of line with collegiality. In order to look at the collegial partnership related to the improving the quality of instruction at a distance the three stages of DE courses needs to be looked in . The stages are pre-design planning, actual designing of the course, post design evaluation period. All these stages are very important from the point of view of DE. This consideration is supported by Robinson (1994) who calls the learning materials as the pivot on which the whole learning teaching enterprise revolves. In addition to her this viewpoint, there is her belief that the quality of course materials depends on the how effectively the delivery and the learner support system function, and how well they all integrate in the operational terms (Robinson: 1994: p.120).

Pre-design planning

During the pre-planning period relationship between course developers are planned in relation to the education goal. Based on this goal and the future vision of the course, course design, development, production and delivery process are conceived. In context of DE the course development will call for the inputs of academic authors, editors, reviewers, graphic designers, instructional designers, and other members as computer programmers, researchers, information technologists and publishers. Along with the above the quality of teaching learning at a distance cannot be targeted without being sensitive to the concerns of the students:

- The course developers may develop a profile of the perceived students by reflecting in the previous learner's experiences, consultation with previous colleagues, student services, meeting prospective learners and finding out their expectations from the course, mailing questionnaires to past and prospective learners and eliciting any other related information (Rowntree: 1994: p.43).
- Collegial research of content, mode of media, and learner evaluation procedure on the part of course developers and prospective learners together to find the students intended purpose and goal articulation.

- Negotiations between the course developers regarding time schedules , funds and costing , development plan, production and delivery of materials.

Designing the course

Collegiality demands that all participants involved collaboratively design bits of courses in groups. During this process they will have to consider the different steps in the course design, sequencing of the steps involved and evaluation of each others (Luckett: 1996; p.39). The considerations will result in agreed criteria for course design which is based on good course materials, encouraging critical reflection in the learners. As colleagues of the course development team, the course development is a continuous, recursive and ever evolving process of course design. The parameters of course design incorporate educational framework of thinking, student intake resources, curricular structure and aims. This is all in addition to the already agreed course outline, units contents, sequencing, continuity, pacing and methodology of each unit, frame-work of thinking, , assessment and feedback procedures (Luckett, 1994: p.40).

Collegial course designing as enumerated above lead participants to establish collegial trust and open communication to facilitate the improvement of the quality of course material.

Post-design course material

In the post design stage participants need to conduct their own course evaluations on the basis of collegial approach. Formative evaluation may be carried out so that course teams, colleagues in DE, can give feedback on teaching methods, and what other steps should be taken to improve teaching/learning so that their course materials may be modified. This needs to be an ongoing collaborative process of interaction and monitoring based on trust between course developers in relation to producing quality course materials. An unbiased summer time evaluation also needs to be pursued by administration and management in improving teaching learning at a distance so as to ensure quality teaching and learning.

Pursuing design and development through collegial partnerships will contribute towards improving the quality of learning and teaching. The collegial partnership in DE system does not confine to course developers,

course teams, colleagues in the DE institutions and students only but carries further to the other role players involved in the timely delivery of materials. No matter how well designed the course materials are but if they are not delivered on time then the quality gets affected. The failure of quality in the delivery system is attributed to:

> *A combination of poor record system, lack of specified time for despatching materials after receipt of registration information, lack of monitoring system and unclear designation of responsibility for checking performance... the late production of the materials, created by late hand over by writers .... infrequent communication and lack of co-ordination between the staff teaching the course.*
>
> *(Robinson, 1994: p. 186)*

Robinson thinks of 'quality assurance' as the prescribed activities that an organisation undertakes. The activities standards are specified and reached consistently for a product of service... (1994: p.128). For 'quality assurance' regarding design, development, production, and delivery of course materials collegial collaboration has not only to become visionary but also committed in DE institutions. However, the improvement of the DE instructional process does not rest on the collegiality of course developers, course designers, and media producers. What is needed is a broad programme to establish collegiality for the administrative management, support services, regional network as well. This need is most genuine as improvement in the instructional process is considered to be the norm of all the role players in the course development and design. The inadequacy of the management in the DE institutions is not seen to play any role in the improvement of the instructional process. Collegial partnerships of all role players be they from academics, information technology, management/administration is the need. Until this is perceived by all concerned little improvement in the instructional process through collegiality cannot be perceived.

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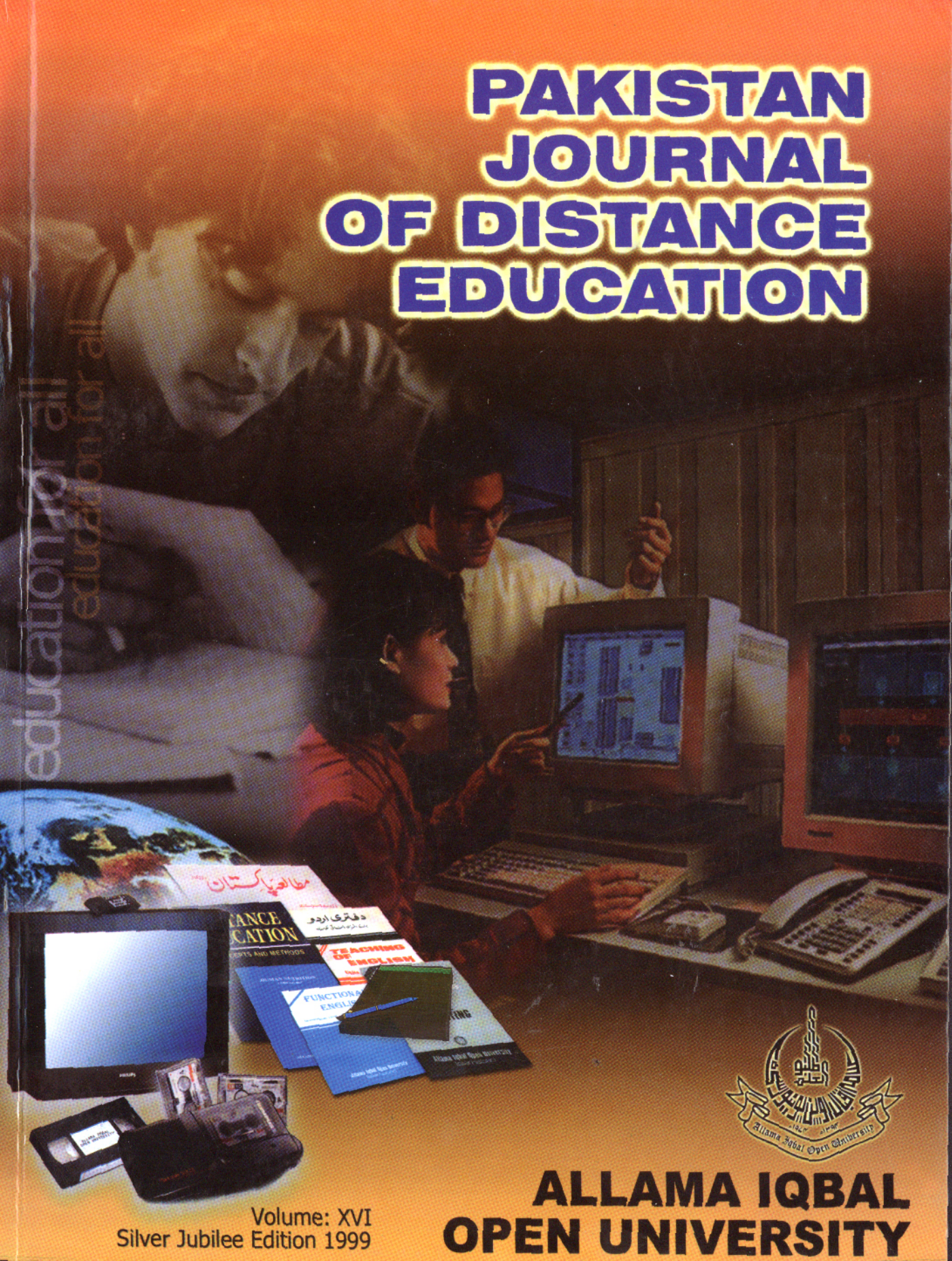

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ALLAMA IQBAL OPEN UNIVERSITY

Interactivity And Media In Distance Education

By

Muhammad Javed Iqbal*

Distance education is the organised mode in which learner most of time is a distance from institution so material designed for these learner is self-instructional and self-paced which provides high degree of autonomy and independence. There were time when distance education was equated with correspondence education. But, since the last two decades, distance education is identified with the extensive use of technologies such as: broad cast radio and televisions audio tapes, video tapes, telephones fascimile machines, electronic mail and computers. But print is still in most cases core of the learning package. This increase in choice according to Bates (1990, p.20) has brought difficulties of decision making also.

The Loneliness of Distance Learner

In almost all definitions of distance education, most of the time learner is at physical distance from institution or the teacher. This means that interaction between the student on the one hand and the tutor counsellor - on the other hand is different from formal class. Bates (1990, p.24) classifies the social interaction in open and distance learning as:

- "Interaction between the learner and the originator of teaching material.
- Interaction between the learner and a tutor, who mediates between material and the learner, by providing guidance or assessment.
- Interaction between the learner and other learners"

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The first kind of interaction is very rare in distance education but position is now changing as the use of interactive technologies is spreading. Second type is common as in most cases, face to face tutorial is there, third type of social interaction has been the neglected one uptill now, only those may have some interaction who attend the tutorials/workshops.

By using technologies, interaction can take place without face to face contact, even interpersonal interaction can be from a distance via mail service or through computer based electronic mail etc. so social interaction is not necessarily time or place dependent or even instructor dependent if a mediating tutor or pear groups are used. This loneliness is covered by interaction with material which is designed for this function. Student is active while learning through distance material. He/she does not merely reads but have to do some thing with learning material. Students are required to demonstrate what they have learned, reprocess new material to incorporate with old one, apply to new education. Feed back is an important component of interaction as it indicates to the students the degree of learning they have.

There is towards "students and result oriented accountability". This is due to:-

1. The rapid or appropriate technologies.
2. The increasingly shorter span in the development of these technologies.
3. Their pervasive and far reaching impact on cultures, societies and the world"
   (Hodgking, 1990, p.83)

Interactive Communication and Technology

Education by any definition depends upon human communication. Many forms of human communication are enhanced by new information technology. This technology has increased the fidelity with which messages can be transmitted and the amount and the variety in these message. Fidelity has also reduced :noise. Accordingly to Hawkridge (1983, p.23), technology extends our senses and breaks the bounds of time and space for use/ Now technologies are human extension and evolutionary in their nature. Evolution is biological rather than mechanical process. In

the mechanical world whole equates to the sum of all parts, these subjects are analyzed and comprehension is made. While in biological world, whole is quite different from sum of parts, analysis can not explain satisfactorily the whole. Increasing shift can be seen in new learning technologies from mechanical universe to biological one.

In a sense, all communication is interactive (sent and received) but it does not necessarily mean that content is perceived and understood. In interactive communication people are allowed to communicate instantly and directly with each other. Here new technology provide base for interactivity. Pakdiraton (1990, p.140) terms two way communication as advanced learning technology.

Rational for Learning Technologies

Advantages of learning technologies are as follows:

Adaptability	The technology should allow learning material to be used on a wide range of equipment without loss of essential characteristics.
Applicability	Learning technology should have more benefits when compared with other technologies. It should be user friendly and for high quality man-machine interactions.
Multimedia and multi	Technology should assist in production of learning material and provide systems which help in learning teaching strategies.
Adjustability	Learning material should be transferable to new developments and may be Adapted to different situations and cultures.
Compatability	Different systems must allow for full inter connection and should be able to be usedcompatibility in ways beneficial to the learning and teaching process.

Inter connect-ability	Learning technology must support communication and interaction between different users and systems in different users and systems in different environment (Pakistan, 1990, PP.140-141)

Holomberg (1983) identified the following purpose of two way communication:

- To support students motivation and interest by contact with an encouraging tutor and counsellor.
- To support and facilitate student learning by having students apply the knowledge and skill acquired, as well as by the tutor's comments, explanations and suggestions.
- To assess students progress in order to provide them with an instrument by means of which they can judge their educational attainment and the marks obtaining.

Here the mphasis is on interaction between the individual student and the tutor. Simulated dialogue includes interaction-ship with study materials, assignments, self assessment exercises, review questions, discussion on telephone, group discussions residential summer schools.

Media

Media may be seen simply as ways of tansforming a signal into a message of making a sense of raw data, other conceive media as devices for transmitting messages simultaneoulsy to a large number of people. There are many kinds of media, this division depends upon the degree to which they rely on technical devices for transmitting signals into message. Hart (1991, P.4) classify media into:

(1) Presentational media
(2) Representational media
(3) Mechanical/electronic media

Presentational media requires face to face communication (e.g. speech), Representational media enables the messages to be stored, passed over a distance and reproduced in the absence of participants (e.g. telegraphs, newspapers, magazines). They use symbolic codes, print, graphics and photography to communicate. Mechanical/electronic media is also representational media as this also uses codes to convey

the messages (e.g. telephone, radio). This rely on technical devices at the part of decoding as well as encoding. So first type of media uses codes but speech and sign language are to some extent representational, second different kinds of media are often used simultaneoulsy, for example television uses speech, television codes and electronic transmission of messages through air.

The media is usually taken to be mass media, relatively modern mechanical/electronic media which involve technical devices.

Mc Lawn (1973) insists that forms of media matters more than the content. He views the effects of media as implicit and subliminal. Media is either hot or cool. Hot media like print, radio and film are high in definition low in audience, cool media like telephone, writing and television are low in definition and high in participation.

Knowledge Meida

Various terms are used for new technologies used in distance education such as telematics, the information super highway and multimedia, knowledge media. Knowledge media as a term "designate the results of convergence of computer, telecommunications and cognitive science" (Daniel 1997, P. 78). It is about capturing scoring, imparting sharing, accessing, creating combining and synthesizing of knowledge. It is not CD-ROM or computer conferencing but the whole presentational style, the usr interface, the accessbility, the interactivity.

Understanding Media

Distance education personals should understand the following five basic principles.

(1) The media do not simply reflect or replicate the world.
(2) Selection, composition and elaboration occur at every point in the computer process of editing and presenting messages.
(3) Audience are not passive and predicable but active and variable in their responses.
(4) Messages are not solely determined by producers "and editors" decision nor by governments, advertisers and media moguls.

(5) The media contains a multiplicity of different terms shaped by different technologies and capacities. (Hart 1991, P. 8)

Division of media depends upon the degree to which they on technical devices for transmitting signals into messages. Hart (1991, P.4) classify media into:

(1) Presentational media
(2) Representational media
(3) Mechanical/Electronic

Achievement of goals of distance education depends upon the selection of teaching methods. Goals may be in cognitive, psylnomotor and affective domain. The cognitive domain is concerned with acquisition of intelelctual of intellectual knowledge. Usually, it is assumed that courses of Open Universities are of high quality as the course team practice is there. The course team usually makes the course up to data, consistent and high quality. As far skills in psychomotor domain is concerned, distance education institutes face some difficulties espcially in science on technical subjects. Compensation of daily lab work may be met by providing casual lab work, home kit for personal use at home. Limiations are mainly in affective domain which is concerned with emotions and attitudes. As most of the clientele of Open University's are adults and have already plenty of professional socialization. When there is increased interaction between students and faculty, naturally affective domain is emphasized.

Media Utilization

Educational transaction is a collaborative process between teacher and learner, this process can be facilitated by various modes of communication. The communication process serves several functions. Some of these as listed by Garrison (1990, P.91) are:

(1) Negotiation of objectives
(2) Transmission of contents
(3) Dialogue regarding meaning
(4) Validation of knowledge
(5) Feed back and rate of progression towards agreed goals

In developing instructional design in distance education these communication may present special instructional problems, thus use of

instructional technology should be made by considering strengths and weaknesses of each media.

The current consensus that "we know neither how to measure the psychological effects of media nor how to adapt them to the goals and functions of education". (Settler, 1979, P.1) Clark (1983) is of the opinion that "media comparison studies clearly indicate that media do not influence learning under any condition" (P.445), but Bates (1981, P.20) suggests that many instructional functions" in a given circumstances, lend themselves more to one medium rather than another. In this regard, Salomon (1981 b. P.3) has established a psychological theory in which he integrates and considers the interactions among media, cognition and learning. Knowledge is represented symbolically, cognition and learning are based on internal symbol systems. Bates (1981,P.14) comments that :there is no super-medium, each can serve different functions. Thus media do not differ with different learning skills or teaching approaches. Each medium therefore enriches or adds to education of process.

We needed to turn our attention not only to packaging and presentation of information, but to transaction itself. Clark (1983, P. 456) states that it is what the teacher does, the teaching that influences learning. Now, there is a shift in emphasis from investment of resources in the development of material to the investment in the instructional environment. This will result in student centered approach.

Selection of media is an essential decision that must be made in developing instructional design. Romiszowski (1977, P.61) classify the characteristics of media into two classes.

(1) Essential media characteristics: These are ones which control the clarify the Message.

(2) Optional media characteristics which improve the quality of presentation.

There are several considerations which might influence ones choice or selection

a) Choosing media which are attractive to the learner.
b) Choosing media which fit the learners study habits.

c) Choosing media which suits the teachers teaching habits, skills and preferences.

d) Choosing media for particular application.

Factors Those Count In Media Selection

Factors those count in media selection are:

Task Variables

While selecting media, most of the designers considers the type of performance expected from learners. This implies that some media lend themselves better than others to the incorporation of the desired conditions of learning. Gange and Briggs (1979, P. 180) have developed a list which indicates how the identification of type of stimuli presented in a lesson implies certain options of media choice.

Type of Stimuli	Media options
1. Printed words	books: programmed instruction handouts, charts, computer.
2. Still pictures and spoken words	slide tapes, voice slide, lecture with poster computers.
3. Motion, spoken words, and other sounds	motion pictures, television live demonstration
4. Pictorial portrayal theoretical concepts	animated motion pictures, puppets and props

Learner Variables

All the instructional designers agree that while selecting media, student profile should be considered. Here Dales (1969, P.128) counts one experience which is useful and its categories are as follows:

Verbal symbols
Visual symbols sign, stick figures
Radio and recording
Still pictures
Motivation pictures
Educational Television
Exhibit
Study trips
Demonstrations
Dramatized experiences, plays, puppets role-playing
Contrived experiences-models; mock ups; simulation
Direct purposeful experience

For cognitive objectives, Briggs (1972) stated thum rule "Go as low on the scale as you need but go as high as you can for the most efficient learning". From this, Gagneand Briggs (1979, P.18) suggest to consider opposing factors of "slow but sre" and "fast but risky" for the selection of media.

For affective domain, Dale's age/media relationship becomes inverted as compared with cognitive objectives.

The Assumed Learning Environment

Administrative considerations are also important in selection of media. These factors are 1) size of school budget' 2) size of class; 3) capacity for developing new materials; 4) availability of radio, television and other media equipment, 5) availability of modular materials for individualized, performance based instruction; 7) attitudes of principal and teachers towards innovations, and 8) school architecture (Gagne and Briggs, 1979, P. 182)

The assumed development environment time, budget, and personnel available influences the designing of specific delivery system, so determine the kind of media which is to be used. Here design models and team management systems are also needed to be considered.

The Economy and Culture

While choosing media, users acceptability is also important, moreover whether selection is within budget and technology available re-

sources. Different groups of clientele may have different attitude towards different media. Besides this, cost effectiveness is over riding factor. For these, designers need to ascertain the target clienteles status and intentions. Information required may be collected by visiting the users, use of questionnaires etc. but best way is to arrange some of the users on the design team, this will help to ensure acceptance of the media but also enhance the effectiveness of the total instructional design.

The important is not the interaction but is the quality of interaction and feedback also. One way of evaluating of the quality of interactivity is "what kinds of thinking it is likely to stimulate in the learner and is it appropriate for the task at hand? Usually learning is an isolated activity between the student and learning material if learning material is not designed on the principles and techniques of instructional design.

To be "interactive" it is necessary to understand the strengths and weaknesses of different technologies. Two ways communications media are valuable tools for distance educators according to Dekkers (1990,P.34) these provide greatly improved interactive capabilities with institutions, staff, other students, resources etc.

In short, effective interactivity will help in an increase in the students population, a decrease in dropout rate, reduction in tutorial problems, reception of broadcasting with more convenience and improving the tutor performance.

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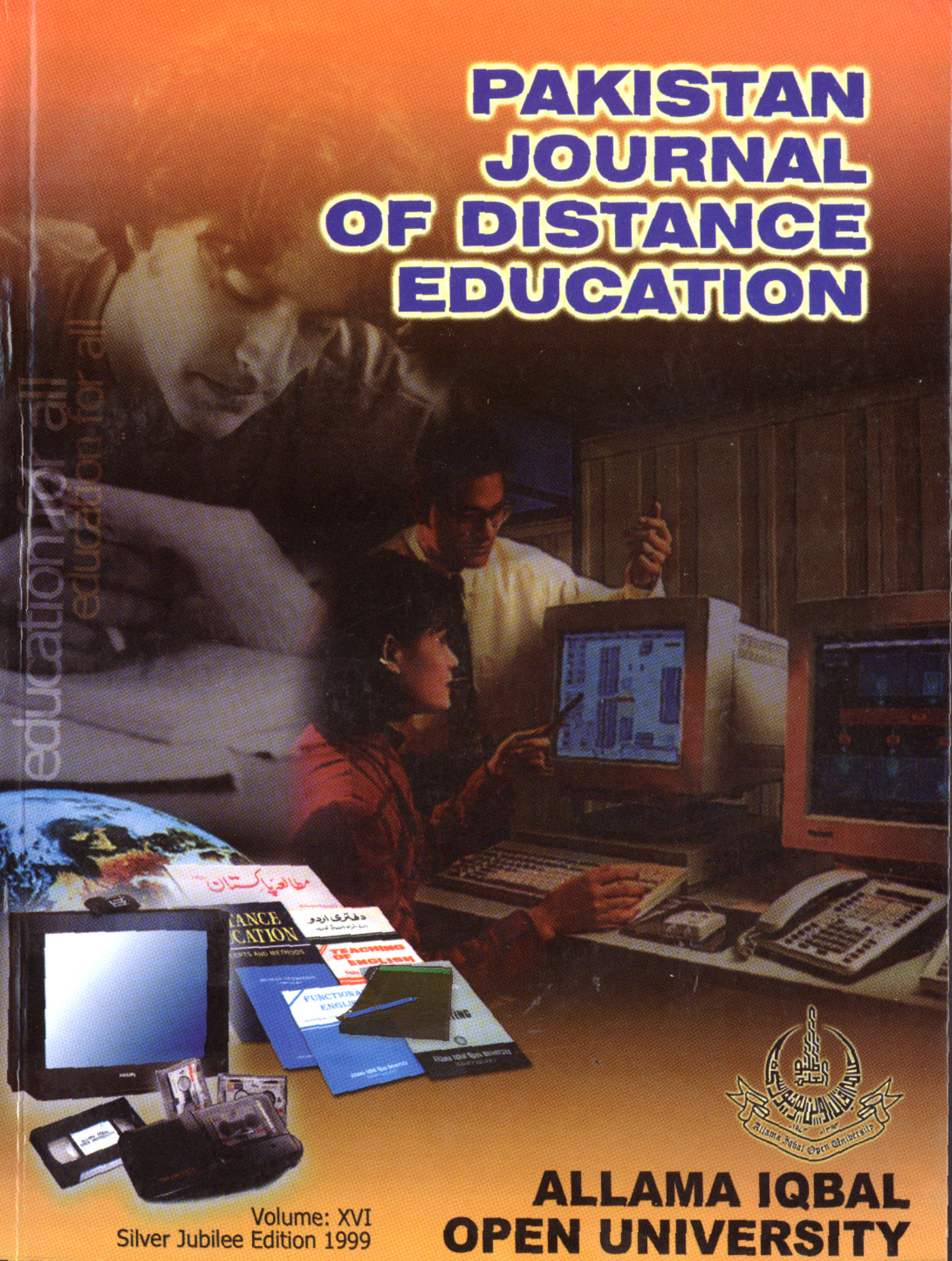

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ALLAMA IQBAL OPEN UNIVERSITY

Technical Education: Its Implication for Industrial Development in Pakistan

By

Dr. Muhammad Yousaf*

Introduction

If we go through the history of technical education development in Pakistan, it can be revealed that it did not receive the attention it needed during 1950's (N.E. Commission Report, 1959). However, just recently it has been observed by our manpower development planners that it is meaningless to talk of industrialization without first ensuring the supply of the necessary technical manpower. This implies that there is a vital need for a system of technical education in the country. Industrialization which may be considered as the panacea for the country's problems, cannot be properly initiated or maintained unless educational machineries are geared towards supplying the industries with requisite trained manpower.

In the past, our system of education had attached more importance to the education of those preferred *white-collar jobs* rather than manipulative skills. However, evidence within the last 15 years or thereabout seems to indicate that Pakistan is blessed with natural resources. (Govt. of Pakistan, National Education Conference, Islamabad, 1989.)

Thus, for the sake of effective utilization of these natural resources, a need for workers has developed who may be educated in occupations that require both technical knowledge and skills of a different nature from those needed by office workers.

