

LEAPING FORWARD

A REPORT ON HIGHER EDUCATION IN PAKISTAN
FEBRUARY, 2006



PEP

PROMOTION OF EDUCATION IN PAKISTAN FOUNDATION, INC.

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Welcome Remarks by Muhammad Haroon Shaukat Consul General of Pakistan, New York, USA

On behalf of the Consulate General of Pakistan, New York, Permanent Mission of Pakistan to the United Nations and Promotion of Education in Pakistan Foundation, New York, I have the great honor and privilege to warmly welcome the very eminent and distinguished speakers and participants to the International Symposium on Issues in Higher Education in Pakistan.

This symposium seeks to map out innovative and practical models and strategies to promote higher education in Pakistan, raise its standards, and make it more accessible to the socially and economically disadvantaged segments of the Pakistani society.

In recent years, the world has undergone phenomenal transformations. The epoch-making developments, inter alia, include:

Global recognition of a sustainable model of national success based on the foundations of democracy and free enterprise;

Dramatic changes in science and technology, especially IT and growth of knowledge based industries that have fundamentally altered the very basis of economic dynamism; and

The deepening of the process of globalization, results mainly from IT revolution and new world trade regimes.

Against this background, the quality, range and easy accessibility to the higher education will be amongst the most important determinants of the pace of socio-economic development in any developing country.

Higher education is faced with a number of challenges related to ever expanding disciplines, lack of real focus on science and technology, availability of qualified faculty and the quality of instruction, skills-based training, research and development, financing, equity of conditions at access, and employability of graduates. At the same time, there are new opportunities relating to technologies that are improving the ways in which knowledge can be accessed, harnessed and disseminated. Equally relevant is the issue of greater involvement of private sector in higher education and instituting strong and rigorous regulatory mechanisms.

It is not surprising therefore, that all fast moving developing economies, including China, Pakistan, India, South Korea, Turkey and several other developing countries and investing substantially in higher education.

As Pakistan positions itself for leadership in the knowledge based economies, in a fiercely competitive era, a sharper focus needs to be accorded on different essential aspects of higher education in Pakistan, especially its diversification, raising standards and making it accessible to the bright and the talented in masses.

In this context, this symposium provides a unique platform to the experienced and distinguished participants to discuss and debate key issues in higher education in Pakistan and to present feasible and implementable strategies.

We look forward to enlightening discourses and rewarding outcome.

Thanking you for your valued presence, I wish to warmly welcome you once again.

Foreword

We are very happy to have put together this report of the First International Symposium on “Issues in Higher Education in Pakistan”. The Symposium was held at the United Nations in New York, on December 5, 2005.

The world has been undergoing a revolution in science and technology since the last half of the twentieth century. In the modern world, the educated are going to be the “fittest” for survival. The education sector, especially the higher education has been very much neglected in Pakistan since its independence in 1947. The quality of higher education, especially in colleges is far below standards in developed countries. Less than 3 % of the age group 17-24 is enrolled in a college/university whereas the corresponding enrollment in developed countries is 50-75%. Pakistan, with its population of ~ 150 million people and a pivotal position in global affairs, is in need of a considerable help to improve the standard of higher education at its colleges and universities, and to make higher education accessible to its masses.

The Symposium provided a unique platform to exchange knowledge and views on the status and issues in higher education in Pakistan, and on various models to improve the quality and the accessibility of higher education.

The participation of experts in higher education, along with educationists, non-profit organizations, philanthropists, corporations and students of higher education made this symposium a truly unique effort and platform to achieve the objectives of the symposium.

We hope that the policy makers and educationists will take full advantage of the recommendations of this report and realize the improvement of higher education and its accessibility to the masses.

Khalid Iqbal, Ph.D.
President, PEP Foundation, Inc.

Executive Summary

“Education is a great engine of national development, social development, intellectual development, cultural development, economic development, and individual development.”

Diane Ravitch
Symposium on “Issues in Higher Education in Pakistan”
United Nations, New York, December 5, 2005

The world has been undergoing a scientific and technological revolution for the last half of the 20th century. In particular, the popularization of personal computers and the invention of the Internet during the last two decades have had a profound effect on the economic, social and even cultural development in modern society. In the past a nation could survive with the unskilled labor force and natural resources. However, the survival of a fittest nation in the 21st century will require its masses to be educated in logical thinking, reasoning and modern skills. It is mostly through a college/university education that young citizens learn and acquire these skills. Unfortunately, this sector has been among the most neglected in Pakistan since its independence in 1947 and is among the weakest in the modern nations. The current government in Pakistan has made a significant commitment to this sector by increasing the budget several folds. However, given the past neglects considerably more need to be done both in additional funding, and in the development of a clear Master Plan, and in substantial reforms and their implementation.