One of the objectives of Pakistan's Second 5-year National Development Plan was to establish Pakistan firmly as united, strong and self reliant nation, a great and dynamic economy (1979). It should be noted that these objectives were not fully achieved because of lack of proper

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trained manpower within the country. For any nation to be self reliant and to claim to possess dynamic economy, it should be able to supply, the trained manpower for its various sectors of economy, while depending less on foreign assistance (Govt. of Pakistan, National Education Conference, Islamabad, Ministry of Education, 1989).

The Third Plan (1965-70) indicates that there is greater realization for successful implementation of plan depends not just on availability of financial and other capital inputs, but more importantly, on adequacy of trained manpower in the various occupations. An observation is that the Federal Government, having acquired enough experience from its unfulfilled objectives of developmental plans, has recently taken a more positive approach towards the manpower as well as unemployment problem. (Economic Survey of Pakistan 1988-89.)

With the expanding economy, there has been a demand for workers educated for technical occupations. This demand has been increasing, and consequently educational programmes in schools, technical institutions, universities, and industry are being developed to meet this demand.

Technical Education: Its Nature and Role

The term technical education has no single universally accepted definition but what is common among various definitions is that the basic goal and its objectives still remain the same. Technical education has been referred to as that phase of education which seeks to help the students acquire specific mechanical or manipulative skills required in industrial arts or applied science. (Advanced Learner's Dictionary, 2nd Ed.) Thus, a student at the completion of his technical education programme is expected to have acquired basic expertise in a particular branch of industry and applied science in which he shows special aptitude and interest.

Furthermore, Banjo J. (1974) states that technical education is essentially vocational education intended to provide the skills and manpower for industry and other engineering services required by the society. Whatever is definition is, it is the objective in technical education to give students a broad based competence in a field of technology. The student should have enough background knowledge to start a job with a brief orientation period and quickly take full responsibilities. It is also essential that

the training should be broad and deep enough to allow the graduate to work in a cluster of closely related occupations.

At this juncture, there is a need to point out that all occupations require the use of some manipulative skill and application of some technical knowledge required varies with specific occupations concerned with design, manufacture, sale, installation, and servicing of wide variety of products require more manipulative skill. Several of these occupations are found in industry, business, agriculture, research, and service occupations are regarded by many as technical occupations. Generally, these occupations are considered by many as technical occupations, while the workers are loosely called skilled workers technicians and engineers.

Indeed, jobs in the technical areas, require specific knowledge and skill in planning and control or in operation and maintenance. In other words, a technical education programme is a terminal programme which does not prepare students for universities. It is designed to meet the needs of industry, business, agriculture, and such other areas of human activities.

Current Status of Technical Education

According to the present education policy, the Government recognizes only the following types of technical education institutions outside the universities. These offerings are exploratory in nature and can be classified as Technical High Schools, pilot high schools, comprehensive high schools, with adequate facilities for teaching certain subjects at secondary level. Institutions for preparing skilled labours, technicians, industrial technologists include vocational training institutes, technical training centres, polytechnic institutes and colleges of technology. Preparation of teachers for technical institutions is carried out at the Institute of Education and Research, Punjab University, colleges of technical teacher education for post-secondary level such as National Institute of Technical and Science Education, Islamabad while another one is in Faisalabad run by the Provincial Government.

The Departments of M.B.E. and Technology Education offer Post-Graduate degree programmes in the areas, namely Business Education and Industrial Technical Education. Exactly this type of programmes are under consideration by faculty of education, Islamia Univer-

sity, Bahawalpur with a view to reducing the manpower shortage key sector of our economy.

The Nature and Need of Technical Education

At present, about 30% of elementary school-leavers do not enter secondary schools, and about 50% of secondary school-leavers do not go further for higher academic education. Generally, the schools do not furnish the students with the minimum training enable them to enter the labour market. Technical education courses are therefore most needed to attract and keep in school children who are likely to leave the school because they are unable to obtain suitable preparation for employment. In addition, only one hope for Pakistan is by helping every individual to help himself. Furthermore, for boys and girls in the country to perform their chosen tasks better, to understand the relationship of their particular work to the whole, and know what their labour is worth and a good knowledge of technical education is required.

Pakistan is rich in natural resources, some of which are lying dormant due to lack of technical manpower. At the moment, technical education is greatly needed to help in conserving and developing our natural resources. Coupled with it is the fact that technical education is needed to develop human resource. The greatest treasure which Pakistan holds today is the under-developed human resource and vocational possibilities of many adult workers as well as the great number of our school children. It is obvious that the waste of labour by imperfect or improper employment can largely be avoided through technical training. Such training in required skills, is the most certain remedy for employment.

It is also recognized that the practical training of workers brings both immediate and lasting economic returns in increased production and wage-earning capacity. Also, with the rapid developments in our economic sector, there has ensued a constant and increased demand upon industries for more and better goods and services. Thus, technical education is needed to meet the increasing demand for trained workers.

In essence, every citizen should be equipped to contribute effectively to the welfare of the society. Roberts (1957) in his book *Vocational and Practical Arts Education* has written:

"The highest, possible welfare is achieved only when each individual produces to the extent of his capacity. For this purpose, the necessity for equipping each person for some occupation is a fact that even the most primitive society has recognized."

Implications for Developing Technical Education in Pakistan

One of the main defects in educational system, Pakistan is the strong bias towards academic and literary subjects. Hence, technical education has not been adequately developed, resulting in the dearth of men with the technical *know how* needed for the effective implementation of the various programmes for economic and industrial developments.

Moreover, a major deterrent to technical education in Pakistan is that most of the young people in the country as well as the adults, unlike people in developed countries have had very little interaction and interface with modern technology and are just starting to experience the technical age. Thus, an average Pakistani youth lacks the basic mechanical knowledge, attitude, habits and thinking that are a normal part of growing up in a technological culture, and all of which facilitate technical training.

An important factor which seems to inhibit the development of technical education is the attitude towards manual work. A Pakistani has not usually been prepared to contribute to the development of nation. Hence, for a lasting progress in the country the following are needed to be implemented:

1. A programme has to be chalked out to train the individual minds about the needs of the society and the importance of work. A development of the sense has to be aroused that there is joy or happiness and honour in the Islam also emphases dignity of labour work. The development of a philosophy which stresses the need and value of hard work towards self realization and national development.

2. Until very recently, the willingness and motivation of Pakistani leaders to direct the course of vocational and technical education were lacking. But, if the current emphasis is anything we can depend upon, it can then be assumed that he desire exists for improving the lot of the technical education. However, a

good deal of commitment and dedication needs to be associated with the desire to promote the course of technical education in Pakistan.

3. All forms of education are expensive. As an institution continues to develop, so does the cost mount. Moreover, some forms of techncial education are more expensive than most other phases of the education programme. Cost of tools and equipment, need for more buildings, and higher teacher salaries are among the causes.

4. It is expected that any shift in priorities, as a result of changing social needs, will require corresponding changes in the curriculum. but unfortunately, the curriculum changes in Pakistani schools are somewhat static in contrast to the modern curriculum which is dynamic and growing. Thus, many of the technical institutions in the country have been using syllabi which were drawn several years ago. A number of occupational changes have appeared from the effects of technology which have not been reflected in the curriculum.

   Furthermore, the curriculum for technical education must not be limited merely to training of the student to become a worker in a particular job. Rather it should also equip all youth and adults for successful living and earning as well as learning in a society which is rapidly developing technologically. The acquisition of such knowledge will enable the students to cope with the social, economic and political changes which are bound to come as a result of technology.

5. The recruitment and preparation of qualified teachers for technical subjects have been a continuous problems since the introduction of technical education in Pakistan. Among the roots of the problem is the poor condition of service of technical institutions when compared with their counterparts in the industries and other sectors of economy where better condition of service exists. If technical education is to expand as it should meet the needs of the present and future Pakistanis' it will need many more qualified teachers in the years to come.

Moreover, since good teachers of technical education have always been difficult to find and retain, community appreciation and understanding of the importance of technical teachers would help to secure and hold good teachers in the area of technical education.

Conclusion

In conclusion, it needs to be re-emphasized that the development of our agriculture, commerce and industry may not be attained as quickly as we would all cherish unless there is a serious effort on the part of all of us to support the course of technical education.

No phase of educational system is more important to the economic development of a country than technical education, and yet it is not properly planned and managed in our country.

Education and training of technicians has been accepted as a crucial sector of manpower development in achieving the socio-economic goals by all developing countries. Technical education can never be in a steady state, but must constantly be seeking new solutions as newer problems are generated by technological changes and industrial development.

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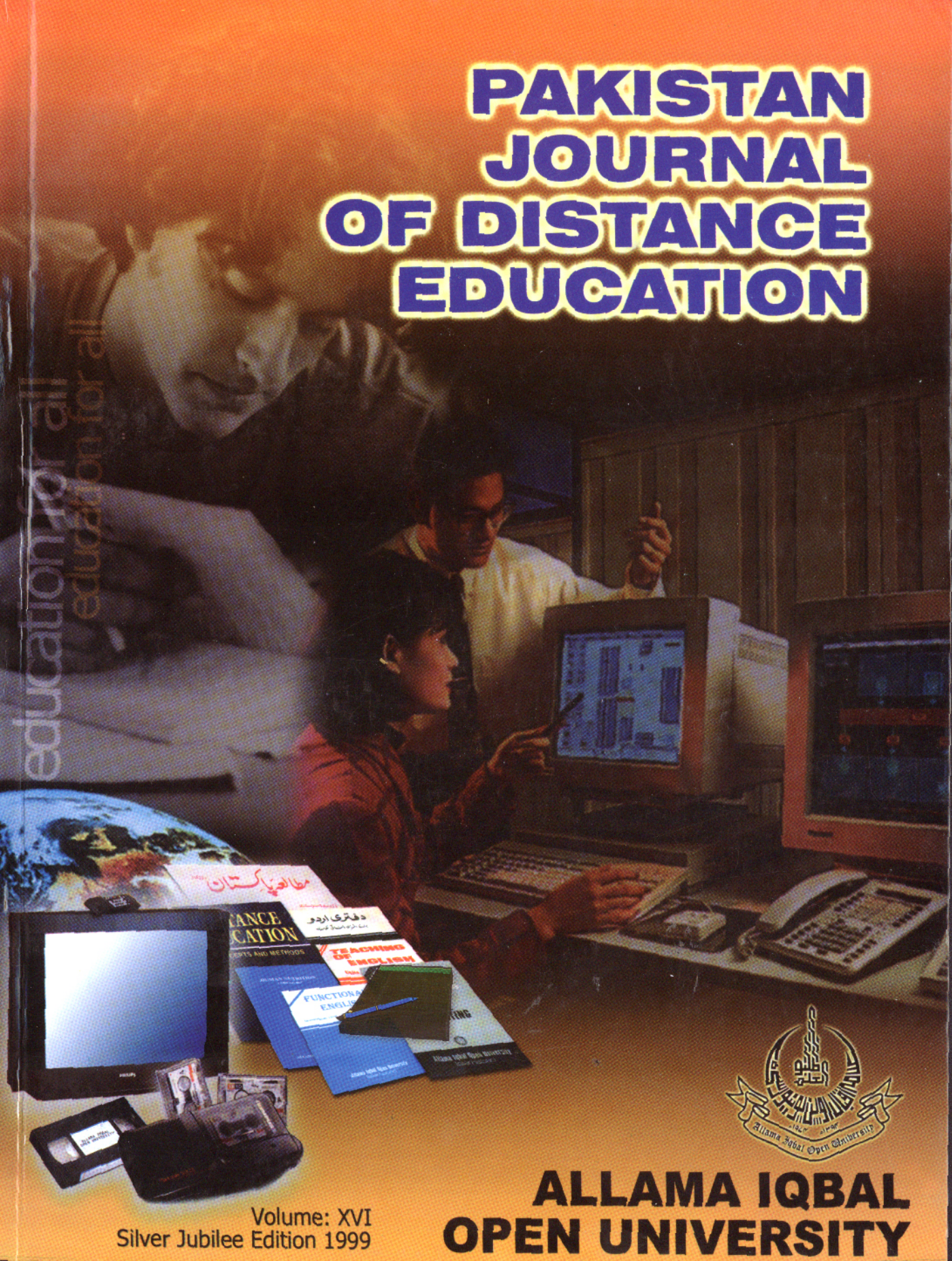

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ALLAMA IQBAL OPEN UNIVERSITY

Development of Secondary School Science Curriculum in Pakistan

By

Nabi Bux Jumani*

In Pakistan the curriculum is prepared at national level according to Act No. X of 1976. It is an act to make provision of federal supervision of curriculum textbooks and maintenance of standards of education (published on the 3rd April 1976 in the Gazette of Pakistan. Registered No.S. 1033/L 7646).

The curriculum of science subjects at secondary school is being taught with the help of textbooks written in accordance with curriculum, prescribed by National Curriculum Committees. The revision of curriculum started at all levels in the country in late sixties. From class 1 to X, the science curriculum was developed by the local experts while insight and benefit was also taken from the curriculum developed mainly in foreign countries. Revisions took place in 1978, 1986 and 1990s.

Since independence in 1947, there has been growing consciousness in Pakistan about the role of science in the service of the nation in its overall development as a modern state. The Quaid-i-Azam, in his message to the Pakistan Educational Conference (1947) emphasized the need for scientific and technological education in these words:

> *"There is immediate and urgent need for giving scientific and technological education to our people in order to buld-up our future economic life and to see that our people take to science, commerce, trade and particularly well planned industries".*[1]

The above message of the Father of the Nation shows the importance of education, particularly in the scientific and technical fields and its significance for the people of Pakistan.

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The Advisory Board of Education for Pakistan and in its reports and policies issued from time to time emphasized science education. One of the items of the agenda for the 4th meeting of the Advisory Board on Education reads (1950): *"If Pakistan is to fall in line with first rate nations of the world, tremendous efforts will have to be made to inculcate, stimulate and organize a scientific development and build un-effective programme of universal scientific training."*[2]

The Commission on National Education (1959) stressed the importance of science education in these words:

> *"In an age when science and applied technology determine the ratio of progress of nation the teaching of Science and Mathematics should be given a strong place in our secondary curricula. These subjects have, however, had to yield their rightful place in our school to language teaching and other literary subjects."*[3]

As a result of importance given to science education, massive curriculum reforms were undertaken in 1950 at all levels i.e., Primary through university, and science was made a compulsory subject for all students at the secondary stage in the content of science education. The curriculum reforms of 1960 were followed by *"syllabus reforms of the intermediate level for the purpose of modernizing teaching content and methodology in science and mathematics"*[4], according to the "Report of the Present Status and Future Plans (1967). In 1947 the success of the revision programme at the intermediate level inspired the West Pakistan Education Department to extend its efforts to high school stage in 1968. The process of modernization of science syllabus was extended to middle stage and to B.Sc. class in subsequent years. In 1972, the Education Policy 1972-80 triggered a new series of activities in the field of curriculum at the secondary level, biology was added as an active science subject and now the students offering science group study physics, chemistry and biology. The presently taught curricula up to the secondary classes were revised as a result of implementation of the policy (1967). *"The Physics curriculum was intended to provide the students with basic knowledge of Physics and to introduce them to the advanced topics and the developments in the subject problem solving skills have been emphasized and laboratory work as well as class room demonstration occupy prominent places in the physics curriculum"*[5]. At present Physics, Chemistry and Biology at Secondary and higher secondary level occupy a place as a full-fledged discipline in the

syllabus and these are generally taught as active subjects. However, it is observed that the textbooks still have a number of mistakes which create misconception into the teaching and learning.

In 1974, various Boards of Intermediate and Secondary Education in Pakistan were entrusted with conducting research studies on various subjects. As such, the Board of Intermediate and Secondary Education, Multan conducted study on evaluation of chemistry curriculum and the Board of Intermediate and Secondary Education, Hyderabad on curriculum of Physics etc. Mustaque Ahmed Goraha (1972) in his doctoral study entitled *Study of the Process of Curriculum Change in Secondary School Science in West Pakistan during 1967-68* discusses curriculum planning/designing, textbook preparation, evaluation as a process and teachers training. In the presentation and analysis of the data regarding curriculum he discusses the preparatory stage, the developmental stage and implementation stage.

Before independence, University of the Punjab was the only established University conducting secondary school certificate examinations throughout the present Pakistan. The Universities of Sindh, Karachi and Peshawar started functioning after the creation of Pakistan.

After the birth of Pakistan in 1947, there emerged a growing consciousness in the country about the role of science in the service of the nattion for its overall development as a modern state. The commission on National Education was set up in 1958. It gave the idea that science should be given a vital position in our education at all levels and it should be made a compulsory subject at primary and secondary school level. As such, teaching of science was included in the curriculum at primary stage and general science, one of the compulsory subject for classes VI to X. Moreover, basic sciences like chemistry, physics, and biology have been introduced in a more specialized form in IX and X classes to the students opting for science courses.

Research Report on *Curriculum Development of Chemistry in Pakistan* indicates as under:

> "*The National Curriculum Committee for improvement of the Science courses at various, set up in 1960 made a major attempt to rectify the science syllabi for primary, secondary and intermediate stage uniformly for Pakistan as a whole.*"[6]

But, the committee had to do the job in a limited time and afterwards there was no attempt for the revision of the syllabi on a national scale. In addition, the individual Boards of Intermediate and secondary educaiton had to reduce the contents of the courses due to local limitations. They could take very little advantage to these developments and their science curriculum was prepared to the needs of the traditional past. The lack of coordination between school and college levels created inconsistency in the science education system as a whole.

The implementation of science courses considerably on the availability of qualified teaching staff, suitable classrooms, well equipped laboratories, good libraries and teaching aids.

During the first decade of our independence, no effective step was aken for the improvement and expansion of science, education in our country. According to Research Report on curriculum development of chemistry in Pakistan:

> *"Considerable steps in this direction were taken during the second decade. But the science education continued to suffer due to the performance of academic type of syllabi and the science teaching geared more to the needs of the traditional post than to needs of the expanding future".* [7]

The Report further mentions:

> *"The total expenditure on education averaged 1% of the GNP which after meeting expenditure on other types of education left very little for science education. As a result scinece education suffered both in quantity and quality. This unfortunate trend without any notable change in science course remained till 1960".*

The Report discussed the reformation of syllabus while mentioning that:

> *"Government of West Paksitan launched a massive programme of syllabus reformation in 1967. This programme came under discussion at high level meeting of advisory committee members, officials of the Ministry of Education and experts from UNESCO".*

The National Education Policy and Implementation Plan 1979 stress upon the need of revision/development of curricula. As a result of this, new secondary stage curricula were developed in 1986. Education Policy 1992-2000 and 1998-2010 emphasize revision of curriculum of the subject of science at secondary school level. Institute for the Promotion of Science Education and Training (IPSET) is entrusted with the responsibility in this regard. Textbooks of science subjects at secondary school level are published and being taught in schools for 1999-2000 academic session.

Private sector is also allowed to publish textbooks on competitive basis unlike past practice when merely provincial Textbook Boards were responsible in this regard. National Education Policy 1998-2000 mentions:

> *"Private and foreign investment shall be explored in the field of education and framework of incentives/encouragement to such entrepreneurs shall be provided". (42)*
>
> *It further mentions "Curricula for secondary stage (IX-X) shall be revised with a view to stimulate problem solving, independent thinking". (44)*

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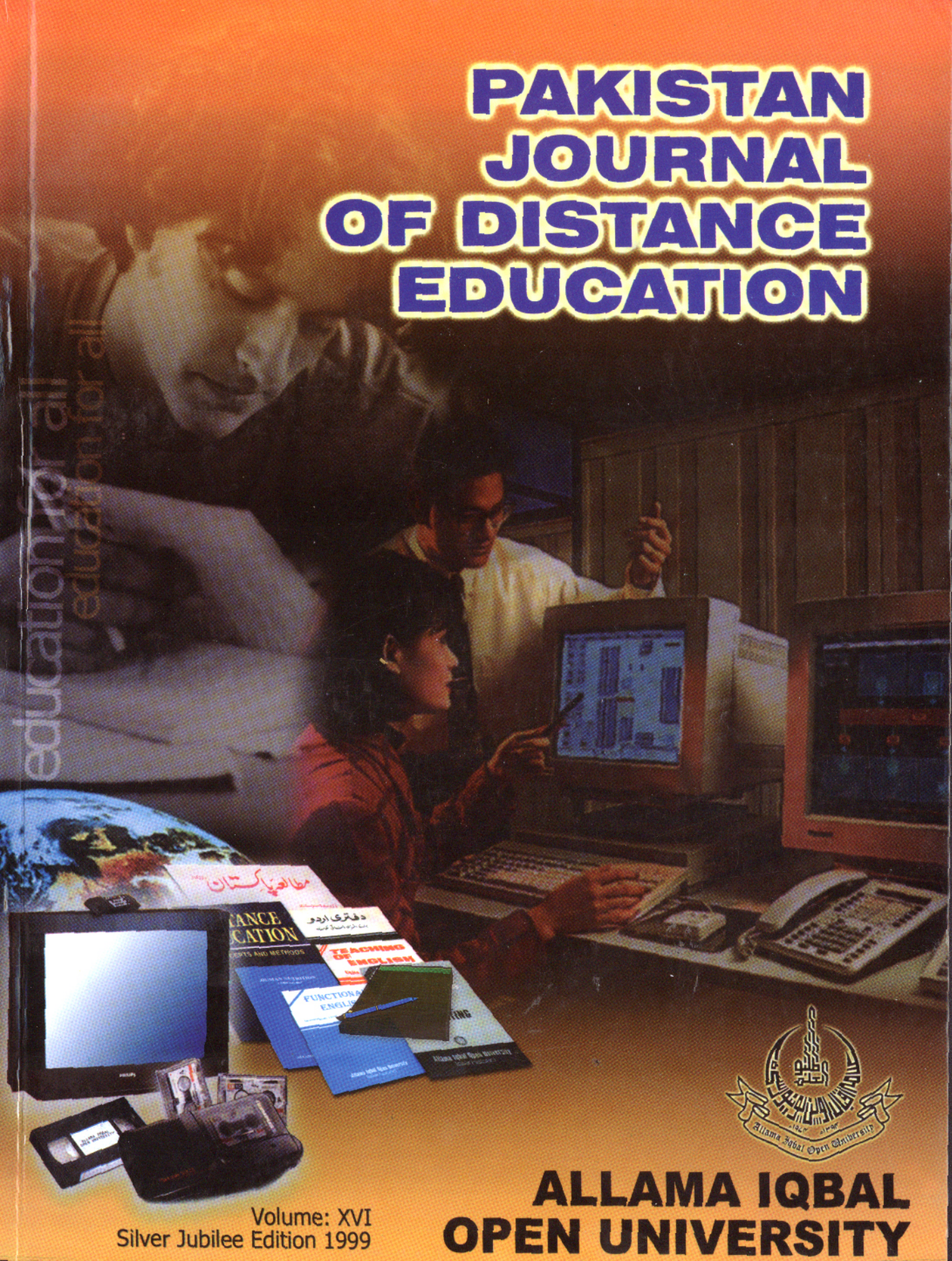

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An Analysis of the Conceptual Framework of INSET and its Application in Pakistan at Primary Level

By

Dr. A.R. Saghir*

I. Meanings and Nature of INSET

Nobody could deny this fact that the teacher plays the most crucial role in the achievement of the objectives of education in a country. He/she is thus the most important factor in any system of education. There is ample evidence to prove that other factors held constant, the level and quality of student performance is directly proportional to the instructional competencies of the teacher demonstrated in the class.

In view of the most crucial role of teacher in promoting the cause of education and the attainment of Education for All (EFA), it was underscored by the World Conference of EFA held in Jomtien, Thailand, in 1990. In this regard, the training of teachers was identified in subsequent meetings held in New Delhi, in 1993; and Bali, in 1995 as the most important strategy and the biggest challenge in the global struggle to improve the level and quality of student learning. Francis L. Higginson has rightly remarked that more than ever before, society seems to expect teachers to solve all its problems. Employers want them to provide disciplined, pliable, easily retrainable employees. Community, religious and political leaders want them to prepare young people who are willing to commit themselves to supporting the public welfare.

Regarding the role of teachers, APEID/UNSCO Report makes apt remarks. To quote from that source, 'Teachers have to be agents of change for improving the life of the community. However, many trained teachers do not have enough competencies and confidence to carry out their role beyond the classroom. They have not kept pace with the rapid growth of knowledge, particularly in science, technology and mathematics.

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Their knowledge and skills in these subjects need to be upgraded. Such a multi-dimensional and significant role of teachers does make it extremely important that they are prepared adequately for their highly important job. The situation does, therefore, call for an adequate and systematic analysis of the overall conceptual framework of INSET for realistic planning for that purpose.

The importance of pre-service training being well admitted, the in-service education of teachers (INSET) keeps them fully abreast of the latest knowledge and techniques relevant to the instructional work in the ever-changing situations. Before we proceed further, it seems quite pertinent to have a look into the conceptual frame-work of INSET. The literature is replete with numerous definitions and explanations of the concept of INSET. According to Bolam (1980), the in-service education and training of teachers (commonly abbreviated as INSET) may be defined as those education and training activities engaged in by primary and secondary school teachers and Principals, following their initial. Professional Certification, intended mainly or exclusively to improve their professional knowledge, skills, and attitude so that they can educate children more effectively. According to APEID/UNESCO (1993), INSET includes all training activities which address the differentiated needs of teachers in schools (including teachers without pre-service training) to improve their knowledge, skills and attitudes for better instruction.

II. Objectives of INSET

Before we take up our discussion on INSET at primary level in the context in Pakistan, let us have a brief overview of the objectives of INSET in general. Objectives of INSET focus, inter alia, on up-dating the knowledge and skills of the teacher so as to equip him/her with the latest techniques to enable him/her perform his/her functions in an effective manner in the ever-changing world. In this connection, G. De Landsheere's remarks are quite pertinent . He very correctly holds that the need for further education during a teacher's entire career has been recognized. For teachers who have enjoyed an education of good quality, further education can be limited to reading the disseminated information, to periodical seminars, short refresher courses and, of course, postgraduate study. To quote his remarks further, there are cases, however, where the teacher's education has become obsolete (at least to a significant extent) or has practically never existed in certain aspects deemed important for their job. Examples of such situations are the introduction of a 'new mathematics'

curriculum when teachers have never studied it themselves, or the introduction of teachers to education, research methods and techniques when these aspects had no place in the initial training programme. In such a case, further teacher training is often called "recycling". So, the process refreshes the teacher's knowledge and techniques or in some cases even provides him/her exposure to the new concepts in relation to his/her ever-changing role.

How does the time factor necessitate INSET for teachers, has been described by Judith E. Lanier and Judith W. Little very beautifully. According to them, the methods emphasized in beginning teacher preparation do not accord well with the challenges subsequently met in the classroom. They have substantiated their viewpoint in the light of several researches (Eddy, 1969; Fuchs, 1969; Griffin and Hukill, 1983; Little, 1981; Lortie, 1975; Ryan, 1970). Obviously, this situation necessitates the INSET programmes to enable the teacher meet such subsequent challenges.

The overall objective of INSET being multi-dimensional, it may be pointed out that the INSET aims not only at upgrading teacher's knowledge and skills and improving his attitude, but also at fostering his/her continuous professional growth. These aims, according to British government committee, as quoted by Eraut, include the following:

1. To develop their professional competence, confidence and relevant knowledge,

2. To evaluate their own work and attitude in conjunction with their professional colleagues in other parts of the education service.

3. To develop criteria which would help them to assess their own teaching roles in relation to a changing society for which schools must equip their pupil.

4. To advance their career.

Objectives of INSET were also spelled out in the regional meeting of those responsible for development of teacher education in fourteen

countries including Pakistan, organized by APEID at Hobart (Australia) in 1986. They identified them as follows:

1. The inculcation of a value system appropriate to a career in teaching.

2. The imparting of specific new skills and knowledge.

3. The retraining of teachers to enable them to keep pace with new trends in education.

In the light of our above discussion, we can conclude that INSET is not being conceived merely as a means of updating the knowledge and skills of teacher or as a means of making up his/her deficiencies by teacher educators. In addition, it is also preparing a teacher for a new emerging role, and giving his/her the confidence and capability for devising innovative solutions of school problems, in cooperation with the community, and for continuous professional growth leading to self-fulfillment.

III. Strategies of INSET

APEID/UNESCO identify various strategies of INSET. They are briefly summed up as under:

1. **Distance Education**: Distance education strategy has been tried and carried out successfully in many countries of the Asian Region. There is a dire need to develop a good network of communication, self-learning material and audio-visual support in this strategy.

2. **Cascading Modality**: Under this strategy, selected teachers/Master Trainers are trained at the central level who, in turn, impart training to teachers at provincial/state/district levels. This strategy is being extensively used in Malaysia, the Philippines and many other countries including Pakistan as well.

3. **Use of Resource Centres and Teacher Activity Centres**: This strategy involves the setting up of resource centres or teacher activity centres, which become the venues for conducting INSET. They hold regular meetings at the centres.

Malaysia has got about 350 teacher resource centres. Similarly, many other countries of the Asian Region have also started setting up similar centres for INSET purposes.

4. **Identification of Leader Schools**: under this strategy, some suitable schools are identified and designated as Leader Schools. These schools are provided with requisite facilities for conducting INSET programmes for teachers working in the surrounding schools. Such schools are found in the Philippines and Thailand.

5. **In-house/School-based Training Modality**: This strategy involves the provision of INSET facilities at school level. This is followed by the training of teachers by the senior teachers of the same school or experts from outside for this purpose. This practice also does exists in Pakistan ,but just on informal basis. It is yet to be institutionalized.

6. **Establishing a Pool of Experts**: Under this strategy, a pool is set up of experienced teachers and experts who are then sent for training at central level. These teachers, upon their return, meet other teachers regularly and impart training to other teachers.

7. **Other Strategies of INSET**: The source, as quoted above, also refers to several other strategies, which are generally adopted for INSET purpose in different countries. These strategies are as under:

   - Setting up and Strengthening of Teachers Professional Organizations
   - Setting up Database on Experts in Various Educational Fields
   - Subscription to Journals and Periodicals
   - Attachment Programmes for Teachers

Bob Gough and Dave James suggest a number of methods and techniques of INSET, which in spirit, correspond to the strategies of INSET as mentioned earlier. These methods and techniques include (1) Conferences (2) Visits and Observations(3) Meetings (4) Lectures (5) Workshops (6) Group Work (7) Case Studies, and (10) Role Play.

IV. Effectiveness of INSET

The concept of *effectiveness* has to be differentiated from that of 'effect' for its better understanding in the context of training of teachers. According to B.J. Biddle and M.J. Dunkin, effectiveness deals with a narrower range of events. On the other hand, the effects of teaching include all outcomes that can be shown to be influenced by teaching. According to N.A. Flanders, H.E. Mitzel (1960) was the first to suggest that research on teaching involved presage, process, and product variables. When Dunkin and Biddle (1974) reviewed the same field of research almost 15 years later, they needed an additional class of variables called 'context variables' which included, in their case, characteristics of the pupils, the classroom, the textbooks, the school, and, the community.

Dunkin and Biddle, quotes Lee S. Shulman, constructed a model for research on teaching based on the earlier formulation by Mitzel (1960). They posited four classes of variables as under:

1. Presage variables, which include teacher characteristics, experiences, training, and other properties that influence teaching behaviour, etc.

2. Context variables which include properties of pupils, of the school and community, and of the classroom, etc.

3. Process variables which include observable actions of teachers and students in the classroom, etc.

4. Product variables which include immediate and long-term effects of teaching on pupil growth intellectually, socially, emotionally, and the like.

V. Some Glimpses of INSET at Primary Level in Pakistan

It has been repeatedly confirmed that the dearth of adequately trained teachers can undoubtedly be singled out as one of the most potent factors hampering the achievement of the objectives of education. A careful review of literature reveals the fact that in most of the developed

countries, there is a wide variety of agencies, institutions and individuals carrying out in-service teacher training programmes. These programmes put in a lot of efforts and make the training activities more and more research-based to meet the ever-growing needs of the target people.

It has rightly been observed in the National Education Policy, 1998-2000 that the quality of education is directly related to the quality of instruction in the classroom. This fact necessitates not only the provision of pre-service education to teachers but also their continuous in-service education. On the contrary, the in-service teacher training programmes in Pakistan are at present generally being organized in altogether a different spirit and in-service training at primary and other levels is being given a very low priority. As per the prescribed norms, a working teacher should receive fresh in-service training input once every five years. In practice, due to the paucity of recurrent funds, not even a fraction of teachers manage to benefit from this facility. Moreover, the quality of in-service programmes is so weak that they fail to motivate the teachers and most of the teachers either try to avoid the course or remain passive participants with little value added at the end of the course.

The situation is not, however, that dismaying. Fortunately, we do have some INSET programmes at primary level, which may be further strengthened. In Pakistan Allama Iqbal Open University presents a good model of distance education. It is launching a good number of training programmess not only for primary level teachers and also for secondary level teachers. During the late 70s and early 80s, the AIOU did plan and launch its famous PTOC (Primary Teachers Orientation Course). The course was especially designed to upgrade and enhance the skills of primary teachers already working in schools. Presently , it is offering a revised course known as New PTOC under assistance from the Norwegian Government.

The cascading modality has proved to be extremely useful in Pakistan specially in providing orientation in teachers, through master trainers, in the techniques of integrating Population Education concepts while teaching different subjects at middle level.

The teacher training unit of the Curriculum wing, Ministry of Education organizes numerous in-service teacher-training courses under its auspices for promoting the cause of primary education, along with the in-service training of other categories of teachers.

As quoted by Social Policy Forum, a number of innovative INSET programmes exist in Pakistan at primary level. The AKES (Agha Khan Education Service) have recently replaced their 9-month FBTD (Field Based Teacher Development Programme) in the Northern Areas with a 19-week in-service programme known as FBTD 2000. This innovative programme includes six week training in content knowledge and multi-grade and co-operative teaching-learning techniques, followed by six weeks of supervised teaching in ones own school, and the last week for review of the experience.

In private sector, the TRC (Teachers Resource Centre) Karachi organizes workshops for teachers and heads of schools. It was established in 1986 by a group of working teachers in response to the declining quality of education in schools. In 1996 alone, it imparted training to 1583 participants from 248 institutions.

The Pakistan Education Foundation , which is an NGO, has emerged as another very strong professional organization and is rapidly establishing its resource centre in Islamabad for imparting in-service education to teachers at different levels. It has already run number of INSET courses in summer vacations which have prove to be very cost effective.

The challenges ahead relating to primary education are so numerous and horrifying that there is a dire need to take drastic steps to further improve and enhance the role of INSET at this level in the country.

1. In addition to going for realistic planning, the curricula need to be up-dated so as to make the same need-based. This requires a comprehensive survey before undertaking the job.

2. The INSET activities being mostly organized at provincial Education Extension Centres, their number needs to be adequately increased for imparting INSET to every individual teacher after every five years.

3. High drop-out rate at primary level demands that teachers be equipped with skills and techniques required for enhancing the retention rate at this level. This would facilitate the achievement of the policy targets of universalization of primary education in the country.

4. There is a dire need to undertake a comprehensive survey and devise a mechanism for tapping this extremely important potential source of senior teachers who happen to have attended INSET courses and thus multiply the fruits of such training for the benefit of the teaching community at large.

6. The number of INSET courses attended by a teacher and the performance demonstrated therein need to be linked with the promotion of teachers. This would motivate them for this activity.

7. Training of teachers needs to be taken up seriously so as to prepare them for their job of imparting training to teachers. Their curricula and training methods may be determined in the light of their training needs assessment

8. INSET institutions may be equipped with adequate physical facilities including the training equipment to be used for imparting training to primary teachers. This, however, requires a comprehensive survey to identify the needs of these institutions.

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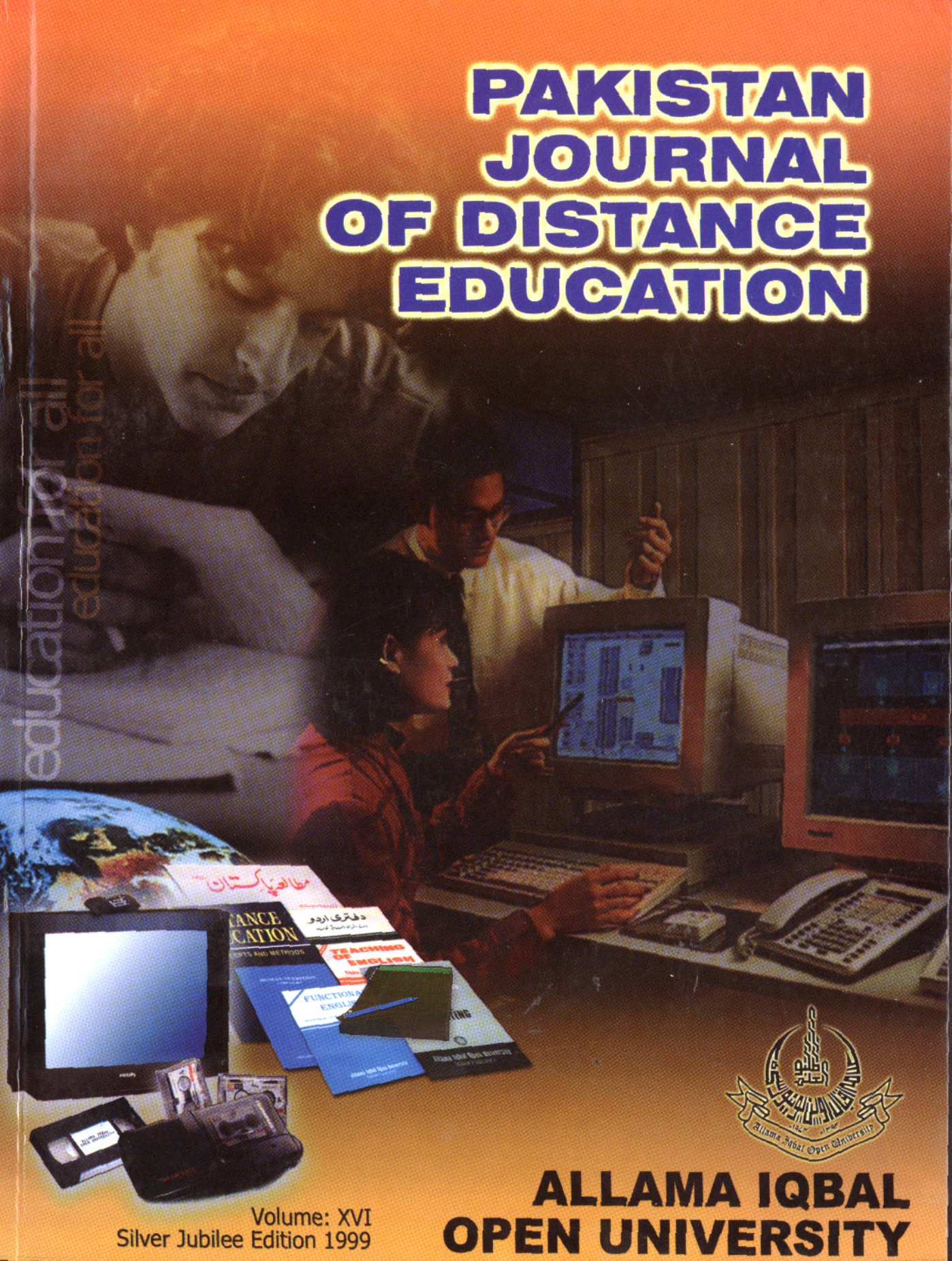

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Examination In Pakistan: Problems and Reforms

By
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Introduction

Concept of examination is as old as education itself. During the process of education it is imperative to test and evaluate the achievements of pupils in order to determine their relative degree of attainments and judge their capacity and fitness of candidates for higher studies. Thus assessment of the progress of students at an educational course and ascertaining their fitness for higher courses of studies are among the basic objectives of tests and examination and are fundamental to the growth and development of education. Two distinct systems of examination have emerged over the years i.e., internal and external. In the internal system, teachers assess the progress of their students and grade them accordingly as they progress in their studies. But with the passage of time the grades and marks awarded by various examiners became disputed and eventually lost their credibility. Therefore, in order to lend credibility to evaluation grades and levels external or public examinations were instituted and the evaluation function of education at different levels entrusted to external examining bodies which confer degrees of qualifications and award grades/marks. Thus examinations have become the exclusive areas of Universities and Boards of Education. However, soon after their institution the external or public system of education came under criticism on various accounts and with the passage of time the criticism grew severer.

In Pakistan, the first Education Conference held in November, 1947 suggested a *critical review of the examination system.* The First Five Year Plan 1955-60) empthatically stated that *the examination has come to serve other than educational purposes-----chiefly as measure of qualification entitling students to admission to higher level of education or for a government or other employment.* The commission on National Education

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(1958) reviewed the situation related to education and found the system of examination symptomatic of many weaknesses. Similarly, the Commission on students Problems and Welfare (1965), the Third Five Years Plan (1965-70), the Education Policy (1972-80), Report of the Inter-Board Committee of Chairmen on Examination Reform (1974) and National Education Policy (1979) have all criticized the prevailing system of public examination and suggested fundamental reforms.

Merits and Demerits of Internal Examination

As regards assessment of pupils progress at an educational course is concerned, internal examination is considered most reliable. The examinee's progress is monitored during the entire course of studies. It ensures complete assimilation of the course content and offer better chances for the application of knowledge and skills gained. The internal evaluations followed by timely interaction between pupils and teachers result in better learning. Internal examination also give proper feedback for effecting improvement in teaching.

However, the effectiveness of internal examinations presupposes highest degree of tacher's devotion and integrity. There are, however, numerous factors which tend to nullify the achievement of the desired objectives of examination. Firstly, it is the arbitrary powers vested in the internal examiners in setting the items of tests and standards of educational measurements. Secondly, it is the existence of various pressure groups i.e. of students, parents, political and religious, groups who try to influence the result of internal examinations. Thirdly, various institutions tend to give exaggerated awards to their students as a prestige point. Fourthly, a considerable time is consumed in the examination which otherwise could be utilized in teaching.

The external system of examination sought to overcome the above stated weaknesses. No doubt, it succeeded in overcoming some of the in therent weaknesses, but this system in the present shape fails to deliver the goods and is one of the major weak areas of our educational system.

Demerits of External Examination

Reporting on Public Examination in Pakistan, J Deakin (1974) cautiously ascribed the malpractices in examinations to the decline in the moral standards of people, indiscipline among students and *too much*

education of the wrong sort. In his report on Public Examination in Pakistan, Deakin states:

> It seems generally agreed that there are, in the top classes of the secondary schools and in the universities, too many students who are unable or unwilling to apply themselves to academic courses and that in consequence many candidates will fear failure, will resist changes in the examinations away from questions demanding only memory or part of the syllabus towards questions involving the higher mental processes and will (in the climate of opinion which has, it seems, developed in Pakistan, not only among students it is claimed that the curriculum is very much overloaded, knowledge oriented, and of Poor quality. The textbooks are defective, sometimes inaccurate, outdated, full of printing mistakes, and prepared in somewhat hurried manner. Similarly, it is said that the teacher are Poor in knowledge and skills, without satisfactory pre-service and in-service training, not devoted to teaching profession and not doing their job and responsibilities seriously. The tendency is to make short cuts with the least possible efforts. Again the institutions insufficient are inadequate in number and facilities. These have building space, over crowded classes, insufficient number of teachers and instructional material, no supplementary reading materials for teachers and the students, no teachers' guides or help books, no incentives or facilities for the teacher to keep them up-to-date or to experiment innovations in the classroom. (From Deakin, 1974, App.I, P.5)

Enumerating the defects and weaknesses of the examination system the report observed:

It is agreed that the examinations evaluated only a fraction of the outcomes of teaching learning process. They give emphasis on rote memory, as opposed to real understanding, comprehension, and problem solving. they tend to develop poor study habits among the students as they postpone all efforts till the last month or so. The examinations become instrumental in lowering the standard of teaching because teaching is oriented to the type of questions set in the examination and thus become subordinate to examination system. Thus no efforts are made to develop original thinking, problem solving and positive attitudes or habits among the students in the classroom. Placing entire confidence on the result of examination after one or two years instruction is not in accordance

with the modern theories of learning. Attaching too much importance to the examination marks is one of the major causes that resulted into malpractices in the examination system. The examination score makes or mars the future of the student --------his admission to service or to institution of higher learning, or award of scholarship etc. It is the result in the public Examination that gives reputation or otherwise to the institution. It is the pass percentage in the public examination that measures the efficiency and work of the teacher. Thus the student, the parent, the teacher, and the head of the institution all tend to use all means---legal or illegal---to place the student in a better position in the public examination. Unfortunately even the educated and highly placed parents and sensible teachers or heads of the institutions sometimes indulge in or encourage malpractices in order to achieve the desired end.

The National Education Policy (1979) called the system of external Examination prevalent in our institutions *Obsolete* and one which *encourages learning by rote and subjects the student to various stresses and strains.* (P.66)

The following list of weaknesses related to examination in the country is based on and extracted from a review of the Government documents on examination published from time to time. The list also presents the sequence in which various weakness popped up in the examination system:

(i) 1951: public examination shifted from the assessment of a student's progress during an educational course to determining his fitness for a higher course,

(ii) 1955: examinations served other than educational purposes---- chiefly as measure of qualification entitling students to admission to higher levels of education or for employment,

(iii) 1958: examinations at the end of classes X and XII are taken too seriously and absorb the entire attention of the teachers and the school authorities...They consist of written tests in which success can be achieved through mere memorization, and practically no effort is made to test the pupil's intelligence and no credit is given for the work done during two years.

In higher education, for most students the examination has come to be more important than the acquisition of knowledge... Teachers have taught only the basic minimum of what was required by the syllabus and have substituted cramming for education... The examination function of universities has dangerously over-shadowed teaching and research,

(iv) 1966: malpractices are wide spread in examination, poorly constructed test items and idiosyncrasies of examiners do not accurately test scholastic attainment or intellectual development of students,

(v) 1965-70): unfair practices have been mounting and the examination system is conducive to laziness of the pupils,

(vi) 1971: (a) unhealthy competition among Boards for awarding large number of first division to students in their jurisdiction

(b) student indiscipline and mal-practices in the examination centres

(c) guardians assisting their wards in resorting to unfair means

(d) Outside influence in public examinations and corruption among the staff in the examination centres

(e) intimidation of invigilating staff

(f) public pressure to defeat the very policies and procedures which safeguard the sanctity of examinations,

(vii) 1972: percentages of failure is high and causes high rate of student dropout and frustration,

viii) 1973: education system as a whole is responsible for the defects and weaknesses of examinations. In spite of all their shortcomings the examinations make or mar the future of a student, they give reputation or otherwise to institutions, they measure efficiency of teachers. Thus, the students, the parent, the teacher , and the Head of the Institution all tend to use all means in public examination,

(ix) 1974: for fear of failure many students (also some parents and teachers) resort to unfair means, and

(x) 1979: the system of public examinations prevalent in institutions is obsolete.

Major Defects in Examination system

An analytical review of the facts presented in various government documents reveal that the problems of examinations are consequences of certain defects in our education system as a whole. Unless something is done to remove these defects, any meaningful improvement in the examinations is not likely to be possible. Following defects in our education system have been pointed out by the experts:

1. The examination do not assess the progress made by a student during an educational course.

2. The examinations determine the student's fitness for a higher course or employment.

3. The examinations comprise of written tests in which success can be achieved through memorization.

4. Examination function of universities (and of Boards also) has over-shadowed those of teaching and research.

5. Examination do not provide accurate test of scholastic achievement of students.

6. Examination do assess intellectual development of students.

7. Idiosyncrasies of examiners are very well know in evaluating student performance in examination.

8. Too much education of wrong sort for too many people above the class VIII level.

9. The curriculum being overloaded, knowledge oriented and of poor quality.

10. Teachers are poor in knowledge and skills, and not devoted to teaching profession.

11. Institutions are inadequate in number and facilities.

12. Examinations evaluate only a fraction of the outcomes of teaching-learning process.

13. The examination scores makes or mars the future of the students.

The above defects and weaknesses of the education and examination systems have caused the following problems.

1. The examinations are taken too seriously and absorb the entire attention of the teachers and the school authorities.

1. In examinations, success can be achieved through memorization.

3. The system of public examination destroys any incentive to study until the examination day looms near.

4. For most students examination assume to be more important than acquisition of knowledge.

5. Most teachers teach only what is *important* and substitute cramming for learning.

6. The system is more conducive to laziness.

7. High percentage of failures and dropouts create feeling of frustration and despondency among affected students.

8. There are too many students in educational institutions who are unable or unwilling to apply themselves to academic course.

9. Students, teachers, parents, and heads of institutions resort to unfair means in examinations.

10. Student indiscipline and malpractices in the examination centres.

11. Outside influence in public examination.

12. Corruption among the staff in the examination centres.

13. 'Public pressure' to defeat the very policies and procedures which safeguard the sanctity of examination.

Suggestions for Improvement

The need for effecting improvement in the examination system was felt in the First Educational Conference(1951). The Conference suggested use of a Cumulative Record Form as Part of the certificate to be issued to the students after completing each level of education. In respect of Higher Secondary Examinations it was observed that it should be exclusively reserved for the purpose of testing a student's proficiency to pursue courses of studies at universities and other institutions of corresponding grade. Since this would be a qualifying examination the teachers of the institutions of higher learning would have to be satisfied with the standard of the performance of a student, it would be necessary that "they should be given a large share in the conduct of examination". The conference also recommended use of objective type of tests as supplementary means of testing attainments.

The authors of the First Five year plan (1955-60) in fact carried out the recommendation of First Education Conference and suggested remedies to the problems of examinations. It included the following:

1. University examinations should be limited to degree examinations... boards of Secondary Education should take over the responsibility for matriculation and eventually for intermediate examinations, and such examinations should be in terms of student progress in accomplishing the particular purposes of secondary education.