At present, less than 3% of Pakistanis in the age group 17–24 are enrolled in a college/university as compared to a corresponding number of 50–75% in developed countries. The standard of education in the public sector, which produces over 75% of the graduates, especially in science and technology, is quite modest. Quality education is limited to only a few institutions, many of which are private, profit making and beyond the reach of all except a very small upper class. Thus, there is both a strong and urgent need in Pakistan for colleges and universities where quality education can be made available to young men and women, especially from economically disadvantaged background. Pakistan, a nuclear power and the sixth most populous country in the world, is too significant to ignore the crisis state of its higher education.

Although several initiatives were made previously to identify the needs and respective solutions of higher education in Pakistan, the best compilation of recommendations was the year 2000 report “From Peril to Promise” published by the Task Force on Higher Education and

Society. In this report, the Task Force, convened by the World Bank and UNESCO, brought together experts from 13 countries to explore the future of higher education in the developing world, proposing transformation of the educational management system and its resources. This report stimulated the establishment of a Pakistan Task Force and its report, *Improvement of Higher Education in Pakistan: Challenges and Opportunities* (2002).

The participants of the first International Symposium on Issues in Higher Education in Pakistan, held at the United Nations in New York, presented their evaluations of the current state of the crisis of higher education in Pakistan and of the reforms instituted since 2002. The nature of the problems identified and proposed recommendations to overcome this crisis to improve the quality and the accessibility of higher education is as follows:

A. Nature of Problems

1. Planning and Administration

The current Higher Education Commission (HEC) is a considerable improvement on the former direct ministerial control over higher education. It is time, however, for a constructive examination of the HEC's achievements and remaining challenges. We also believe that it is time for HEC to create a comprehensive plan for the next stage of reform in higher education in Pakistan and to aggressively use the budget to implement the reforms called for.

2. Quality

At present, over 99% of the youth in Pakistan does not have access to higher education of international standard. The standard of education in the Pakistani public universities and colleges, especially the latter is far below that of the international standards and the corresponding institutions in the developed countries. The standard of education in the private institutions of higher learning varies widely. These institutions mostly offer education in only a few disciplines. Social sciences, which are the critical core of any quality education either lack or constitute a minimal component of the curriculum at the private institutions. The few of these private institutions that have acceptable standards charge very high tuition fees and are beyond the reach of all but a small number of upper class that represents less than 0.1% of the population of Pakistan.

3. Accessibility to youth from economically disadvantaged background

At present, the higher education is essentially denied to youth from economically disadvantaged families. A large majority of Pakistanis with a monthly average income of Rs. 6,000 per family of six, cannot afford even the tuition fees of public colleges/universities without financial assistance. The participation rate of these economically disadvantaged Pakistanis in higher education is negligible. Despite, its best outcome the higher education as a poverty alleviation program, has not been employed, to date, by either Pakistan or the international agencies or donors like United Nations Development Program, World Bank and USAID.

B. Reasons for low quality and accessibility

1. Reasons for low standard of education in Pakistan

Five major causes of low standard of higher education in Pakistan, have been (i) a gross neglect of college education, (ii) demoralized and unqualified faculty, (iii) antiquated methods of teaching, (iv) lack of sufficient funds and facilities, and (v) lack of assessment and quality improvement mechanisms.

(i) College education

There has to be a holistic approach to education. In all the policy planning so far, the thrust of all initiatives has been directed towards the universities, and in that, primarily public universities to the neglect of colleges. Public universities are heavily, if not entirely, dependent on public colleges for their intake of students. They are the weakest link in the whole chain of education in Pakistan. In all initiatives and planning these colleges have been ignored. Their infrastructure is in poor condition and equipment and libraries almost non-existent. Most of the college faculty has little, or no training and only a local Masters degree, no incentives for improving their qualification, and no facilities for research. Relying on outdated textbooks and learning by rote, they produce students who are ill prepared for university.

(ii) Faculty

A qualified and motivated faculty is critical for imparting quality education. Lack of independent external reviews, sufficient training programs, productivity and performance-based rewards and opportunities for growth, and low remuneration have resulted in demoralization and exodus of faculty from public colleges/universities. A large majority of faculty in degree colleges and at the universities in Pakistan do not have sufficient research experience and any ongoing scholarly research. The remuneration in the public sector colleges/universities have been very low, resulting in an exodus of better faculty to the private sector or faculty having to focus their attention on private tuitions and side businesses.

(iii) Antiquated method of teaching

The teaching is mostly based on plain lectures and not a learning process. Critical analysis, discussions and questioning of teachers' views are often discouraged.