2. Only the colleges which satisfy a certain standard should be recognized for affiliation to the universities and only they should be permitted to present students for degree examinations; this should restrict any facilities that may be permitted for private students.

3. The Government should invite a committee consisting of vice-chancellors and a few selected principals of colleges to consider this matter/who to go for higher education/and make recommendations on which the Central Government in consultation with Provincial Government could announce their considered views for the guidance of universities and colleges.

4. Affiliated colleges should present students for degree examinations, provided that in their judgement the students have satisfactorily completed the prescribed course of study

5. The universities should encourage the institution for B.A. degree examinations of the unit course system of teaching each unit extending over 12 to 18 weeks. Under this system pupils would be able to concentrate on subject at a time and complete it by satisfying prescribed test, which would include examinations, credit for work in the class, and cumulative records of achievement.

6. Employers should aim ultimately to devise their own particularized measures of job qualifications. A measure of this kind, if found practicable would go a long way to free the minds of pupils from the specter of employment specifications of a mechanical character, distinguished by labels only. The conditions are not favourable for making such a change in the immediate future, but in view of its importance it needs to be studied and borne in mind.

The Commission on National Education (1959) concluded that a system which combine the features of both external and internal examination would be more desirable in our situation. In case of examination held at the end of classes X and XII, the Commission was of the opinion that public examination are essential for testing overall grasp of the subject. The Commission, however, recommended that public examinations should be supplemented by an assessment of schools work done and the performance in the periodic test throughout the year by giving due credit in determining the final result in the public examination.

Realizing that there would be possibilities of abuse of this kind of assessment by teacher-examiners, the commission said:

We recommend that the results of the periodic tests be publically recorded by the teachers on the notice board as well as in the pupils, progress reports. This will be a sufficient check, in our view, for no teacher will be able to face his class if he gives high marks to examines whom their classmates know to be weak.. In addition, a more rational relation must be established between instruction and examinations. At present, examinations completely overshadow instruction instead of growing out of it and being its natural climax. (pp. 123-124)

The commission also considered the problems of private candidates at these stages of examinations. While not approving the idea of private candidates, the commission recommended that:

> .....for such candidates the universities and Boards of Secondary Education should conduct external examinations. The external examinations should, however, be conducted only in such subjects as do not require sustained laboratory work; there should be no external examination in science subjects such as physics, chemistry and biology. (p.124)

As it was in case of secondary school examinations, the commission recommended that in higher education also the "external examinations should be supplemented by regular internal examinations prepared and marked by the teacher throughout the academic year."(p.23). The commission also considered various problems which could arise out the practice of internal examination in the colleges and universities. It was, therefore, emphasised that:

> periodic examinations be conducted by teachers. These should be held approximately once a month or, if advisable, even more frequently. The "answer" papers should be returned, and marks posted. A cumulative record should be prepared for each student. A student should be required to obtain pass marks in both his internal and external examinations. His standing and division would, however, be determined by the total figure. The colleges should be expected to present for the university examination only those candidates whom they consider, on the basis of their internal marks to

have a reasonable chance of success. The universities should scrutinise the internal awards of their affiliated colleges so that if these should differ widely from those of the external examinations, the reasons for the divergence may be looked into .(p. 24)

The commission also suggested that "the essay-type questions should be supplemented by the new type objective tests that have been developed in other countries". (ibid). It was said that the job of exploring the possibilities of new types of testing, and devising and standardizing the tests would be the responsibility of the Institute of Education.

As in secondary schools, the Commission did not approve of the idea of private candidates in the higher education, and suggested that "these concession may be continued for a further period of five years only and that they should be restricted, as at present to Bachelor of Arts pass degree". (P.25)

The Commission on Student Problems and Welfare (1966) reviewed the examination system of the country and suggested several measures to bring reform in the examinations. Considering our own specific situation the Commission opposed the idea of adopting "American system of examination" on the plea that "its success depends mainly on an honest and objective evaluation by the subject teachers and involves a radical change-over to a method not fully understood by the teachers themselves." (p.103). The commission was of the view that the system of public examinations should be continued with certain modifications in it. Some of the modifications suggested were as under:

(i) Sessional and internal evaluation should be used only as a permission to take a public examination (ibid)

(ii) Every question paper should be divided into two parts of equal value. The first part being same as now, "the second part will contain questions designed specially to test the intelligence on the student. The boards and universities should forth with make appropriate arrangements for a systematic study by a competent body on manner in which the questions for the second part should be framed at the various levels.(ibid.)

(iii) Examination papers should be set, for each level of examination by teachers of higher levels. In case of universities, examination papers should be drawn from other universities and there should be a uniform system of examination in all universities. (ibid)

The Commission recommended sever punishments for cases of unfair means. The teachers and staff of the office of the controller of examinations, if found involved in cases of malpractices in examination, should be expelled from service. (pp. 104-105).

The Third Five Year Plan (1965-70) urged an "early development of objective standardized of scholastic achievement for various subjects and classes" (P. 239). To improve the effectiveness of examination in the process of learning and to check the prevailing malpractices in examinations, the authors of the plan advocated "increased reliance and trust on the teacher, who in his turn has to shoulder more responsibility" (P. 240). This however, was not considered enough, and it was deemed necessary that "the whole question of students evaluation has to be subjected to close and scientific study, along with its essential implications for school and college practices and teacher". (pp. 239-240)

The Education Policy (1972-80) which became the source of several proposed reforms in examination during the seventies, had suggested the elimination of annual examinations upto Class IX and recommended *a system of continuous evaluation of the progress, aptitudes and problems of students by the class teachers.* (p.31)

The Policy suggested that:

Upto class IX progression will be based on a combination of periodical-cum-annual examinations and a continuous, scientifically graded assessment of the student's achievement, general behaviour and aptitude. For this purpose, a cumulative record of each student will be maintained by every school. (ibid)

The Education Policy (1972-80) also specified that:

The examination system after class IX will be kept under continuous review and evaluation with a view to streamlining, revising or in any other way changing it. For this purpose, standing Committees on Exami-

nations will be constituted under the National and Provincial Education Councils. (p.32)

The Proposal for a New Education Policy (1969) recommended the continuation of the present system of public examinations at the end of classes VIII, X and XII and the degree. It was, however, suggested that the present system of examinations should be supplemented by objective tests, personality evaluation and progress reports from the institution where the student has carried on studies. It was also proposed that "divisions and classes should be abolished. The certificates, diplomas and degrees may either, show the marks and grades obtained in each subject or a separate endorsement obtained by the student concerned."(p.44)

The National Committee on Examinations (1971) suggested the following remedies to the present malaise in the examination system:

(i) Comprehensive and all-embracing reforms in education are necessary to improve examinations in the country.

(ii) Marks obtained by a student in internal examination should supplement, and be recorded on certificates side by side (in a separate column) with the marks secured by a student in the external examination.

(iii) Internal evaluation should be made reliable and should gradually lead to lessening the importance of public examinations.

(iv) Penal action should be prescribed against persons who create disturbance in or outside the examination hall.

(v) Community should ensure satisfactory conduct of examination in a particular centre or else the centre should be closed.

(vi) Provisions should be made for taking action on the confidential reports from the invigilators, and the invigilators should be compensated for any damages suffered by them in performing examination duties.

(vii) Open book examination may be tried at higher levels of education in specific subjects/ courses only.

The Inter-Board Committee of Chairmen (1973) considered the problem of examination in the configuration of the total education system of the country. Recommendations of the Inter Board Committee of Chairmen included the following:

(1) Educational planning on more scientific basis.

(2) Development of instruments to measure the total personality of the individual.

(3) Development of standard achievement, aptitude and intelligence tests by a central Bureau of testing and evaluation.

(4) Establishment of a test and research cell in each examining body.

(5) Establishment of a Bank of test items.

(6) The textbooks should contain specimen test papers of desired pattern.

(7) Pre-service and in-service training for all teachers in evaluation skills.

(8) Courses for the training of examiners and papers setters should be held.

(9) Internal examinations based on scientific and objective methods.

(10) Development and maintenance of student cumulative record by each institution and its proper use.

(11) Question papers to consist of objective test items, short answer type questions and essay type questions with separate allotment of time and marks.

(12) The question papers to be designed to assess comprehension, assimilation, originality, initiative, scientific approach of problem solving, power of reasoning, expression of ideas, etc.

(13) Penal action against those who create law and order situation in or around the examination centre.

(14) If possible machine scoring and tabulation of results to be used.

(15) Successful candidates to be placed in five classes from A to E.

(16) Examination for private candidates to be conducted by the Allama Iqbal Open University.

(17) Importance of external examination to be minimized.

(18) Admission to institution of higher learning to be based on the marks obtained in external examination, internal examination, and aptitude tests as well as interviews.

(19) For employment both internal and external marks to be considered.

Based on his observations and analysis of the situation J Deakin (1974) made a number of recommendations to overcome the problems of public examination system in Pakistan. In making these recommendations, in some instances, Deakin (1974) carried over the suggestions of the Commissions and Committees, which had already deliberated on the matters concerning public examination in the country. He also added his own recommendations for improving the situaiton. The following is a summary of Deakin's recommendations:

1) Security measures to be taken for ensuring the secrecy of examination papers.

2) Time tables of examinations to be published and strictly adhered to:

3) Measures to be taken to preserve order at examination centres and to prevent cheating.

4) Senior people to be employed for invigilation work; it should also be made compulsory for teachers to do invigilation work.

5) Only external superintendents and invigilators be appointed, and examination centres be inspected frequently.

6) Answer scripts be exchanged between provinces for marking, candidates, to be seated at a distance from each other and the prevail be required to take a short qualifying test before entering for the examination.

7) Decision to use essay type, short answer and multiple-choice objective questions to be implemented.

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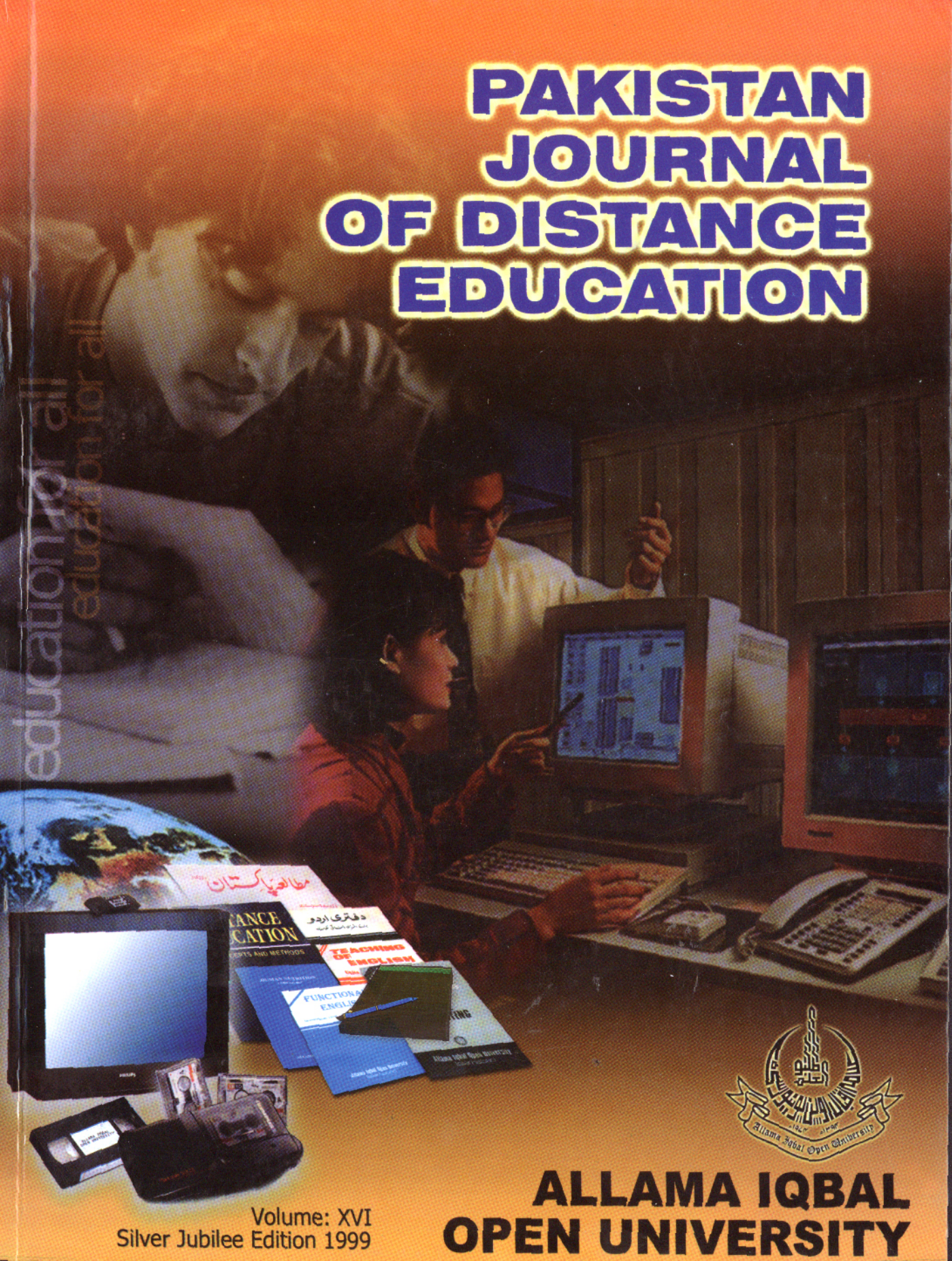

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INDIGENIZATION OF EFL MATERIALS: Rationale To Indigenize English Language Learning Materials Using Examples Of Pakistani English By Native Writers

By

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During the past decades, policy makers, educationists, syllabus designers and teachers have been searching for appropriate English language learning materials to teach at school and college levels. They endlessly search for the best possible classroom teaching methods which can bring about a refreshing change in the existing teaching and learning systems, ease teachers' difficulties in teaching *English as a Foreign Language* (EFL) courses as well as help students gain an acceptable linguistic and communicative competence in English. The search is still on and will continue to be until those who matter in the education sector exhibit a serious concern and will to reform the aging English language syllabi and modernize the classroom learning and teaching behaviour.

This article tries to establish the rationale behind using student friendly and culture sensitive English language teaching materials. Furthermore, it will put forward the case of using indigenous or local materials written in Pakistan by Pakistani writers to teach a foreign language which will hopefully, bring about a refreshing and innovative change in the learning and teaching behaviour of students and teachers alike. In doing so, I would first of all like to organize my argument around a brief discussion about the usefulness of English language in our academic, social and professional lives; secondly, sketch out briefly the success story behind the private English medium schools which have introduced English learning materials infused with contemporary themes; and finally suggest introduction of locally flavoured English as foreign language learning materials in schools and colleges.

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Before rationalizing the usefulness of indigenous English language materials, it would be worthwhile to address the cliched fears in peoples' minds regarding the expanding elitist influence of English language in the Pakistani society. Whatever the controversies, we need to come to terms with the reality that English language is here to stay and despite beaten labels as a colonial relic, a symbol of oppression and exploitation, we cannot deny its presence in almost every sphere of our lives. What we really need is to concentrate on evolving a healthy relationship between becoming foreign language literate and not foreigners in thinking, behaviour and attitudes. We need to strike a balance between the two by being aware of foreign cultural, literary and linguistic traits, acquire a healthy, tolerant and internationalist tendencies at the same time preserve ones national, socio- cultural, literary, linguistic and traditional values. Riazul Haq spells out the fears of scores of Pakistani people who oppose the influence of the language labeling it as an instrument of manipulation.

> Although introduced through a historical accident, English has become a pattern of life, and its cultural influence continues to be strong. At the same time, prevalent apprehensions in the country that we shall continue to be a client culture: that our cultural preferences, our instruments of analysis, our categories of thought, our very modes of thinking, will be determined for us by those who own and control this language, and that we would always be subject to easy intellectual manipulations. (1993, 15- 16)

Despite arguments for and against English as a medium of instruction, we have not yet been able to undermine its usefulness and importance in nearly every sphere of our lives. Riazul Haq further adds that

> The best course is to accept the inevitable and try to demarcate the territory of English and carve out the specific role it can play in the educational, professional and national domains. The future of English in this country has to be clearly identified as the language of technology and international communication. (1993,17)

There are many misconceptions in our minds regarding English language and these have never allowed us to think beyond making it a medium of instruction or not, resultantly we have failed to identify suitable contents and the skills needed to teach it and thus "our preoccupation with the position of English has never really allowed us to think about the practical implications of language teaching as a profession". (Riazulhaq

1983,7) Extensive debates in the past about the status of English language in Pakistan, its usefulness in the fields of academics, science and technology, business and trade, media so on and so forth has not been able to convince the decision makers enough. And this limbo like state is responsible for the creation of two streams in Pakistan; the English medium stream and the Urdu medium stream, existing side by side, each throwing their weight around in different circles of life. Larik (1983,11) asserts: "In Pakistan, English has enjoyed a status no other language has. Although enmeshed in controversy between the elite and not so elite, English seems to survive the test of time and the policy makers." The role of English in Pakistani has taken new dimensions over the last decade or so. The growing influence of English medium schools and a liberal use of this foreign language on electronic media and in social circles prove that English language has dug deeper roots and is flourishing. "There are people who consider it as a stumbling block for mass education, where others realise its international status and acknowledge it as being an asset, through which we come to know of the latest discoveries and inventions in science, technology, medicine, literature, and liberal arts." (Khamisani 1983,25)

Pakistan's educational melting pot that is predominately influenced by political manoeuvring has always exhibited contradictory and changing stances towards English. To be or not to make it the medium of instruction has cultivated boredom in people, and as a reaction, over the recent years, we have seen a growing and fast expanding private education sector that has taken the country by storm. These private education institutions cater to desperately seeking parents who are searching for good quality education for their children and are willing to pay exorbitant fees and related expenses in exchange of making their children proficient in English language and are able to compete for admissions in foreign universities for further education. These schools enjoy a great deal of freedom, have gone ahead and implemented their own policies, selected their own teaching materials and teaching schedules and try to outdo each other by maintaining high standards. The question is why we have such elitist schools at one side and the regular government schools at another? What differentiates the two? Why one sells more and the other less? Why one has acquired an elite label and the other a *desi* one. The obvious answer I can think of is all these private schools have English as a medium of instruction, their textbooks are aesthetically refreshing, contextually relevant and give out a very contemporary look, their teachers if not properly trained, have a good proficiency in English language, these schools

restrict the number of students in each class and claim to have student centred learning environment, besides hold regular teacher training courses and workshops and encourage accountability both for teachers and parents. I am not pleading the case of private English medium schools here, what I am trying to establish through this argument is that basically the secret of their success lies in their not getting stuck with the controversies raging since years and have actually moved ahead with times and its demands. These schools though, use foreign assembled learning materials, in this case EFL materials, where as I want to establish that if we use culture sensitive, locally produced, indigenous learning materials, the learning process will be interesting, rewarding and worthwhile.

We have been teaching foreign assembled materials for ages now and this is because of these culturally alienated contents that after years of learning English there is so little learned. So, which English is best suited to our students? What is wrong with our existing English language syllabi and teaching methods? What can we do to overcome the problems or deficiencies in the existing English language syllabus? Why do we study the English language? Is it for academic purposes, professional reasons or for any other reason? Why after years of studying English as a subject, most of us still struggle to achieve an acceptable spoken and written competence? Why do most students feel afraid of studying English? What is the relevance and utility of teaching the literary works, especially at school and college levels, and that too strictly foreign in flavour? Do students need English to help them understand other subjects like science, history, etc? What kind of English language learning materials can best suit the needs of our students which can enable them to perform all those multiple tasks waiting out there in a dynamic, competitive and challenging world? If students need to study English literature for its aesthetic and cultural importance, then why expose them *only* to foreign literature, why not familiarise them with the literature written in English by the local writers? Is the main purpose of learning or teaching English is to give students an in-depth understanding of a foreign culture, its various theoretical dimensions, minus the communicative or functional competence? Does learning a foreign language means only achieving a reasonable level of communicative competence by understanding its use and usage in its proper socio-cultural and psycholinguistic contexts; in other words be efficient speakers of the English language? What kind of indigenous literary texts need to be chosen to teach students at various levels, i.e. at school level, college level and at the university level? Once the contents are identified, what should be the learning objectives and the teaching meth-

ods? We are confounded with all these problems and unless we clarify these ambiguities and detect where the problems lie, we would not be successful in halting the overall deteriorating standards of education especially the standard of English learning and teaching. It is time now to search for solutions and perhaps we can find the remedy in ethenicizing EFL materials. Materials which are realistic and relevant to students' cultural, moral, ethical and aesthetic needs, refreshing and contemporary in context, practical, useful and interactive in approach, helpful in building and strengthening positive and healthy national and global concepts. Contents which can quench students' thirst for knowledge and practicality. Ideally, introduce learning materials that are indigenous in essence, closer to our national, regional and cultural identities and those students can empathise with. We need to recognise the fact that culture- sensitive materials can lead to students' success in foreign language learning, resulting in overall improvements in the educational standards, professional merit and of course, help resurrect the depressed society bogged down with the fallen academic and professional standards. The issue of culture-based learning materials are true for other disciplines as well, but here the focus remains on suggesting alternate or parallel English language learning materials which are predominately Pakistani in essence. As Saleemi asserts that

> To a non-native user the idea of his own kind of English is quite appealing. It may not be as good as "real" English, but, well, it is undoubtedly English. People eager to support their own particular brand of English seem to be gratified at the idea that, while able to retain some kind of English, they do not have to complete any more against the perpetual native-speaker one-upmanship. (1993, 35)

We can achieve improvements not only by experimenting with contents, what we need to do is revamp each and every aspect involved in English language learning and teaching starting with contents and going on to actual classroom dynamics and teachers' academic and professional skills. Sometimes despite our awareness of all factors governing English language teaching, we conveniently emphasise some and deny others, such as we emphasise that our children should have a good communicative competence in English, but they should not be allowed to discuss the foreign concepts given in the textbooks, for example male female relationship, drinking alcohol, partying, dancing and other suggestive references. So, to be able to reach a workable situation, we need to introduce those materials with which our learners can identify. In order to revitalise the

English language curriculum and syllabus, we should, first of all, determine the learning and teaching aims and objectives, select contents that are relevant to students' academic, professional demands and fulfil their national, and socio-cultural needs, and grade them according to their level of difficulty and complexity.

We should not be afraid of taking the plunge and throwing off the cloak of scepticism, we need to gradually encourage our local writers, hunt for and include interesting, contemporary, thought provoking fictional works, poetry, prose, authentic writings chosen from newspapers, journals, etc with an intrinsic Pakistani flavour in our English language syllabus. I am sure once we are able to accomplish this we would see improvements in students' learning capabilities because these indigenous contents will tickle the sensibilities and heighten their aesthetic appreciation. Perhaps we can begin with smaller dozes that can create awareness among students to explore their own cultural ethos, build their functional competence and confidence to handle works of art in target language at later stage and enable them to explore unknown territories that focuses on assumptions, values and behaviours of the foreign culture. As a " student of English can and will add new dimensions to his or her personality through his knowledge of English and its culture and will continue to retain ones own personality, but open to a new set of cultural values." (Arnold 1942,X1)

Pakistani English has evolved over the years carving out a prominent niche on the map of the world Englishes and has a pulsating presence in our lives. Baumgardner (1993,41) sees English as "a relic of British colonialism made richer by absorbing indigenous linguistic and cultural traits." Many die hard proponents who associate English language as a language of the white people might express their doubts about introducing indigenous materials at school and college levels arguing that there aren't enough locally written English materials and if at all there are they lack in quality. They do not agree with the assumption that using locally produced materials will help students overcome their difficulties in learning English, lessen the cultural and conceptual gaps and in turn will yield better results. To put their fears at rest, it is worthwhile to argue that Pakistani English has managed to find a place among the world Englishes and is considered an entity in itself. "There now exist a growing body of literature in Pakistani English as it is used in various domains of contemporary Pakistani culture and society." (Baumgardner, 1993) Pakistani English is distinguished by its typical variations in syntax, grammar, pronunciation, phonetics, idio-

matic use, creative and stylistics nuances, colloquial forms and borrowed words. Documentary evidence of all these are found in abundance in samples of creative literary writings (fiction, short stories, plays, poetry, creative essays), news paper articles, television, radio, academic journals and in many other sources. A typical brand of Pakistani English is used in the media and in offices. One cannot ignore situations where a liberal use of code mixing by speakers have added a distinctively local flavour to an otherwise foreign language, and have given birth to a vernacular reality that we call Pakistani English. Saleemi, (1993,33) asserts "There is in today's world an increasingly large number of non-native users of English." He goes on to add that "English doubles both as an international language and the most widely used second language." Another relevant argument one can give to support of idigenization of EFL materials, is that students will have a double benefit: one, they will gain a deeper insight into their own cultural values and literary traditions, will be aesthetically and sentimentally richer and secondly, the ordeal of learning a foreign language will be easier because of familiar contexts. Several researchers and linguists believe that the usefulness of introducing culture-sensitive EFL contents found in abundance through newspapers, translations of masterpieces, original writings in form of poetry, novels , short stories, creative prose written by local writers can enable students to have deeper and objective analysis, and through reflection and discussion, they will gain deeper insights into their own cultural values and literary traditions in the same way that the study of another language helps us perceive the structure of our own. However, Rehman (1991) believes that "literature is a form which transcends national boundaries both geographical and ideological." With regard to the cultural aspect, several writers and linguistics believe that English is already de-enthnicised. Others express their reservations by asking, can we really culturally-neutralise a native or a foreign language?, It would be appropriate to quote Stern (1981,65) who says: "On the one hand, it is recommended to acknowledge and tolerate dialectal, sociolectal, and interlanguage variations. On the other hand, there is the demand for an international, universally acceptable nuclear or core English." However, English with a status of an international and intranational language, has such a range of use and variety that one more indigenous variety with all its socio-cultural, linguistic, political, and educational flavours will further enrich it.

Considering the assumption that we need to revamp the English language learning materials in accordance with the needs of students and society, add an indigenous flavour, localise it and thus make it more ac-

cessible to students' expectations, we now move a little further. What materials should we select? from where and written by whom? what should be the selection criteria? do we have enough materials, or language litrature locally written and manufactured? Sidhwa put such fears at rest by asserting that:

> There is a difference between the writing of novelists like myself, who use English as a Pakistani vernacular, and that of the new crop of British writers of south Asian origin who have spent most of their lives in England and who have absorbed the traditions of the language together with the thought patterns of the British. English as spoken and written by them is indistinguishable from that of the native population of England. Their contribution is, and will continue to be extensive and valuable. They can manipulate English as only Englishmen do... but no matter how much we admire their verbal and structural innovations and flamboyance, I as a Pakistani writer to being lumped together with them. It is unfair to both. Their vision of the subcontinent and its cultures is essentiality that of an outsider. They pick from the culture what is, from a western point of view, exotic, amusing, bizarre, and saleable. (1993,219)

Agreeing, I would recommend that the selection of EFL materials should be from among those local works where the writers are concerned with home realities, with indigenous overtones and infused with national ethos. The writings that have serious thematic significance that can help resurrect and inculcate tolerance, perseverance, individualism, cooperation, sense of self-respect, loyalty, friendship, public service and civil sense. All those writings which sketch our rich and turbulent past and reflect the contemporary milieu cutting through the layers of false sense of ethnic, religious and gender superiority and inferiority complexes. In other words, we need to choose the contents that boldly address the regional, linguistic, religious and sexist dilemmas that plague the Pakistani society. A combination of folklore and ethnic themes combined with writings handling real everyday life issues will enhance students' self-expression, motivation, sensitivity, and give them a sense of pride in national and regional cultures. Hence it is time to emphasize the indigenous and de-emphasize the foreign. We, however, need to be cautious in not overdoing, we need to be realistically aware of the importance of English in the world markets and the arrogance it enjoys as an international language at the same time take pride in our fast growing Pakistani English market.

> And this language, rich in literature, is no longer the monopoly of the British. The fact remains that in adapting English to our use, in hammering it sometimes on its head, and in sometimes twisting its tail, we have given it a new shape, substance and dimension. It is now widely acknowledged that some of the most innovative writers in the English language come from our part of the world... English is to stay, and whether we like it or not it has become a useful tool: a means of communication with the rest of the world.
> (Sidhwa, 1993, 212)

I would like to dispel the fears expressed by all those skeptics who do not favour the inclusion of indigenous materials to teach English as a foreign language justifying that we do not have enough materials in English language written and produced locally and if at all we manage to find some, they lack in finesse, in thought, language play and variety. I have personally experimented teaching English using indigenous English language materials written and produced locally and have received an overwhelming response, the level of interest exhibited by students was awesome and results extremely encouraging. To share my experimental experiences with indigenous materials need a separate article, I would, however like to add that the first step is normally wobbly, but once you have a firm foot hold it is no looking back.

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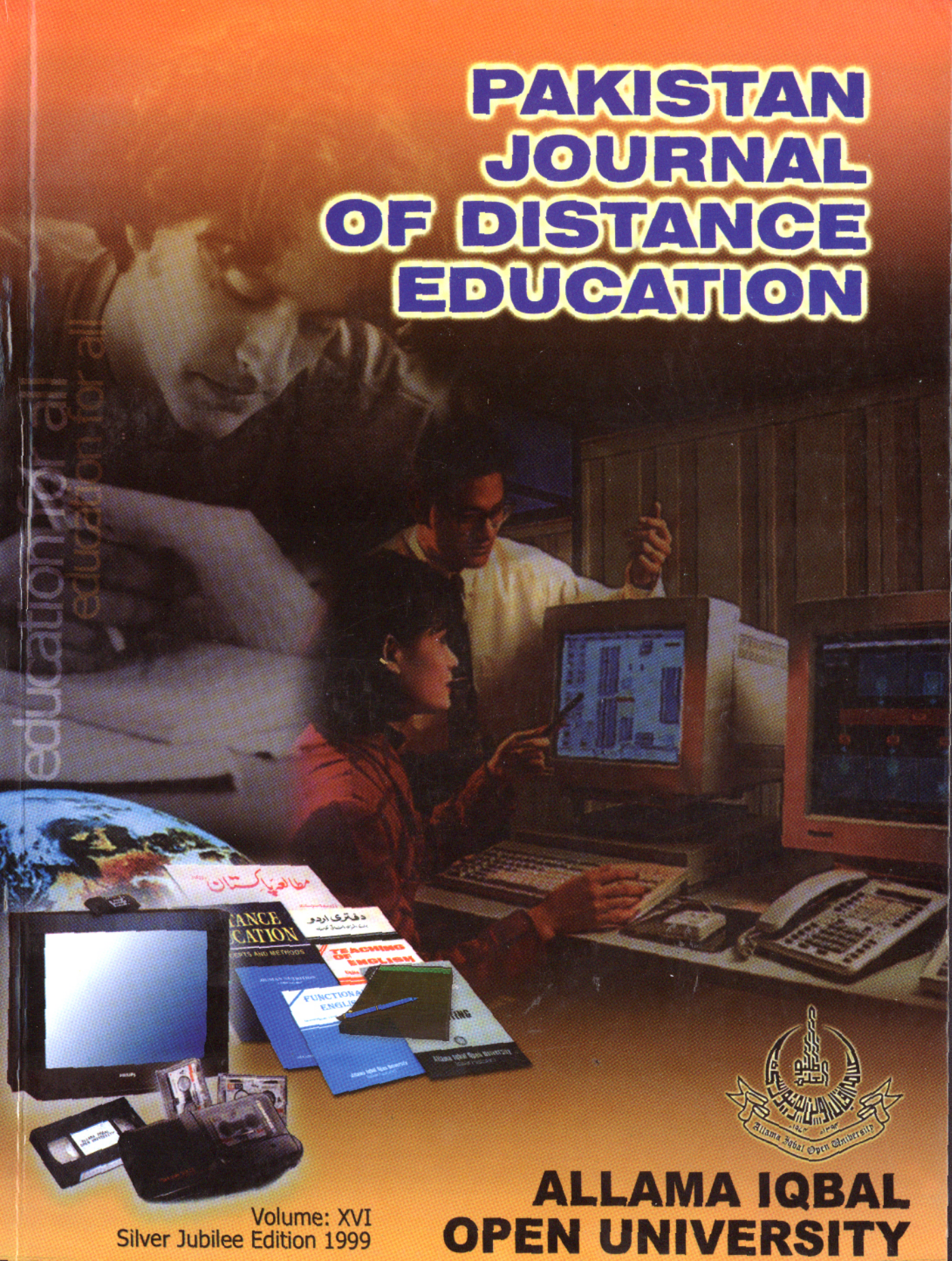

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Use of Literature in Language Classroom: Why , What and How

By

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The controversy regarding the dominance of literature in English language classes and language syllabi is ages old. A lot has been said and written in favour and against this issue in general. This article is an attempt to address the same on-going debate and to review the use of literature for teaching/learning English language in our country. It also takes into account the kind of literature that can be most appropriate in a situation like ours. But, before coming to the actual topic, there is a need to elaborate the role of English language in our national framework since this will help determine the objectives for teaching English language in the country. English undoubtedly enjoys a very important status in Pakistan. It does not only serve major educational and administrative purposes, but also has a vital functional role in our routine life; for instance, it is the language of road signs, medicine labels, utility bills, applications, forms, magazines and newspapers. It is used on streets, on media, in courts etc. and is, at the same time, the language of science and technology, business and administration, political and commercial correspondence in nearly half of the world and an important means of international communication throughout the world.

This world-wide fame of English and its specific role in the overall set up of the country leads us to a very crucial question as to what aspect of English either language or literature be taught or practiced by us. Probably there is no one answer to the question, but what is evident is that currently in Pakistan literature has a dominant role in English teaching classes at all levels. From class VI to degree level, English is taught as a compulsory subject throughout the country. From degree level onwards it is offered as an elective subject . The first external examination in English is that of middle standard (Class 8th), but is not compulsory for all students. Secondary school certificate examination (SSCE) is the first compulsory external examination. After (SSCE), public examinations are held

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every two years. In all examinations, from middle standard to degree level, there are two papers on the subject of English. The first paper generally covers the assigned text books (most of which are literature based) whereas, the second paper comprises language items such as letter writing, story, composition writing, translations, grammar practice, sentence construction, etc. Keeping in view the extremely important place of literature in our scheme of studies, it would perhaps be useful to analyze its importance in language teaching since, as mentioned earlier, its language that we need.

The rationale for using literature to teach language is endorsed by several renowned writers. For instance, Povey (1967) is of the view that the value of literature is so self-evident as to be beyond discussion Regretting the fact that in educational terms English has become two subjects, he enumerates 4 general aims of literature teaching. The foremost of which is improving all language skills by extending extensive linguistic knowledge, subtle vocabulary usage, complex syntax and style that can properly stand as a model for students. Sandra Mackey (1982) supports the views of Povey reinforcing that literature does indeed have a place in the ESL curriculum. To him literature can provide a key to motivate students to read in English. It may also serve as an ideal vehicle for illustrating language use and for introducing cultural assumptions. To Widdowson (1975), the justification for the use of literature overseas is to provide the students a chance to learn the English language and learning a language involves in part: learning of the language system, the structures and vocabulary of the language, and how the system is used for communication. Pattison (1968) advocates the use of literature for language teaching in these words: "A language must have content as well as form." To him, content is thought provided by none other than literature. He also compares language to body and literature to soul. To him, rehearsing common situation seems to be an activity that would soon pall. There has to be some thing to read and write about in order to motivate people literature. Aristotle, terms as a continuous motivating force and a source of permanent interest, since it speaks of people, of common situations and of universal truths. It is a motivating force not only for the learners of language but for ESP (specific language) learners for the same reason that it creates a habit of reading and appreciation through motivation. One who reads a literary text well can read specific text too.

Historically, literature widened the scope of language and has been performing the same function ever since. In fact, no language can be con-

sidered for serious study which lacks its literary production. It is a matter of age old practice that school going children right at the initial stages of learning learn and memorize certain poems that are specifically for them, popularly known as nursery rhymes. In almost every language, popular poets have written such rhymes. It is through such literature that children make acquaintance with the written language. Coleridge too wrote a poem for teaching his son prosody. teaching literature through literature. Songs, poems or rhymes are a change from the routine classroom activity of language learning, which help in teaching rhythm and stress patterns, very essential in English since it is stress-timed language. Drama too is a very useful literary form for learning a language, its vocabulary and its structures in context. Drama not only helps in learning communicative language, but also provides an insight into the culture of the native speakers of a language. In a cultural vacuum a language cannot be learnt easily. Comprehending a foreigner becomes easier by having some knowledge of his cultural background since most of the cultural attitudes built in by the speakers are reflected in their speech patterns. It is true that the 'world' of a novel, play or a short story is a created one, yet it offers full and vivid context in which characters from many social backgrounds can be depicted, and also one of the ways to help us imagine what life was like in the past.

Literary language has been objected on the grounds that firstly, it is too deviant from natural, common everyday conversation. It is generally believed that the poets, writers and dramatists deviate to a greater or lesser extent from the common life; so perhaps acquaintance with such kind of language is of no great use to the learner. Secondly, in order to understand a literary text, in addition to linguistic competence learners are also required to have extensive familiarity with the literary conventions, figurative language and literary forms, which can be rather too taxing for a simple language learner. Lastly, literature is supposed to be a source of cultural transmission. If students are not familiar with the culture of the target language they will hot be able to comprehend the meaning and will consequently develop a deep repugnance for the language as well. Even for the teachers it will be extremely difficult to explain literary texts of all kinds-poems, plays, short stories, novels. All these apprehensions challenge inclusion of literature in the English language courses. As a matter of fact, although linguistic communication differs markedly from non-literary communication, no poet, novelist or dramatist can create an entirely new language. The poet has got to master the rules of English grammar before he attempts to bend or break them. The literary writers,

particularly the poets take the language around them and adapt it to their specific needs. In doing so they have to respect the fundamental rules of the language (i.e, the grammar, the vocabulary and the rules for combining these into meaningful utterances). These rules are equally applicable to non-literary discourse). But because literary messages differ from non-literary ones in function, the literary writers invent special conventions of poetic , novelistic and dramatic communication which would not work in ordinary practical discourse, because of the use of language system itself in ways which are unorthodox, thoughtprovoking and striking. The creative writers such as poets give not only a new turn to the language but also a new life. This poetic deviation does not take anything away from a language. Dante, Goethe and Shakespeare certainly enhanced the value and meanings of the words and language they used.

Helen Powers's article (1981-8) "Literature for language students: The question of value and valuable questions", discusses the value of literature in language teaching. She asserts, "The major justification for inclusion of literature at all levels of language instruction is that it can prompt class discussion better than almost everything else...if the teacher knows how to ask the right questions" Each novel, short story or play can spark off a wealth of interesting activities. The tasks and exercises based on a literary text can provide valuable practice in all four language skills: listening, speaking, reading and writing. For instance, listening comprehension can be improved by telling or playing on tape, some interesting stories and songs followed by certain activities. Similarly for building reading skills, literature provides a lot of authentic reading material which appeals to the learners/readers since it deals with fundamental human issues. In this regard Collie and Slater (1987:5) state: "Literature can be helpful in the language learning process because of the personal involvement it fosters in readers." Once the habit of reading is developed, it not only adds to learners receptive vocabulary but provides them familiarity with different features of the written language such as the formation and function of sentences, the variety of possible structures, the ways of connecting ideas and so on. This inturn broadens and enriches their writing skills. Likewise a literary text can provide incentive/prompt for oral work if suitable activities are chosen.

To quote Widdowson, (1975) 'The study of literature is primarily a study of language use and as such it is not a separate activity from language learning but an aspect of the same activity. In other words, linguistics and literature are two fields of knowledge, which illuminate one an-

other. Now many authentic samples of language have been incorporated in literature e.g forms, travel timetables, magazines, journals, articles, pamphlets, advertisements, weather reports, etc. These can help the learners learn a language which is genuine and can easily be managed in and outside the classroom. In fact, literature provides a rich context and exposes learners to language used at its best, as a result of which individual lexical or syntactical items are made much more memorable. At the same time it has served as a valuable source in improving certain grammatical features as well. Some interesting activities can be used for this purpose. One simple example is to ask the readers to read the given passage from some literary work and pick out noun phrases, verb phrases and other grammatical items depending on the level of the class and the nature of the passage. Similarly direct and indirect tenses can be taught with the help of dramatic speech. Comparative forms of adjectives and imperatives can be taught with the help of stories, so on and so forth. In short literature helps acquire a native-like competence in English, expressing their ideas clearly, precisely and concisely and being creative, critical" and analytical.

Once it is established that literature is in-dispensible to language teaching, the next immediate and equally important question is, what literature be taught at what level? Unless literature is well chosen for a particular level it will not serve any purpose. As a matter of fact most of the problems arising in literature- oriented language classes are either due to the wrong choice of the literary material at a particular level or because of the mishandling of that material in the class. Thus, literary material carefully chosen and well presented can be quite motivating and rewarding otherwise can do more harm than good. The suitability of a text depends on each individual particular group of students, their needs, interests, relevance to the situation, cultural background and language criterion comprehension level.

The criterion, for choosing texts varies widely. One general principle is to include works of common interest stimulating personal involvement. Another principle is as Marckwardt (1981) puts it, texts should be contemporary and world-wide. By world-wide he means writings produced all over the world. But these should be also appropriate on socio-cultural and political grounds. In addition, the texts should be simple, involving less complexity of style as well as context. The students lose interest and discard those texts that are not intersting or do not potray their culture. To change the attitude of the learners and teachers towards the study of lit-

erature and to establish its worth and value as a subject, the texts and teaching techniques can play a very vital role, provided handled appropriately.

HOW?

At present, as mentioned earlier most of the teaching in English subject at all levels is literature based. It includes poetry, drama, novel, short stories, essays, etc. The students are required to write critical appreciation of poems, discuss humour in prose and story, understand the dramatic element in a play , depict characters in a novel and so on. Teachers take it for granted that the students/learners know the basic sentence structure and correct language. The learners on the other hand are only concerned with passing exams. The most serious drawback of our examination system is that it encourages cramming instead of promoting understanding. The questions set on the text books are such that the learners need not be original e.g summary, main idea, central idea, theme, critical analysis etc. The students can easily cram and reproduce these in the exams. Therefore they show no interest in the actual literary text.

To overcome this problem, we need an approach which should reestablish the interest of the learner in literary studies. This is perhaps possible through a student-centred approach. This approach must ensure student's involvement through variety of activities. The student-centred approach should supplement the good points in the teacher-centred approach and overcome its drawbacks.

Currently a teacher-centred approach to literature is common in Pakistan as well as in some other Asian countries. It is a traditional approach to the teaching of literature. In a traditional classroom approach the teacher is the source of all information which he is supposed to impart to his/her students. In other words, its merely teacher taking time. Teachers talk for hours to passive and un-motivated learners. They do all talking, ask questions and then answer them. Whereas an answer is a treasure; it is usually hidden, and is worth possessing if the learners themselves strive to find it with the sweat of their brow. Otherwise it is almost worthless. This approach may help learners in detailed comprehension of a text but does not help the learners to express their own opinion, literary tendencies or response on a text, partly because they are not encouraged to share their views with others and partly because of the inadequacy in the language. A teacher handling literature in the class, should be able to make his/her students alive to language and its delicacies. Since the enjoyment of lit-

erature rests with the enjoyment of language. They are complementary to each other, together they make one pattern, one picture. As material is to building, language is to literature teacher. He/she should stimulate learners imagination and awake in them a sensitivity to all aspects of language. Through a variety of exercises and activities the learners can be encouraged to interact with the text and analyse it in the most interesting, challenging and exciting manner. These activities may also enable the learners to explore their own responses and share their personal feelings with the group or class.

Through frequent participation in literary activities, the students become sensitive to language and its communicative potentials as a result they can handle a range of communicative contexts with great confirdence. The learner, even if he/she does not truly appreciate the literature, through practice, gains valuable linguistic knowledge and experience. To conclude in the words of Widdowson, 'A study of literature, requires sensitivity, intelligence, precision of response and so on because it takes the reader into unknown territory where familiar signs may be few and where he must often find his own way by following recondite clues. But since the signs and clues are linguistic the sensitivity must initially be a sensitivity to language.....,

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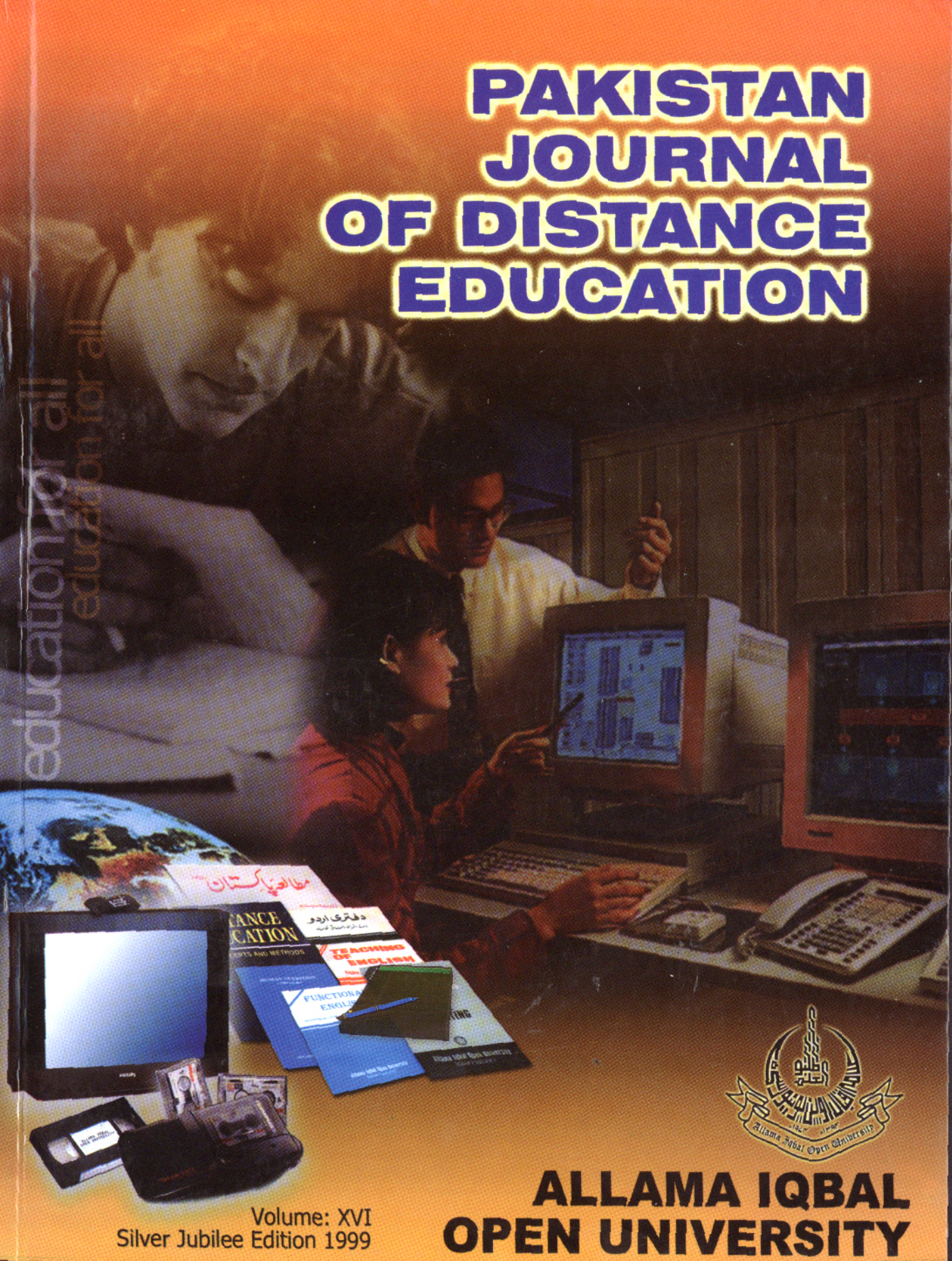

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ALLAMA IQBAL OPEN UNIVERSITY

Community Support For Basic Education
Issues And Options

By

Farzana Shahid*

Introduction

With the literacy rate of only 35%, Pakistan stands far behind the other nations of the world. Low literacy rate among the females and rural population is much boggling. Anyhow, literacy though still low, has improved over the past decade despite the reason that disparities exist in gender, regions and provinces.

As a developing country, Pakistan was advised by development planners in the early fifties that the magic for economic development is none, but higher education. Without analyzing our national needs, the efforts and meagre resources were directed towards higher education. As a result, development of education in Pakistan during the last 4 decades has been lopsided. Higher levels of education have grown more faster than planed and needed, but this growth has taken place at the cost of other basic levels of education. The access to primary education has also been uneven. The poor inhabitants, the rural people, the women, other weaker section of the society and backward regions of the country have not been able to benefit from Government's educational planning and policies. Private sector has also contributed to this lopsided and uneven distribution of educational facilities. A comparative statement is shown below.

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Table 1

Participation rates* at different level of education by sex (%)

	1991-92			1992-93		
	Both	**Male**	**Female**	**Both**	**Male**	**Female**
Primary Stage Classes (I-V) Population 11 years old)	66.3	83.0	49.2	68.9	84.8	53.7
Middle Stage Classes(V-III) Population10-12 years old) 30.0		44.6	58.9	44.3	44.3	57.7
Secondary Stage Classes (XI-X) Population 13-15 Years old)	27.2	36.6	17.2	28.1	37.0	18.4

Source: Planning and Development Division

*Participation rate = $\frac{\text{Enrolment of each stage x 100}}{\text{Total school age population}}$

Present status

The process of industrialization and opening of Pakistan's economy to global competitions has generated a strongly felt need for promoting universal basic literacy and functional education.