(iv) Lack of sufficient funds

Lack of sufficient funds has resulted in low paid demoralized faculty, and unavailability of modern tools, access to computers, Internet, latest publications, properly equipped libraries and laboratories.

(v) Lack of assessment and quality improvement mechanisms

Quality control, assessment and quality improvement mechanisms are by and large not in place and are not being upgraded regularly and in an institutional manner.

2. Reasons for low enrollment

(i) Absence of a financial assistance program for education to the youth

A major reason for this so low enrollment is poverty. An average family of six with a total income of less than Rs. 6,000 (\$ 100) per month, a large majority of the Pakistani families, cannot afford a public university monthly tuition fee

of approximately Rs. 800, plus dormitory expense of Rs. 2,500 and expenses for Internet use and books.

(ii) Lack of a National Campaign to encourage youth for higher education

At present there is no tradition at universities to actively encourage and recruit students from colleges, and colleges in turn to have annual fairs at feeder high schools to promote and admit students for college education.

(iii) Lack of universal education up to high school

Lack of universal education up to high school has a marked effect on the number of students who enroll for college education.

C. Recommendations to solving the crisis of higher education

1. Planning

- (i)** HEC, with representation and the active participation of senior faculty from both public and private colleges/universities develops a short term, mid term, long term and a long-long term Master Plan for the improvement and the accessibility of higher education in Pakistan. This national plan may also identify the institutionalization of the recommended procedures, and clear systems of transparency and accountability, and necessary checks and balances.
- (ii)** An independent external Board of Advisors to HEC is established to ensure transparency and provide guidelines for decision-making process.
- (iii)** The external HEC Board investigates what of the 2000 and the 2002 Task Force Reports were implemented and what have been the results.
- (iv)** Colleges and Universities receive annual funds from HEC, which may be based on the number and degree programs of students, and number and level of faculty, but the decisions for spending funds should be made by the Board of Governors of recipient institutions. The renewal of the funds must require a satisfactory report from the recipient institution six months in advance of the lapse of funds. The evaluation and award of research grants may be carried out

by HEC, using appropriate review groups of faculty and where needed experts from overseas.

- (v) A national accreditation body with international standards for both private and public universities is created by HEC and employed for the accreditation of various degree and postdoctoral training programs. Accreditation of the private sector is the responsibility of the government to be undertaken with the full cooperation of the private sector. An accreditation council should be established with the members drawn from among the educators in the public and private sectors and the criteria developed ex ante should be strictly followed. Social sciences must be taught not just by public sector but also private institutions. The accreditation body issues charters for the establishment of new institutions as well as accreditation certificates annually to the institutions to guide the consumers.

2. Administration

- (i) A set of guidelines be developed for the decision making process at HEC and institutions controlled by it.
- (ii) Research planning may be carried out at the national level.
- (iii) Public universities are to be autonomous and managed by their Board of Governors and various bodies created by their Boards.
- (iv) Appointments of vice chancellors and deans are to be from academia and made by the University Board. A university may appoint a separate administrator, who do not have to be from the academia, but reports to the Vice Chancellor.
- (v) The Vice Chancellor of a university plays an active role and is accountable only to the Board of Governors.
- (vi) Each institution may calculate the total cost of education per student of each degree program and make it known to each student at the end of each semester.

3. Funding

- (i) The current rate of increase in funding for higher education may be sustained.
- (ii) Allocation of funds to the Universities from HEC is to be based on the number and degree programs of students and the number and ranks of faculty.
- (iii) Students attending private colleges/universities are to be eligible to receive only student financial assistance but based on the same levels as the corresponding public institutions. However, both public and private institutions

should be equally eligible for research grants which should be based strictly on merits of the proposal, the qualifications and track record of the investigators, and the availability of adequate research facilities and environment.

- (iv) Encourage philanthropy for higher education and give recognition and preferred treatment to corporations, businesses, organizations and individuals making large donations to higher education.

4. Faculty

- (i) Make a proactive campaign to recruit talented faculty from home and abroad
- (ii) Increase remuneration of faculty and make it productivity and performance based.
- (iii) HEC organizes annual training workshops for the faculty.
- (iv) Encourage the reappointment of meritorious faculty in the public sector.
- (v) Increase personal and professional motivation either by financial stimuli and/or position.
- (vi) Ensure faculty quality by applying standardized testing (assessment).

5. Methods of Teaching

- (i) Update curricula every three years and require reason-based teaching with more emphasis on logical thinking and reasoning, discussion and differing view points, and less on descriptions as absolute facts.