The literacy level in Pakistan is 38.9%. It is 58% in urban and 28% in rural areas. We are at the very low level in respect of the status of women. Literacy among females is 24% and in rural areas, where majority of the population resides, it is about II percent as shown below:

Table No.2

Percentage literates in population: 10 years old and over by rural-urban and sex, Pakistan 1961, 1981 and1994-95

AREA/SEX	1961	1981	1994-95
ALL	16.7	26.2	37.0
RURAL	10.6	17.7	28.0
URBAN	34.8	47.1	58.0
MALE	25.1	35.1	49.0
FEMALE	06.7	16.0	24.0

*Female literacy in rural area = 11.0%

It is argued that Pakistan has already made progress in education since the literacy rates has increased from 17% (1961) to 37% (1994). However, because of fast growth of population, absolute number of illiterate population has increased even faster than the literacy rate, as there were 22 million illiterate population aged 10 years and above (1961) which has been estimated around 56 million in 1994 (Pakistan Economic Survey).

Table 3

Education expenditure in five year plans

(million Rs.)

PLANS	Total Plan Expenditure	Expenditures On Education	Education Expenditure As % of Total Expenditure	Education Expenditure as % Of GNP
First Plan (1955-60)	4,363	296	6.78	0.88
Second Plan 1960-65	10,608	527	4.97	1.55
Third Plan 1965-70	13,204	677	5.13	1.38
Fourth Plan 1970-75	70.500	3,665	5.20	1.53
Fifth Plan 1978-83	226,000	10,383	4.6	1.5
Sixth Plan 1983-88	250,000	19,810	7.94	2.1
Seventh Plan (1988-93)	350,000	22,680	6.48	2.16
Eighth Plan (First two years 1993-95)	483,320	69,031	14.28	2.33

The first Educational Conference held in 1947, recommended universal primary education within the next two decades i.e. 1967. But, unfortunately we could not make any progress and are still behind to achieve our goals for universal basic literacy. As such, there is an urgent need to

play a prestigious role in the assembly of the nation with 69.54 million illiterate (50% population).

The scenario set by the year 2000 is as following:

Table 4

Literacy scenario* project by 2000

	Total	Male	Female
*Population	144878000	73461000	71417000
*10 year Above	94493000	48149000	46344000
*Literate	25927000	16931000	8996000
*Illiterate	69454000	31404000	38050000

*Figures for 1981have been taken from Census and figures for 2000 are projections (Khawaja and Barrie) in the references 9.

But in spite of this scenario, we need an education system which should prepare our youth and work force for global competition. We need education for all and even different types of educational programmes for survival of the nation.

Problem statement

Providing universal basic education is the major challenge for Pakistan. The country is preparing its workforce to compete in a dynamic global economy and lay the foundation for sustainable economic growth. In the past, the efforts by successive government have not been succecful. This is because of lack of awareness by conventional experts of successful models based on community participation, that are crucial to the promotion of mass literacy.

A review of Pakistan's endeavours for promoting basic literacy show that it is not due to a lack of resources or community interest in education, but is the result of a failure in developing required linkage between community and these intervening. As a result, the following problems are emerging:

Few realities

- Pakistan has been spending 2% of GNP on education which has recently increased to 3% (table 3). Major share of this amount is shifted to higher level of education, and primary education achieves meagre growth.

- The primary schools are the most neglected institutions of the whole system. Both school buildings and teachers are grossly inadequate. Quite often, all the five classes are being taught in one room by a single teacher. In many cases, location of school does not suit to large majority.

- Extreme poverty in rural areas compels parents to keep their children out of school so that they can work and assist the family to earn a livelihood.

- Teachers appointment has become a political bribe. Even illiterates are being employed as primary teachers in the rural schools.

- A dedicated and trained teacher does not get due place in the system. Therefore, interest in honest teaching is lost.

- The higher percentage, undercuts on the buildings of school has wasted a lot of money resulting in substandard buildings.

- There is no co-ordination between Government projects, NGO's projects and donor's projects.

- Leakage of financial resources.

Community participation

The reason that a very small portion of population has access to basic education despite the availability of physical resources, educated teachers and financial resources, still there is a lack of community participation which is important for two fundamental reasons. Firstly, the com-

munity participation introduces the element of relevance and accountability to the whole education system. This makes education meaningful, interesting and help students to lower the drop-out rate. It also improves the quality of education. Secondly, the community runs home school, mosque school or other similar model school which would check the leakage of sources and provide a low cost alternative to the traditional Government primary schools.

Furthermore, the establishment of home schools, requires a tiny fraction of the total resources to strengthen community control over education and its initiatives for undertaking other development activities. That is another fact which needs to be brought to the public's attention by strengthening the efforts for mass literacy.

Community participation is also needed, so as to:

- make education relevant to local needs.
- facilitate schools management.
- mobilize local resources.
- train people in Community work.
- develop school a Community Center for promotion of social environment.

Constraints for Community participation

- Lack of involvement of community leaders, like elected representatives, mosque imam and local leaders.
- Centralized planning and strategies devoid of all local interests and needs.
- Ethnic and cultural differences among the community due to heterogeneous social set-up.
- Lack of awareness among rural communities.
- Personal rivalries and absence of community spirit.
- Lack of training and resources.
- Enough interest is never infused or generated by the community without which the literacy level is not enhanced.
- Comminutes are not involved in the planning and monitoring of primary schools, that cause their lack of interest in the primary education.

Possible manifestations

Communities should be involved in the planning, implementation and monitoring of both formal and Non-formal primary schools for following reasons:

- Communities can and should play a part in setting up schools and selection of teachers.
- Community school should come up with their social demands to train teacher as a change agent.
- The learning package for primary education should be developed to enhance socio-economic skills of the learners.
- Community should take responsibility of taking care for primary health and social environment through schools.
- Communities can be trained to develop a common pool of resources maintenance and promoting the primary schools. More- over, community is in a better position to check leakage of resources and provide remedy for that.
- The potential partners of community participation are GOs, NGos, CBOs and Donor agencies. Responsibilities of these three are shown as below:

Table 5

Responsibilities of Partners of Community Participation

Govt	NGOs	CBOs
Resource mobilization.	Liaison between community/ CBOs and DOs.	Selection of teachers.
Administrative support.	Identification of needs and sites etc.	Arrangement for building, etc.
Technical training support services like curriculum, and research etc.	Formation and training of CBOs.	To ensure participation of all target groups.
Responsibility for integration in mainstream.	Motivational cam paign.	Local supervision.

Monitoring, evaluation and audit.	Procurement of materials, disbursement of salaries and periodic monitoring.	Mobilization of local resources for programme and needy students.

The process of community participation, whether it is successful or not can be checked by the following 7 steps:

A. Message dissemination
(does it reach to target group)?

B. Comprehension of message

C. Are they convinced?

D. Reactions- comments

E. Have they come forward to take initiatives' offered to contribute?

F. Willing to organize themselves to undertake new task?

G. Do they own self-sustainability?

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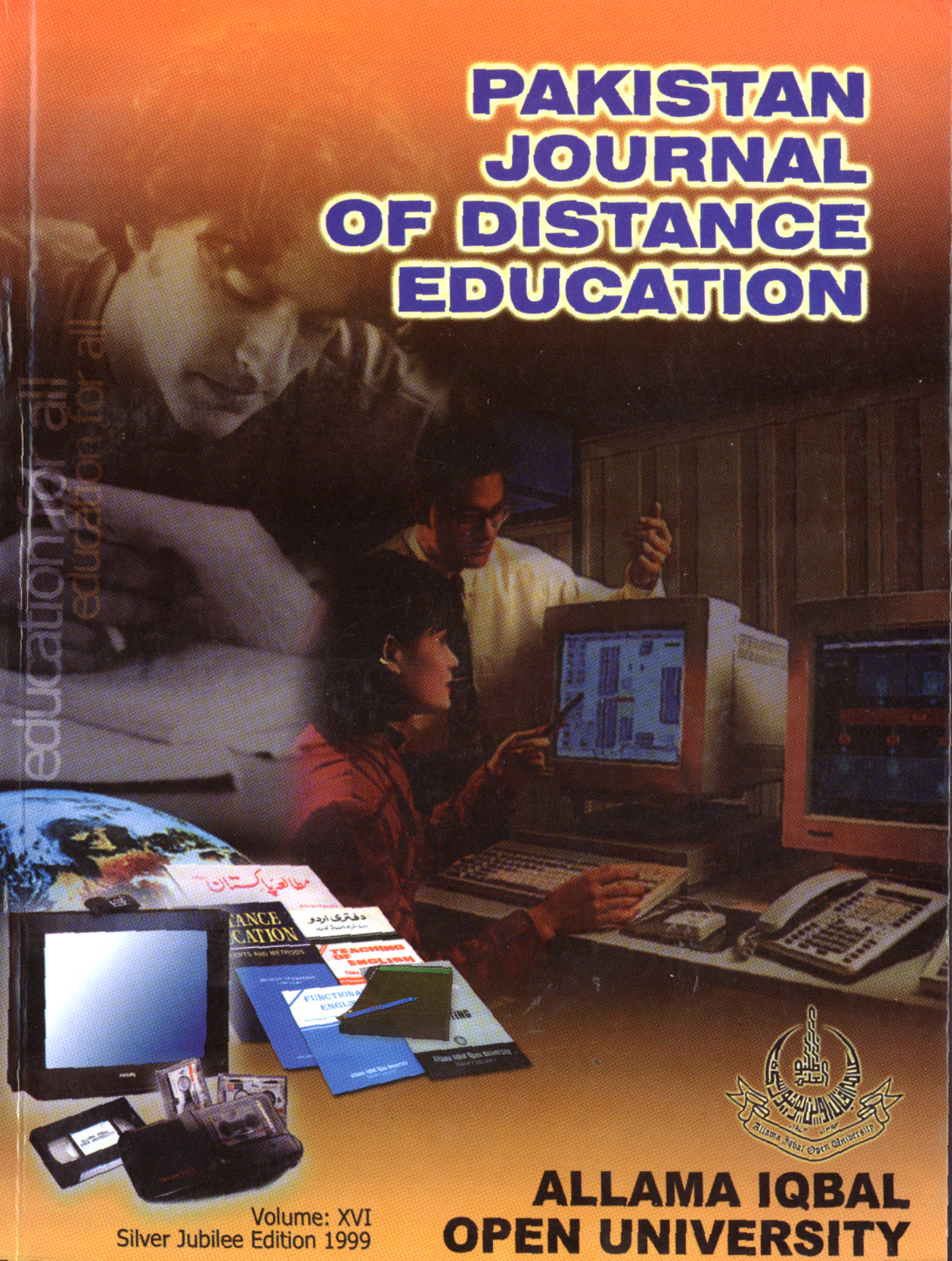

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The Art Of Better Living Through Non-formal Education

BY

AMJAD ALI*

Pakistan seems to fail in tackling the consequences of unplanned urbanisation and urban growth. In the past, threats to peace have come mainly from the military aggressive and ambitious states, will now come mainly from dislocated communities and individuals alienated by uncontrolled urbanisation[1]. We already have created a lot of negativity and suffering both personally and collectively in a non-formal way. This causes us to harm our society, our country and ourselves. Is there any need to stress the importance of and suggest the great need to develop *Non-formal education* alongside the development of our normal education systems in Pakistan. What are the important things we need to do, to make our cities better places to live in? Is there any importance to educate the present and future generations in inner peace and non-violence through both formal and non-formal education? How the non-formal education becomes the only antidote for better living?

What is Non-formal education

Non-formal education is something very far away from most people's minds, so firstly I would like to explain what non-formal education is. We are all familiar with formal education, which helps us to gain vocational skills and teaches us to use the logical, rational, cognitive and intellectual part of our brain. However we are not familiar with non-formal education. non-formal education is an innovation of this century. Coombs defines it as "any organized learning activity outside the structure of the formal education system that is consciously aimed at meeting specific learning needs."[2] It helps us to deal with the intuitive, emotional, instinctive, artistic and subconscious aspects of our mind, all of which help us to develop our social, interpersonal, psychological and emotional life skills[3]. Whilst the formal system of education prepares us very well for the world of work, its limitation is that it does not teach us how to deal with the emotions that

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arise during times of stress and life crisis, or how to unite abstract concepts with everyday life. It also could not help the people to solve the problems of their daily life[4]. Through integrating non-formal education into the formal education system we harmoniously develop both the left and right hemispheres of our brain. This integration creates individuals who are more balanced and who can make and even maintain social peace and harmony in our cities, people who are interested in taking care of the urban and natural environments. Non-formal education is a life long education and not something that finishes when we leave educational institution.

There is no doubt that in the future, due to the intense competition among the people of Pakistan for human resources such as work, money, living space, nutritious food, clean water and air, that the external sources of urban stress is/will greatly increase.[5] This is the reason why we have to start integrating now non-formal education into the formal school and vocational education systems. By doing this, the next generations will be able to deal with the additional burden of social and urban stress in a more relaxed and peaceful way[6]. Non-formal education is very necessary as it gives us the emotional education, which enables us to deal with modem life. If we follow non-formal education, then our lives will be less costing on the economic, energetic and emotional levels. This kind of emotional education is something that people of all cultures and faiths need. In previous generations, these ideas were found mainly within the teachings of the world religions. Therefore, it would be appropriate to try and extract the essence of the good ideas relating to emotional intelligence, interpersonal relationships, peace healing and environmental care which are within all the religious and spiritual traditions and present them all to modem society as a part of non-formal education.[7]

Non-formal education is important at all stages of our life and development; at the time of conception, in the mother's WOMB, throughout school years, during working life, when we are sick and suffering, at the time of our retirement and as we experience the effects of aging and at the time of death. It is something appropriate for all the different groups in our society; the young, old, teenagers, business people, the terminally ill, prisoners and so on — it is for every social group in our society. Regardless of their other needs, everyone needs non-formal education as it helps us to pacify our uncontrolled emotions and psychological disturbances so that we can function in an effective, peaceful and happy way whatever the situation[8]. Non-formal education gives us positive company and a different perspective as well as many beautiful solutions to our difficulties.

BIRTH

The way we behave affects unborn children in an emotional and energetic way, therefore we need to begin non-formal education at the prenatal stage.[9] For example, unplanned children whilst in the womb experience on a very subtle level their parents' feelings of rejection and this effects the child's emotional and physical development. Scientists have discovered that if infants are deprived of affection, that the neural development of the brain is affected.[10] What we need to begin non-formal education at the prenatal stage is to teach and guide the parents, especially the mothers, through Radio, TV and newspapers or by holding seminars, conferences and conventions at the local bodies levels. Even AIOU could conduct refresher courses for spreading awareness about the incoming generation.

CHILDHOOD

Children are educated from the beginning of their school life into a culture of fear. Many find their first experiences of school life to be very stressful. Some of the things which we take for granted in daily life cause a lot of anxiety to children, such as the busy morning traffic, animals, teachers, being liked and accepted by the other children, being academically successful and so on. These psychological factors of fear, aggression, feeling victimised or shy, emotional neglect by parents and so on, greatly hinder the child's emotional development, and if not remedied may produce alienated and violent individuals.

Non-formal education is implemented in very simple ways. For example, at the start of the school day a few minutes are given to a peace class or assembly where children develop together a peaceful mind and good motivation for the day. I suggest that everybody, no matter of their age, has a few minutes of peace in the morning. A time when they just relax and internalise the idea not to be stressed or fearful[1]. Starting the day in such a positive way helps children to study in a much more effective way and helps adults to deal with work and urban stress. Non-formal education can also deal with educating children in specific problem areas, such as how to cope with bullying, discrimination, aggression, interpersonal relationships, conflict resolution and so on.

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[1] Through Prayer we can get the same result.

ADULTHOOD

There is a lot of competition in our societies due to the pressurised ambitious to succeed. After many years of education, when we finish school or university we have already created mental habits of fear, competitiveness and bad self-image and so we end up living with traumas which diminish our possibilities and development.

Our whole urban lifestyle reflects these kinds of problems. For example, when running our business, we always have a lot of fear and blockages, these cause us to waste a lot of time and energy at work. I suggest that we develop many different levels of peace education programmes, both at local and state levels. This is not only for children, it is also for adults. Of course, it is very important that children get the peace habit when they are young, in their formative years, because they are destined to be the men and women of the cities of tomorrow.

The usual pattern is that children receive a formal education preparing them for a life of work and they leave home to become independent generally between the ages of 20 and 30. Between the ages of 30 to 50, most people experience some kind of enjoyment in their lives but after that they start to experience many problems which their formal education did not prepare them for such as growing old, sickness, retirement, loneliness, death and so on.[11] These problems will increase living in a dense urban environments, due to the lack of traditional social networks, stress, unemployment, competitiveness and the alienation of city life.

Every moment of our normal busy lives, our minds' reflect many different emotional and perceptual realities. For example, we might project a very fearful attitude and so feel very threatened at work or we might project aggression and so experience the city as a very hostile place. Due to our belief in the external reflections of our own negative emotional states, we get upset or react inappropriately with our friends, family and colleagues as well as with strangers. If we integrate non-formal education into our daily life it can really help us to identify and transform these negative emotional responses which could otherwise destroy our relationships, health, friendships or capacity to work.[12]

We always act with fear, we are always subconsciously scared to lose our job or that something bad is going to happen to us. This is due to

the fear, which we have internalised. In the workplace everybody has some kind of fear and stress, especially those financially having the whole liabilities. In many ways our whole lives, from birth to death, are stressful and uncomfortable. Perhaps this is partially due to the lack of emotional and psychological education. For example, when we wake up in the morning we immediately think about work. We take breakfast and feel nervous and stressed from the moment we wake up. It is much better if instead of that automatic stress reaction, we spend the first few minutes of the day developing a peaceful mind. What to do, for imparting this type of education into society, would be varied from place to place, depending upon the local cultures, environment, peoples' beliefs and religions. For example, in a religious society, non-formal education could be imparted though Player (religious gatherings) and in a non-believing society, some sorts of exercises like Yoga etc., could be applied. In this way our whole day and our work will unfold much more positively.

SICKNESS

When we are sick, we have a lot of fear, stress and pain. Non-formal education helps us to overcome the mental stress and suffering that goes with those painful physical experiences. Our body may suffer extreme pain, but non-formal education helps us to accept this situation and so we remain cheerful and optimistic. What mode of study we could need to be adopted is to conduct 'Doctors & Nurses' meetings with the patients and general public at the hospitals or at the local bodies level i.e. at the Union Council, District Council, Town/Municipal Committees' levels in a well organized way. This purpose could also be met through publishing handouts, pamphlets and other health material to be freely distributed to the general public so that awareness could be spread. This is a very important factor in speeding up the process of healing or in the case of terminally ill patients it extends their life span and improves their quality of life.[13]

RETIREMENT

It is natural that at some point in life our job will finish and so it is important to do this without fear. Although some people look forward to their retirement, many people when they retire feel dis-empowered because most of the skills and education, which they acquired over so many years have become irrelevant.[14] For them retirement means spending their time with their memories, watching television and reading newspa-

pers. Many old people live alone because they have no relatives and things to take care of them. This leaves many older people feeling that life has failed them and thus they become very sensitive and easily shocked. Non-formal education (Adult Education)[2] should be offered to pensioners and retired persons through organizing their get together meeting and other healthy activities to equip them with the psychological skills that they need to deal with their new situation.

DEATH

When we finally come to die, non-formal education can help us to die in a very relaxed and comfortable way. At death we have to leave behind all our emotional and material supports, we even have to leave our body and speech behind. The only thing that we can take with us into and beyond the death experience is our mind. For this reason before we face death our mind has to be well prepared and peaceful. This objective could easily be achieved through religious teachings at the Jumma Prayer. The only thing, which helped in this situation was the sensation of inner peace.

Coma is also similar to near death experience as the person's body and speech is paralysed but their mind is actually in a very sensitive state. If we give a coma patient peaceful and positive energies and information it greatly helps them even if they appear not to be responding.

CONCLUSION

We have to develop a feeling for inner peace. It is our inner-light our most important company, the most important knowledge we can have, the most important power. People these days have a mistaken idea about peace — they think that peace makes us weak[3]. This is absolutely not true; peace actually makes us much more powerful. Some people believe that peace can only be made through violence and warfare, but we know from our national experiences that this brings only a lot of suffering and violent experiences to many people without solving any fundamental problems. For ready reference, we can and read in the newspapers the recently ongoing Opposition Parties rallies and strikes. We should try the new experience of the peace deterrent.

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[2] To avoid any ambiguity in the use of the word 'adult', the term non-formal education is being used. (Edwin K.Townsend Coles: p.7)

[3] For ready reference you can see all national newspapers (Dailies) for the month of August, 1999, in which most of the political parties of the country are of that viewpoint.

Edwin K. townsend says that the inner peace is the true foundation of world peace, and that to achieve inner peace we need *Non-formal Education*.[15] Through this we can increase our love, compassion, patience, equanimity, kind heartedness, inner peace and other positive emotional states which can help us to deal with the stressful and difficult situations which confront us throughout our life. If we collectively developed these attitudes we will no longer find it necessary to wage war on our people.

Non-formal education can play a major role in promoting the ideas of non-violence. Non-violence or inner peace is a very necessary force in the creation of world peace and is powerful enough to stop all nuclear and conventional weapons in the world. If we personally and collectively practice inner peace, we would ensure the future of the society.

Non-formal education and especially education in non-violence will become vital in the prevention of widespread urban crime and civil unrest. Increasing the powers of the police and military forces will never be enough to deal with these problems. We need to think now about the effects that education of the present generation will have in the future. We need to educate both the educators and our children in the values of non-violence, social cooperation, love, compassion, patience, tolerance, inner space, inner peace, intelligent wisdom and so on. If we can create a basic attitude of non-violence in the minds of the next generation, then all the activities that they need to support their lives, families, cities and so on will go much more smoothly. This includes work relationships, business, family lives, personal relationships and so on. As such, N*on-formal Education* is a long-term investment for the future of our cities.[16]

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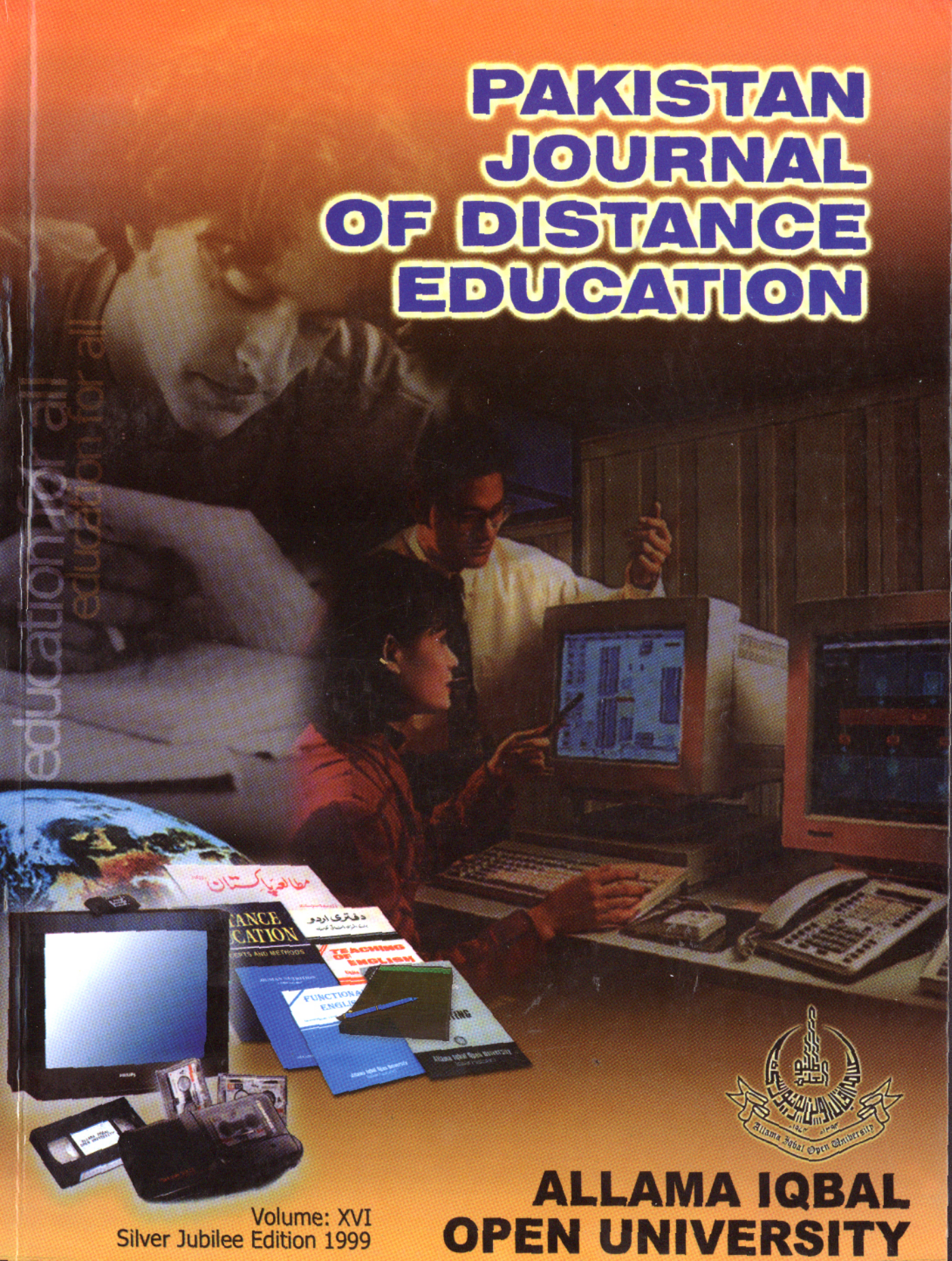

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ALLAMA IQBAL OPEN UNIVERSITY

Science Education In Historical Research

By

Dr. Tanvir Uz Zaman*

INTRODUCTION

It is the age of science. Virtually every aspect of our every day life is affected in some way by the scientific and technological developments. 'What is science' is not at all equivalent to 'how to teach science'. According to Kempa, (1976), "We have witnessed a steady increase in the number of researches dealing with the learning and teaching of science. Evidence for this is readily provided by the appearance, during this period, of several new journals specially devoted to Science Education Departments".

In recent years, science education makes a large contribution in the development of the habit of critical thinking, tolerance and open mindedness among all people and their effective sensible living. An effective science education programme should be directly linked with the establishment of a infrastructure for research in education, mobilisation of resources for production of equipment and strengthening of science laboratories and libraries.

The moment of technological development is it self a source of pressure for teaching science. The importance of science education is generally agreed upon by the teachers and field researchers without any disagreement concerning the role of the science education, their objective and effectiveness.

T. Z.

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SCIENCE EDUCATION

In science education we teach the students to use one form of knowing, i.e. *the experimental*. It has strengths and even limitations. It can answer some questions, but not the all. It may have some beauty or justice (environment) or use of symbolism, but its main function is that of empirical experiment.

Stenhouse, (1985)[1], describes the study of how pupils ought to be educated in the science. Wellington, (1988)[2], said, "Science education is primarily concerned with transmitting a body of inherited knowledge". At other place he says that "in the 'information age' all that matters is that pupils know how to access information and where to acquire the facts". He also says, "the most valuable part of scientific education is 'what remains after the facts have been forgotten". In the opinion of Wood, (1991)[3], "the object of scientific activity is to reveal reality. Science education should be more about the learning of scientific facts. Lakin and Welington, (1988)[2] . quote Phillida Salmon's statement which is as follows:

> "It seems that a particular view and belief about the nature of science may have a considerable influence not only on what science is taught but also on how is taught."

There can be a long discussion about the nature of science education, but from my point of view, Johnstone, (1991)[4] has made very clear statement of the problem of science education while saying; "In science education at all levels, the thing which stands out above all above every thing else is the gross amount of 'noise' which is allowed to surround the 'signals'. It summarises the main problem of science education and practical work in particular. Very often, the conceptual message of an experiment is completely obscured by apparatus, or the equipment. Some time unfamiliar back ground material is needed to understand the experiment and extract the desired result. All these different activities compete for the student's attention while doing the experiment.

IMPORTANCE OF SCIENCE EDUCATION

Broadly speaking, science education is designed to enable the student to identify and solve scientific problems and to do research in new areas of knowledge. This is implemented by teaching scientific techniques and theories which have been founded to be useful in the past.

Holmes, (1977)[5] states: " While the spirit of science enquiry and the work of research workers imply that science it self transcends national boundaries, it maintains that systems of science have their own national specific ethos". Prest, (1977)[6], emphasised that "science education develops appropriate behaviour processes", Stenhouse, (1985)[1] adds that the "self correcting and self-improving activities of science education is thought to be the extension of a more adequate development of children's curiosity through the processes of exploration and learning by experience. It emphasises new perspectives, new problems and satisfaction and becomes a way of opening new vistas to students, and of finding satisfaction in imaginative and constructive use of their intelligence".

In a similar way, Michael, (1975)[7], after classifying science in to various disciplines, says that "in the broad domain of science, a central goal is to increase people's reliable knowledge of the natural world. These are present in people's continuing search for understanding of the universe".

Mentioning the importance of science education in terms of meeting energy needs after the year 2000, Cartrell, (1982)[8] remarks: "Every new scientist and engineer who can be educated to recognise this coming great problem i.e. energy crisis, and expertly trained to increase the supply and conservation of energy, will be one of the worlds most valuable citizens in the twenty first century." Stanley (1982)[9] wrote that broad balanced science will have many implications in the future for specialist, science teachers, industrialists and pupils.

According to Shaikh, (1984), "in science education, the children develop of their own accord a scientific way of observing and thinking, and carry out experiments. It presents new concepts, develops appreciation including the joy of discovery and desire for study, and develop a strong desire to see the truth. In this way, all human potentials are awakened and developed. The children investigate phenomena in the natural world, notice natural laws, make clear the relation between phenomena and ob-

serve nature as a whole." Thus, science education aims at the formation of human character, which includes the formation of views of nature it self. Hence science education brings the science knowledge necessary for living positively in the world of science and technology.

HISTORICAL DEVELOMENT OF SCIENCE EDUCATION

Science education has a very long history. According to Jenkin, (1976) *(10)*, the concept of science education may be traced at least as far as back as the phrenologists. It assumes that the methods and techniques of physical science can be applied to educational problems and that experimentation can lead to a body of empirically tested educational theory Or conversely. According to the *Encyclopaedia of Educational Research*, (1952)[11] "the development of educational theory based upon careful study of child growth and development laid the foundation for science education". These two views are interrelated. Lucas (1965)[12] says that "during the embryonic period of science education, science was taught with emphasis on the memorisation of facts. Laboratory work and demonstration were not included as necessary or primary source for acquiring knowledge regarding the methods of the scientist or for the purpose of investigating, clarifying and verifying facts". *Encyclopaedia of Educational Research* (1950)[13] states that "Science Education was introduced in the elementary schools under such titles as elementary science, objective lessons and nature study. In the secondary schools, these appeared under the title of several more or less discrete, special field subjects as Physics, Chemistry, Botany, Zoology, Astronomy, Physical Geography, Human Psychology, with considerable competition for recognition of the special subjects, such as General Science, Biology, Chemistry and Physics were listed as principal courses in Science.

Crawthron, and Rowell (1978)[14] pointed out that the major development of science education in secondary education was initiated, when the 'progressive education association' established a commission on the secondary curriculum. Tracing the development of science education with special reference to Biology science curricula since 1940s, Meyer, in the Asian Centre of educational Innovation for developments, (1982), said, "in the years immediately after the second world war, science education in schools was largely loose collection of facts, at best held together by the structure of the disciplined learning and the recipe book approach". He further explains, "the first significant change was the realisation emerging

through the fifties, that the subject matter could be selected and arranged to enhance the learning of central concepts or 'Big Ideas' of a particular discipline. The subject matter was arranged as learning hierarchies so that 'lesser' concepts led commatatively to understanding of the Big Ideas".

The Encyclopaedia of Educational Research (5th Edition), (1969), says, "scientific technical and technological potential, brought a revolution in science education. The community looked to public schools for scientists and engineers". Robert, (1960)[15] has noticed during the fifties and sixties, there was also a strong move to select concepts of greater relevance to every day life. All this stage, the applied topics were 'grafted on' or treated as 'discovery learning'. This was the period of glossy curriculum packages and centrally developed curricula. The emphasis was on problem solving, inquiry learning' was defined simplistically as being almost synonymous with discoveries of research scientists, but there was a more realistic move towards 'guided discovery' where the steps of problem solving were made overt.

According to the Asian Centre of Educational Innovation for Development (1984), "during the late sixties and early seventies, there was a gradual assessment and moderation of the 'discovery approach' and there begin to emerge a variety of strategies to bring about a closer match between the methods of teaching and individual styles of learning. However there was firm commitment to experimental work and to participatory learning. During this period, there began the slow emergence of a relatively new emphasis, which was on values. Questions were asked such as 'inquiry about what', problem solving 'for what purpose'? This approach brings together knowledge, understanding, attitude, skills and insights in an attempt to understand social values". It further states that in recent years, several factors, many of them economic and political, have forced science education curricula to become even more directly relevant and appropriate for everyday life. This has implied a shift in the method of teaching and learning. Now there are close inter active links between objectives, contents, and methods. Lewin, (1993)[16], while tracing the developing countries says, "planning conditions are now very different to those of 1960s when the first large-scale investment in science education took place in most developing countries. Confidence in the role that science education could play in national development has been tempered by widely varying experiences of the extent to which development has taken place and by uncertainties about the benefits that have arisen from expanding access". He also explained that the institutionalisation of curricu-

lum development has meant that most countries have localised their science curricula and have accumulated direct experience of the difficulties of implementing changes in teaching and practice. This led to more modest expectations about what can be achieved.

Now the latest trend in science education are the formulation and reformulation, socially oriented approaches, as a growing trend fraught with the leading of social utility. In short, science education is reflecting what society is demanding.

CONCLUSION

- Historically, in science education there is a steady increase in number of researches dealing with the learning and teaching of science. Evidence for this is readily provided by the appearance, during the past few decades, of several new Journals specially devoted to science education issues and the establishment of science education departments.
- Science education includes general aims and objectives, teaching methods, curriculum theory and philosophy of science as its specifically educational feature.
- Science education is a well defined, quasi- mechanical process consisting of a number of characteristic stages, such as observation and experimentation, inductive generalisation, hypothesis (the formation of general scientific statement or law), attempted verification, proof or disproof and objective knowledge.
- Now a days, science education also includes, science as intellectual discipline, science as a cultural activity.

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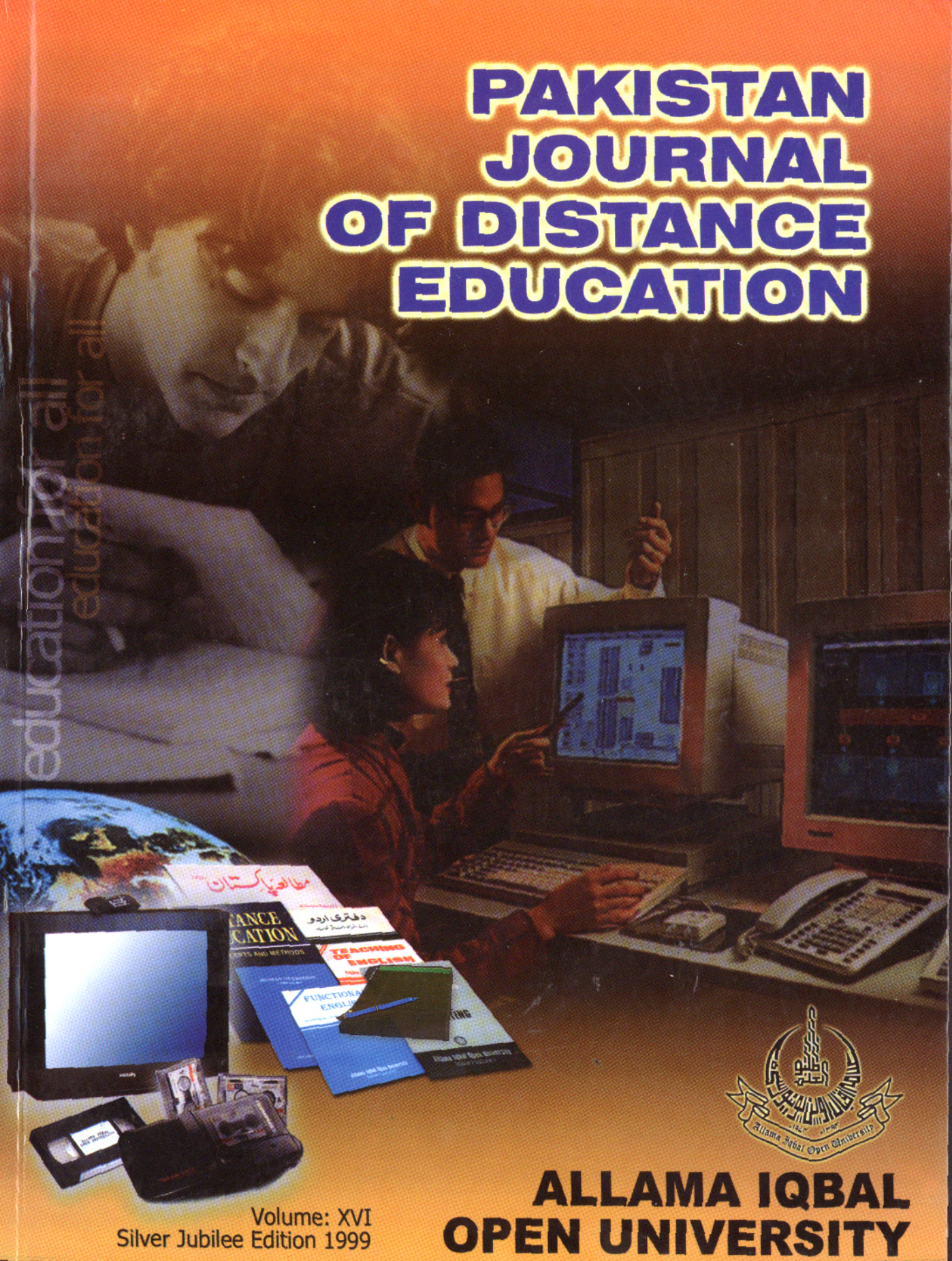

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ALLAMA IQBAL OPEN UNIVERSITY

Thinking In Two Domains

By

Dr. Sabir Hussain Raja*

1. Brief History

There is evidence that the same child may have different conceptions of a particular type of phenomenon, which are equivalent from a scientist's point of view and even switching from one sort of explanation to another for the same phenomenon. It is often noticed that even after being taught, students have not modified their ideas in spite of attempts by a teacher to challenge them by offering counter-evidence. The students may even ignore counter-evidence, or interpret it in terms of their prior ideas. The student's interpretations and conceptions are contradictory, but none less stable. Driver[1] has documented a number of children's ideas in different areas of science, such as, the studies in the area of student's conceptions in dynamics; Gunstone and Watts about force and motion; Nussbaum about the views of the Earth and particulate nature of matter in the gaseous phase; Tiberghien, the idea about heat; Guesne, light; and Shipstone about electricity. These studies have been undertaken in a number of countries. The findings of these studies paint a consistent picture with students early experiences of phenomena dominating their thinking. Driver has mentioned a number of studies[2] undertaken by Pfundt and Duit, 1985, Jung et al, 1982; Helm and Novak, 1983; Gentner and Stevens 1983; Driver, Guesne and Tiberghien, 1985, which indicate that children develop ideas about natural phenomena before they are taught science in school. In-depth investigations have indicated that these notions may persist into adulthood despite formal teaching. Students' prior ideas are an important factor in their understanding of school science. Students make observations and inferences about phenomena which differ from those intended because of their different interpretative schemes. Solomon[3] has suggested that rather than trying to relate what is taught to their prior ideas, students may maintain them as separate domains, "the life world" and "the science world" each relevant to its own

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range of contexts. Harlen[4] while commenting on children's ideas, states that children form ideas about things around them before they are taught about them in school. To those who have constructed them, misconceptions are not recognisable as different from any other explanatory knowledge. They are formed by the same process, take part in the generation of new knowledge and consequently are difficult to replace. As with construction, replacement involves the process of equilibration (5).

2. Present Study

A study has been carried out in Scotland by Johnstone and Raja to see how children think in two domains at the same time. During this study alternative responses of the children have been studied. For this research study both the techniques (questionnaire and 1:1 interview) were used simultaneously. Overall 157 children from P4 to S2 (Primary Fourth to Ninth Grade) participated the research.

3. Methodology

Different activities based on varying length of reasoning chain (steps) were designed. Children were asked to use the activities and explain different steps in the phenomenon. To make sure that every child should participate in all the activities, the idea of an expert at each station was also employed. To make the sample homogeneous an equal number (girls and boys) of children with lowest abilities, medium abilities and with the highest abilities at each age level as judged by their teacher were included. At the request of the teachers, children and the parents, a specific arrangements was made to allow the children to participate anonymously.

The Activities used were:

1. **Activities having a one-step reasoning chain;simple one step of cause and effect**

   a) **PUFF SIGNALS (Mixing of hot coloured water and cold plain water):**
   Hot blue coloured water in a beaker with aluminium foil cover on it is put inside a larger beaker half filled with cold water.

Making a hole in the foil allows the hot blue coloured water to rise up in the form of puffs.

REASONING STEPS: 1: Hot water being "lighter" rises up.

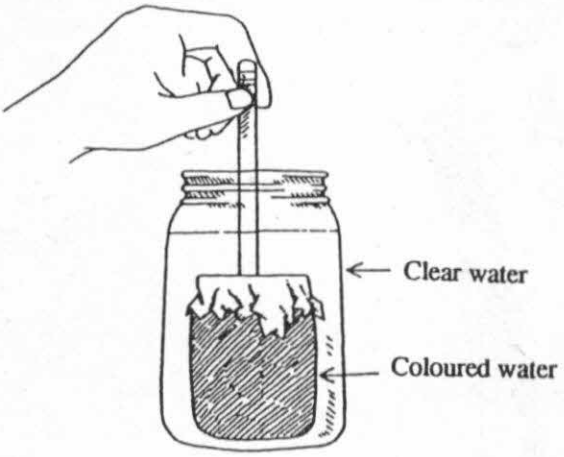

Figure-1

b) **FLOATING EGGS**

Two beakers of the same volume are put in front of the child. Tap water is put in one of the bakers and salty water in the other. Two boiled eggs of the same size are immersed in the beakers. The egg immersed in tap water sinks whereas the egg in the salty water floats.

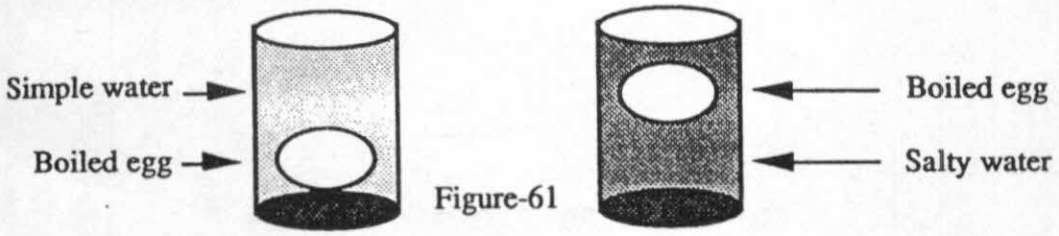

Figure-2

REASONING STEPS:

i) The egg floats in the salty water because the egg is less dense than salty water.

c) **SKY HOOK**

A piece of wood or plastic is cut in the form of a hook. When one tries to balance it on its tail, it can not be balanced. When a leather belt is placed on the hook, it can be balanced on its tail.

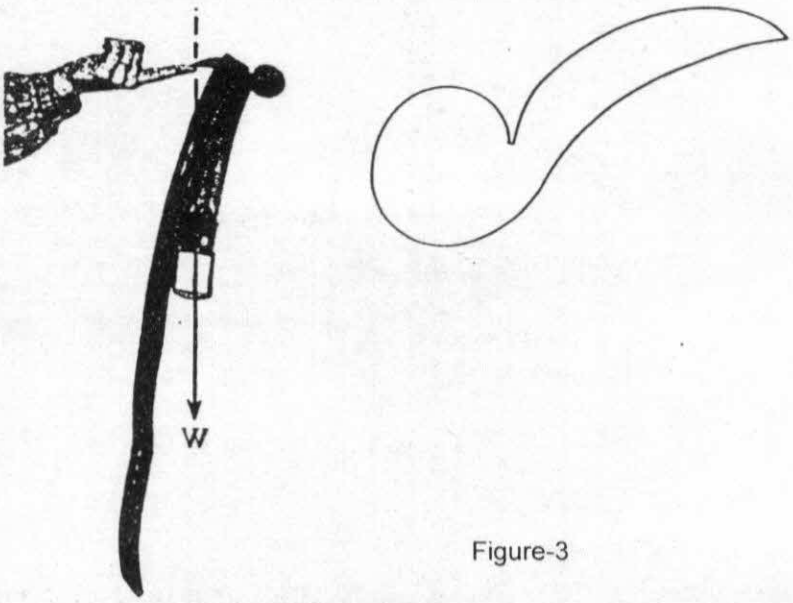

Figure-3

REASONING STEPS:

i) The belt is balanced because the "Line of action of the weight" is shifted under the finger.

Figure-4

2) **<u>Activities having two steps of reasoning chain</u>**

a) **STRANGE DIVER:**

A plastic bottle is filled with water and a dropper, semi-filled with water, is placed inside the bottle. When the bottle is pressed, the dropper (strange diver) falls to the bottom and rises up again when the pressure is released.

REASONING STEPS:

i) Squeezing the bottle, the pressure is transferred to the water inside the dropper, (causes rise of water inside the dropper).

ii) The dropper sinks, being now denser than water.

b) **FLOATING ICE IN SUNFLOWER OIL:**

Chilled sunflower oil is put in a long wide cylinder and clamped on a stand. Dried ice cubes dropped in the oil which float.

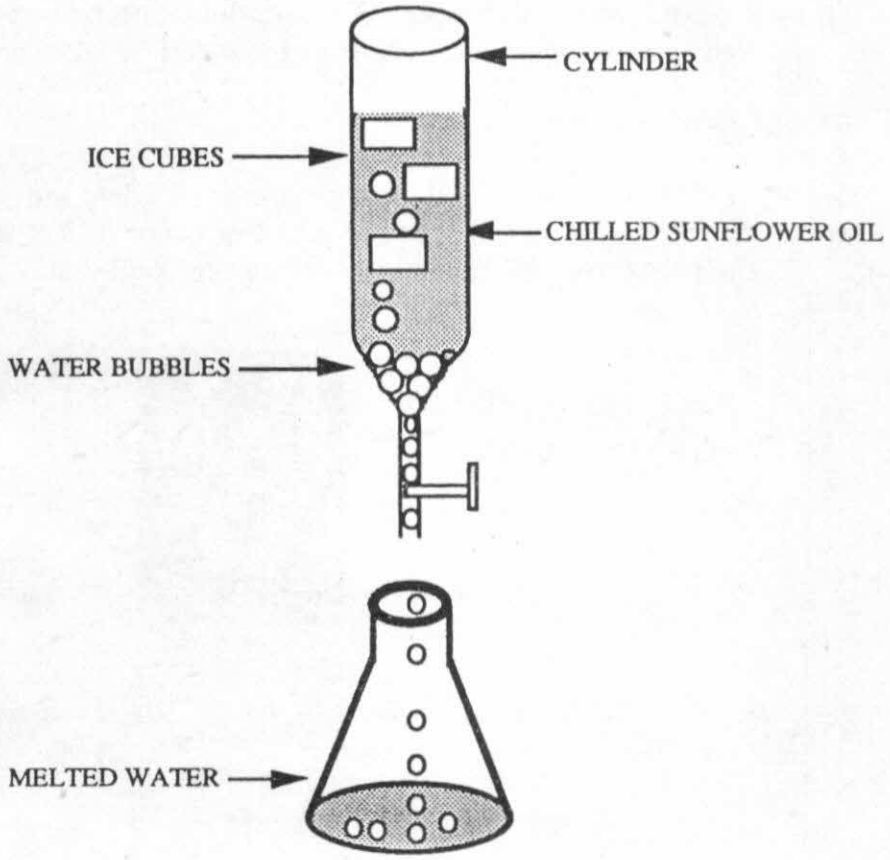

Figure-5

When the ice cubes melt, the melt water falls to the bottom whereas the ice cubes remain floating in the oil.

REASONING STEPS:

i) Ice cubes are "lighter" than sunflower oil and float.
ii) Water is "heavier" than sunflower oil and sinks.

c) **POURING WATER OUT OF CAN.**

A Coca Cola can is emptied. Three holes are made of equal diameter on one end of the can. Water is put in the can. Water does not come out of the inverted can if two holes are blocked; water also does not come out if one hole is blocked and two are open and the can is balanced horizontally.

REASONING STEPS:

i) Taking water out decreases the pressure inside the can.
ii) Air from outside the can presses the water in it to equalise the pressure, and so the water does not come out.

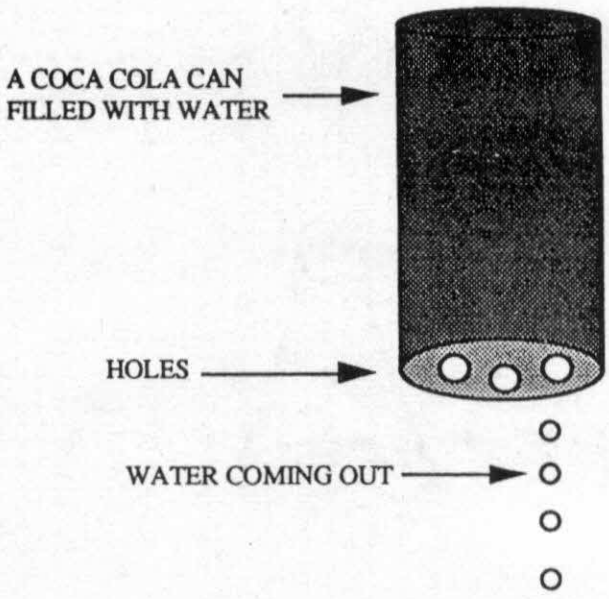

Figure-6

3. **Activities having three steps of reasoning chain.**

A) **INFLATING A BALLOON INSIDE A BOTTLE.**

A balloon is put inside an empty plastic bottle. The bottle has a hole in it. When the hole is blocked, the balloon cannot be inflated. The balloon can be inflated easily when the hole is open. If the hole is blocked after the balloon has been inflated, the balloon does not deflate automatically.

REASONING STEPS:

i) Inflating the balloon inside the bottle needs extra space.
ii) The excess air escapes out of the hole.
iii) The blocking of the hole keeps the air pressure inside equal to the outside pressure. Therefore the balloon does not deflate.

Figure-7

B) Inflating a soap bubble.

The mouth of a round bottom flask is dipped in a washing liquid. A thin layer of the liquid covers the mouth of the bottle. When the bottom of the bottle is covered with the hands, the bubble grows.

REASONING STEPS:

i) The bottom of the flask absorbs heat from the hands.
ii) The air inside the bottle absorbs heat from the bottom.
iii) The air inside the flask expands and the bubble grows.

4. **Activities having four steps of reasoning chain**.

a) **RISING WATER PUZZLE.**

Water is put in a large size watch glass. A small birthday candle is lit and put in the middle of the watch glass. The candle is covered with an empty glass. The candle goes out and water rises up in the glass.

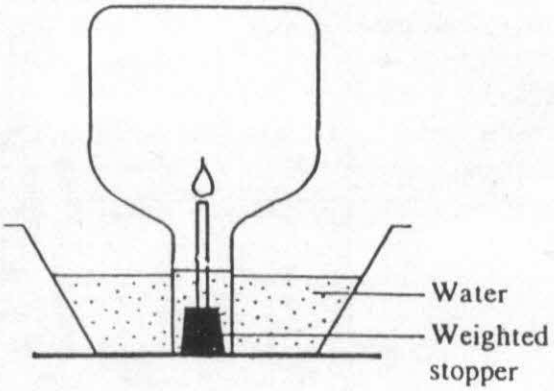

Figure-8

REASONING STEPS:

i) oxygen inside the bottle is used up (to produce carbon dioxide).
ii) Carbon Dioxide dissolves in the water.
iii) Pressure is decreased inside the bottle.
iv) Air from outside forces the water in to the glass.

B) **HAND DYNAMO.**

A handle is moved to produce electricity in the dynamo which causes a bulb to light.

REASONING STEPS:

i) Movement within the dynamo.
ii) Electricity is generated.
iii) Electricity travels through the circuit.
iv) Electricity is changed into light.

5. **Activities having five steps of reasoning chain.**

A) **BALLOON FOUNTAIN**

A glass tube is bent as shown in the figure. A jet is formed at one end of the bent tube. A balloon is attached to another straight glass tube. Both the tubes are passed through a rubber stopper fitted to the mouth of any empty plastic bottle. When the tube with jet inside the bottle is blocked, the balloon cannot be inflated.

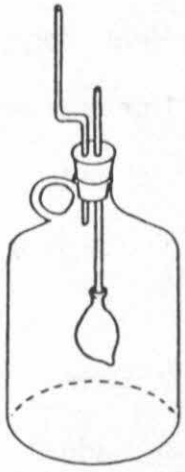

Figure-9

When that tube is opened, the balloon can be inflated easily. If the balloon is inflated first and then the other tube is blocked, the balloon does not deflate. Now, if the bottle is turned over and the tube, now un-blocked, is dipped in water, water rushes inside the bottle through the jet in the form of a fountain.

REASONING STEPS:

i) Inflating the balloon inside the bottle needs extra space pushing air out.
ii) Blocking the other tube keeps the air pressure inside the bottle equal to the outside pressure.
iii) Opening the other tube, allows the balloon to deflate.
iv) Air pressure decreases inside the bottle.
v) Air from outside forces water in to the bottle to keep the pressure equal to that of outside.

B) **SPIRAL MOVING OVER A LIT CANDLE.**

A spiral of aluminium foil is hung over a lit candle and it turns.

REASONING STEPS:

i) Wax burning (chemical change).

ii) Heat energy produced.

iii) Hot air or air gets heated.

iv) Hot air rises up.

v) The rush of hot rising air makes the spiral move.

c) **WINDMILL MOVING OVER A LIT CANDLE.**

A windmill is hung over a lit candle and it moves.

REASONING STEPS:

i) Wax burning (chemical change).

ii) Heat energy produced.

iii) Hot air/air gets heated.

iv) Hot air rises up.

v) Hot rising (lighter) air makes the blades of the windmill move.

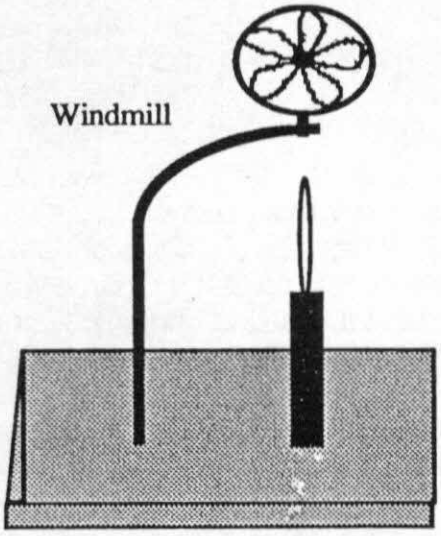

Figure-10

4. Responses of the Students

1. When the children performed different activities,the responses were such as:

A) For PUFF SIGNALS

- Cold water is bringing hot water up.

B) For FLOATING EGGS

- Air trapped in water/air inside egg makes the egg float; sugar/salt make the egg float.

C) For INFLATING A SOAP BUBBLE.

- Hands squeezing glass and make air make bubbles.
- Fire inside the flask makes the bubbles grow.
- Squeezing hands makes bubbles grow.
- Holding the flask makes the bubble.
- Fairy (name of liquid) liquid in flask makes bubble.
- Steam from the fairy liquid makes the bubble grow. .

D) For SKY HOOK .

- Weight and finger make the hook balanced.
- The weight of the belt balances the book.
- Belt keeps the balance like the wings of a plane.

E) For RISING WATER PUZZLE.

- Fire was pushing water.
- Water rises up because the air has blown out the candle: water rises up because air has escaped.
- Water had gone up through the candle to put out the flame.
- Water made the candle cold so that the flame went out.
- Water rises up because it is a kind of magic water.
- Candle flame pulled the water up.
- Glass is so hot inside, it made candle out; steam makes water go up.
- Water rises because it is being pulled up by the fire.
- jar is holding the water up.
- Candle has gone out because it cannot breathe out.
- Oxygen pushes blue liquid up/gas sucks the blue water up.
- Candle goes out because water goes up.
- Candle put out by dampness.
- Air burnt out; no gravity so water rises.
- Jar keeps water from getting out.
- Flame makes water go up; watch glass holds water up; candle could not breathe.
- Air has gone away into water; light goes of then water sucks in.

F) For POURING WATER OUT OF A CAN .

- Water does not come out of the can (with one hole open) because water stuck at the top of the can.

G) For FLOATING ICE IN SUNFLOWER OIL.

- Ice is floating because oil is pushing the ice up there.
- Oil is heavier than water because there is a lot of oil.
- Ice stays up because it is hard and big and bubbles down.

H) For HAND DYNAMO.

- Liquid goes through wires.
- Turning the handle lights bulb.
- Handle goes round, heats up the dynamo, makes electricity, energy goes through wires and alights the bulb.
- To do with handle, it goes round, torch bulb lights due to machinery.

- The dynamo has got electricity in it; goes through wires to the bulb and the bulb lights up; bulb remains lit until handle is turned on by turning the handle light comes on.
  Torch bulb lights because of batteries, magnet things in it make things on and of.

I) For "BALLOON FOUNTAIN".

- Water going up, makes the balloon smaller.
- Air going out of balloon causes water jet rise in the bottle.
- Water hits the balloon and balloon goes smaller. If both the tubes are dipped in water, water comes out of one end, goes inside the bottle through the other.

J) For SPIRAL MOVING OVER A LIT CANDLE.

- Similarly as coal burns inside an engine, it makes steam which makes it move.
- Heat moves it; heat and flame go up and move the spiral.

When the responses of primary school children were arranged on the scientific and unscientific basis, the same child had a mixture of ideas; such as for:

6. Findings

When children's responses were arranged, they were of two kinds:

a) Children's own or unscientific concepts for the explanation of different activities and processes - categorised as alternative explanations.
b) Scientific and un-scientific mixed explanations for the same process at the same time.

7. Results/Conclusions

This study indicates that children at primary level while are thinking into two domains. They construct their own ideas. The primary children even with age of 8 years observe different phenomena in critical manner. They construct their own ideas and have interpretations for their own satisfaction. But, at the same time they are holding school science concepts

as well. This situation indicates that the children have not been given a chance to rectify their own alternative concepts or the teachers have been ineligible to challenge the alternative concepts of the children. In a sense, the children are holding both the concepts at the same time. The school concepts will exist only for the time they are needed but their own ideas will be prevailing unless they are challenged. So the children at primary level are always thinking into TWO DOMAINS. This may hamper the performance of the children which will be a recurring loss.

8. Recommendations

This is a great challenge for the Primary Teachers, Educational Planners and Curriculum Designers. It will be essential to find methods of helping pupils to unpack their alternative ideas and expose them to gentle dissonance, so that they can reconstruct scientific ideas without carrying scientific and alternative explanations on two separate mental planes thus causing later confusion.

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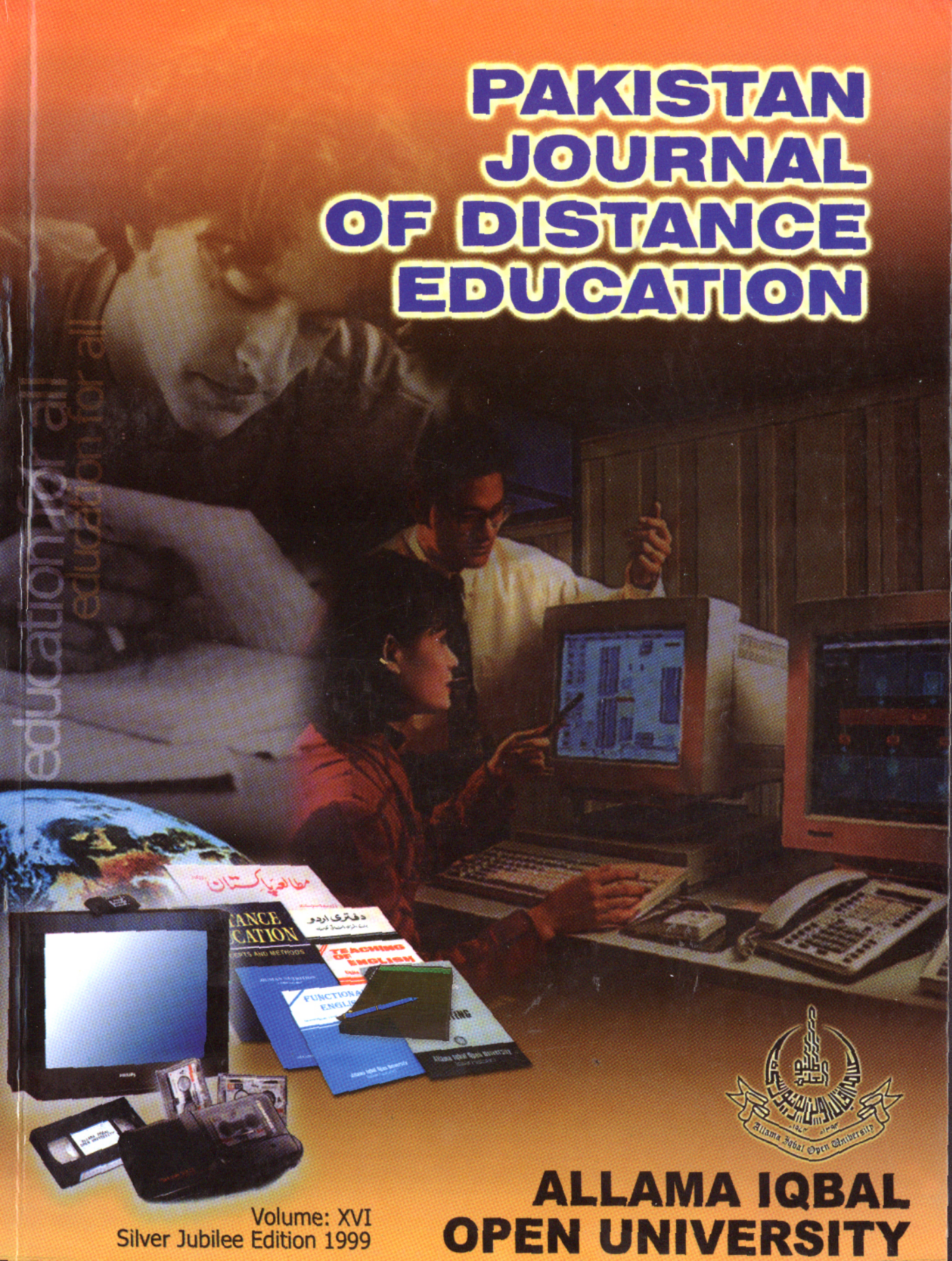
PAKISTAN JOURNAL OF DISTANCE EDUCATION

education for all



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ALLAMA IQBAL OPEN UNIVERSITY

Pakistani Women and Education

By

Samina Yasmeen*

Quaid-i-Azam Muhammad Ali Jinnah, was a far sighted visionary futurist. He strongly believed that the future always belonged to the youth-both men and women. They, however, need to be groomed for it properly through sound upbringing at home and proper education at schools and the colleges. It is an established fact that women as a mother teacher, is the preserver and promoter of the moral values and ethical life style of the family. As such, she is a suitable leader to effect the desired social change along the ideologically chosen lines in the society. The Quaid-i-Azam had always advised the Muslims to follow the Holy Quran on the subject as under:

> *You have asked me to give you a message. What message can I give you? You have got the greatest message in the Quran for our guidance and enlightenment..... Let us forego our personal interests and conveniences for the collective good of our people and for a higher and nobler cause".*[1]

Similarly, while giving his views on Muslim women, he said:

> *No nation can rise to the heights of glory, unless its women are side by side with you. It is a crime against humanity that our women are persuaded to limit their activity within the four walls of their homes. I do not mean that we should intimate the evils of Western life. But we should try to raise the status of our women according to our*

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own Islamic ideas and standards. There is not religious sanction anywhere for the deplorable conditions in which our women have to live. The men should take women along with them and comrades in every sphere of life, avoiding the corrupt practices of Western societies. You can not expect a women who, herself, is ignorant, to bring up your children properly. Our women have the ability to bring up the children on right lines- Let us, therefore, not throw away this asset".[2]

At an other place the Quaid-i-Azam said:

In the great task of building the nation and maintaining its solidarity, women have a most valuable part to play, as the prime architects of the character of the youth that constitute its backbone, but by helping their less fortunate sisters outside in the greater task. I know that in the long struggle for the achievement of Pakistan, Muslim women stood solidly behind their men. In their bigger struggle for the building up of Pakistan that now lies ahead, let it not be said that the women of Pakistan had lagged behind or failed in their duties".[3]

Islam expects women to play their natural role as agent of social changes in the society. It is, however, unfortunate that the society has continued to deny this role to them. At least, they are not properly encouraged to perform their natural duties. There are two faces of Pakistani women, which are persistently run parallel to each other i.e. as an active member of the society and an activist change agent; both-at the common and elite level. She is indeed a suppressed specie. Both images have persisted till today right from the pre-independence colonial period.

Pakistan's constitution (1973) has provided a fixed quota of reserved seats for women legislators; even that token quota expired a couple of years back and has not yet revived. It is still not too late. Women must be empowered by the government and facilitated by the society to become activist affecting the required social changes. Now, that we are preparing to

establish 21st century, only then she will be able to play a befitting role in the society. This can only be achieved when she is given a proper and well deserved status in the education system of Pakistan.

So far as education is concerned it has been said in a conference:

Education does not merely mean academic education. What we have to do is to mobilize our future generations. There is, therefore, an immediate and urgent need of training our women in scientific and technical education in order to build up our future economic, scientific life, commerce, trade and industries.....We have to compete with the world which is moving very fast in this direction.....Greater attention must be paid to technical and vocational education.[4]

The women are about 50% of our population in Pakistan. Despite cosmetic modernization and much talked emancipation, they remain marginalized in the male dominating society. Discrimination and crimes against them are on the increase, in spite of all the lip service to Islam. The women need to be empowered politically, economically, and socially. Only by proper empowerment, Pakistani women can play an effective role in our society. Women are the guardians of human values and custodians of our culture. Their education, therefore, is extremely important.

The world famous futurist, Madam Eleonora Masini of Italy, who is the chairperson of Executive Council of World Future Studies Federation calls women and children the preceptors and propagators of the seeds of change.[5]

The well known main perennial purposes of education are:

1) Personality and character development of the individual, the citizen and the society through desirable national culture, value system and life style.
2) Economic development through life-coping and bread-earning skills.

Unfortunately, education in Pakistan does not serve either of the two aforesaid ends. The educational status of Pakistani women is among the lowest in the world, partly because the education sector as a whole has suffered from neglect....with enrollment rate stagnating particularly in the last decade or so and partly because within the educational sector,

girls are far more deprived than boys. In 1985/86 only about a third of the approximately 940,000, five-years old girls living in rural areas were in schools.[6]

Fewer than one in six of rural girls completed five years of education. Enrollments in Balochistan and Sindh were specially low. In 1981, female literacy in rural Balochistan was estimated at only 1.8%.[7] In higher education.....i.e. intermediate level, degree colleges, post graduate level colleges, professional colleges and universities, women are still under represented. Their representation ranges from 15% to 30% of the total students, averaging 26% at levels beyond the intermediate (grades 11-12) or about the same as at the secondary level for rural or urban areas. Combined International evidence shows that social and economic benefits of female education are very significant.[8] The social benefits relate primarily to the impact of mother's education on their children. Educated mother increase the effectiveness of public health services. Their children including their daughters show a higher survival rate, particularly in the crucial early years, and better health and nutritional standards as they grow older. Educated mothers also see the value of educating their children, including their daughters, and can teach their children basic literacy and numeracy. Finally, educated women tend to want fewer children. The Pakistan contraceptive prevalence survey (1984/85) shows a clear relationship between female education and lower fertility. Given the seriousness of population problem in Pakistan, this is an important additional benefit to female education. Furthermore, this International evidence shows that economic return to female education are just as high as those for males, in terms of public cost of providing schools as well as the private cost of opportunities foregone by the person spending time in school.[9]

If these benefits of female education are so clear to the society, why does female education lag so far behind in Pakistan? An important reason, certainty, is that parents (who have to make the investment) perceive the costs of educating girls to be high. Moreover, the benefits of educating women accrue not to parents themselves but to others. On the cost side, not only do parents have to pay for books, uniforms, and sometimes school fees, in the case of girls, they may also have to pay for transport to the schools, since it may not be respectable for her to walk to her school. Also, if there is no female teacher, it may not be desirable for the girl to join the class.

Finally, and perhaps most importantly, a girl's time is likely to be more valuable than a boy's around the household. She may be needed to look after younger children, fetch water and fuel wood, attend to live-stock, and help with the processing of the agricultural produce, all of which are female responsibilities in most rural areas of Pakistan. Thus, it would seem that two things are necessary, many more facilities for girls, combined with measures to reduce the financial and cultural costs of parents for sending their daughters to schools. There is even a case for subsidizing girls for more than that of boys, since, as noted above, parents don't reap major benefits from investing on their daughter's education. It is obvious that when the economic and social benefits are combined, there accrues greater benefits in educating males rather than females children.

RECOMMENDATIONS:

Education sector in Pakistan is facing a double crisis. At the present level of federal spending, the educational expenditure need to grow by approximately 3% per annum in real terms just to keep up with population growth, and by much more if we want to make up for past neglect. While the country is in the period of fiscal austerity, it cannot be over emphasized that the critical constraints facing the education sector are caused by lack of resources.

One way to overcome this is that the expenditures are reduced and re-allocated from economically non-productive budget items to the social sectors. In view of the need to raise enrollment rates and improve the quality of education, real increases of 10% per annum for recurrent expenditures and 6 % per annum for investment expenditure would be reasonable. However, it does not seem to be happening. The provincial Annual Development programme for Sindh shows a decline. Although Punjab's plan shows an increase in education expenditure over the previous years, given the funds made available to the provincial governments by the center remains constant over the 1988-89 budget. It is not clear how planned increased spending in provincial programmes will be financed.

In line with Government of Pakistan's emphasis on equity, the first priority should be given to improving the extremely low levels of female primary education, particularly in rural areas. For this purpose, the primary goal should be to bring rural enrollments up to urban levels. Several approaches will be needed.

2. Make a major effort to increase the proportion of female teachers. In this respect the following is proposed.

   (a) Lowering academic requirement for female teachers and increasing compensatory in service training, specially supervision.
   (b) Removing the age ban on hiring older women, many of whom would be available after the child bearing years. They would also find it easier to travel in rural areas.
   (c) Providing monetary incentives; hardships allowances or group hostels for female to encourage women to teach in rural areas where they don't like to live. Since the later recommendations entails some costs, they should be tried on pilot basis and carefully monitored to see whether they are effective enough to justify the costs. Current efforts in this direction, especially those that have not been particularly successful, should be analysized in order to improve programme designs.[10]

2. In order to enlarge the supply of potential teachers, rural secondary schools should be improved and post-puberty girls need for separate facilities, hostels, transport allowances etc. taken into account.

3. In order to provide better incentives through increased remuneration, consideration should be given to exploring innovative measures, such as creating of certain reserved jobs, both private and public sectors.

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BOOK REVIEW

The Rise & Fall of the Great Powers
Azim Taqatoon Ka Uroj-o-Zawal
By Prof. Paul Kennedy

Translator: Dr. Mahmudur Rahman
Pages 551; 1998; Price Rs.290
Published by National Language Authority, Cabinet Division, Government of Pakistan, Islamabad.

Dr. Mahmudur Rahman of Allama Iqbal Open University, Islamabad has done it again. And how well he has done it. After successfully translating such works of eminent authors as Richard Nixon's' Vic*tory without War* and Alvin Toffler's *Third Wave*, among others, he took up this time Paul Kennedy's *The Rise and Fall of the Great Powers,* a history of machtpolitic in the present century as culmination of that in the nineteenth century, a work whose basis was laid in his *Muqaddama* by Al-Beruni so many centuries ago and completed now by Kennedy, for the present world – a work full of cliches and foreign terms, defying translation. But Dr. Mahmudur Rahman, the veteran writer and translator, has done a great job of translating this work, having wonderful command over the two languages, bringing lucidity, clarity and readability to his translation, which if read without looking at the title would give the pleasure of an original work in Urdu and would not appear to be translation of a classic. I have yet to see a more facile translation from English into Urdu displaying a rare artistic skill and uncommon ease. Dr. Rahman deserves all accolades and kudos for his monumental translation, published by the National Language Authority by the Chairman, Iftikhar Arif, eminent poet and intellectual.

The translator did not confine himself to translation alone but where the Pakistani in him revolted, he gave a footnote on the subject. When Kennedy wrote

> It was easy to encourage the British to withdraw from India in 1947, for it simply Involved transfer to a parliamentary, democratic regime under Nehru (p.389)

the patriot in him impelled him to give a footnote to the effect that power was transferred not just to India under Nehru to two sovereign, democratic nations, commenting how an eminent historian like Kennedy could commit such a gaffe.

Not only this. When Kennedy wrote

> ...the fact that a considerable portion of
> available Soviet manpower is regarded as
> unreliable and inefficient by general staff---
> which probably is a true judgement, given
> report of Muslim fundamentalism throughout
> southern Russia and the bewilderment of those
> trops at, say, having to invade Afghtnistan

the critic in him could not stomach such an opinion, which had been expressed without quoting specific references and source material. He had to give a footnote to the effect that throughout the book the findings given had been given underpinned by citing relevant source material except in the case of so-called Islamic fundamentalism, which may go to show Kennedy's visceral bias against Islam and Muslims, such as is noticeable among Western writers and media generally.

I sincerely congratulate Dr. Mahmudur Rahman for this monumental work, a veritable block-buster, rendered into Urdu by him. The translation is about as flawless as one might expect of a consummate translator.

Muhammad Isa,

Editor,

Quaid-e-Azam Papers Project

Allama Iqbal Open University

By

Dr. Mahmudur Rahman

Since seventies it's been showering,
Glittering rays of knowledge at best;
In the nook and corner of the land,
Day and night does shine its crest !

In the domain of distance education,
It stands as 2nd in the world;
Glamour, goodwill, glitter, glim,
Of its greatness, they all herald !

Mountain, terrain, desert, vale,
Town and village, field and cave;
Hut and palace, kitchen and shop,
All they glint with 'versity's wave !

In new millennium we will go,
Towards the goal "Iqbal" has shown;
Eager to gain the highest rank,
As per Quaid's norm - well known !

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