6. Quality

- (i) Require reason-based learning.
- (ii) Modernize and upgrade libraries and laboratories and basic students resources for research; train staff and librarians; upgrade and add resources.
- (iii) Immediate intervention is required in improving the quality of college level education, which currently is the weakest segment of higher education in Pakistan. A special and major effort is to be made to improve the standard of education at colleges. HEC may appoint external review boards of the senior faculty of region's universities to review and advise colleges for improvement of education. The funding of colleges to be based not only on the number but also the quality of their graduates and academic programs.

- (iv) The quality of education can only be as good as the quality of the faculty at an institution. Faculty at the public institutions is to receive sufficient financial rewards, incentives and encouragements that they do not leave feel compelled to join the private sector. The Foreign Faculty program is to be encouraged, expanded and employed to augment the local faculty. Post-retirement age is not to be a disqualification in hiring/rehiring of meritorious and productive local and foreign faculty. A proactive leadership effort is to be made in hiring young talented faculty, both locally and from abroad, in all fields.

7. Accessibility

- (i) Improve and increase elementary and high school education. Increase in the parentage of students who successfully graduate from high school is necessary for increasing the college enrollment. Education of girls should be especially encouraged to reduce current disparity between boys and girls in enrollment and completion of both elementary and high school education.
- (ii) Lodge a nation-wide campaign to encourage youth to go for higher education.
- (iii) Make financial assistance available as grants and loans on need basis.
- (iv) Improve financial support and make other resources available to all students, especially those that come from economically disadvantaged families.
- (v) Increase financial assistance and scholarship to talented students in need.
- (vi) Introduce a loan financial scheme.
- (vii) A mechanism may be developed for forgiveness of student loan for serving the community.

8. Public/Private Partnership

Encourage private donor organizations and individual philanthropists to establish independent academic programs and update the existing programs at the existing college/university campuses. Develop financial, administrative and academic partnerships with the donor parties.

9. Support to private institutions

- (i) There may be a full cooperation between government and private sector.

- (ii) Government is to actively encourage and support private sector in establishing institutions of higher learning, by making land available free of cost, provide technical assistance in developing degree and research programs.
- (iii) Pakistani institutions are to be encouraged to develop linkages to reputable foreign institutions and degree and research programs.
- (iv) The Pakistan Govt. is to encourage those private universities which meet the education standards and make education accessible to the underprivileged.

10. Increase Social Conscience

- (i) Make community service mandatory for each college/university graduation.
- (ii) Increase awareness and sensitiveness of the financial cost of education of a student to the public.

Session I

Realization of the problem –The crisis of Higher Education in Pakistan

Dushka H. Saiyid, Ph.D.*

Public Sector Universities of Pakistan: The Way Forward

1. SUMMARY

Reform and transformation of higher education is not possible unless a holistic view is taken of education as a whole. Colleges have been completely neglected by our policy makers, although education after twelve years of schooling is generally defined as higher education. Since seventy five percent of the students in higher education institutions are enrolled in public sector universities, the focus should be strengthening of these institutions. The Higher Education Commission's policies have instead led to a flight of good faculty from the public sector universities resulting in their further deterioration.

2. INTRODUCTION

Pakistan has been neglecting its education sector since its inception, spending not more than 2% of its GNP on education, although the minimum that UNESCO recommended was 4%. The welcome change took place with Musharraf's takeover of the reins of power, and the expenditure on higher education has risen to almost 3% by 2005. The development budget of higher education has risen exponentially to almost Rs. 9 billion in 2005¹, or by 1500%.² However, the recurrent expenditure has gone up by only 50%, with 9-10% inflation rate, rapid rise in the price of utilities, and two rises in salaries in the last three years, the increase in recurrent expenditure has been more than offset by the increase in costs.

3. NATURE OF THE CHALLENGE

3.1. The problem faced by higher education is that of the 21 million in the age group 17-23, only 3% are enrolled in higher education. By 2022 the number of youth in this age group would be 35 million. To meet the challenges of the 21st century Pakistan must enroll 8% of this age group by 2010, and 20% by 2022.³ This means that enrolment must double by 2010.

3.2. The second, and a much more difficult challenge, is to improve the quality and standard of education, while increasing the numbers. It is

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¹ Unpublished paper of Dr UAG Isani on the Public Sector Universities.

² Dr Attaur Rehman's statement at a meeting of ECOSOC, UN, 13 September, 2005, www.presidentofpakistan.gov.pk/NewsEventsDetail.aspx

³ Medium Term Development Framework 2005-10, Planning Commission, Government of Pakistan, May, 2005, p. 482.

generally acknowledged that none of Pakistan's universities is of an international standard.

4. PUBLIC UNIVERSITIES

75% of the enrollment in higher education is in the public sector universities. Current enrollment is put at 150,000, excluding the Allama Iqbal Open University, which is a distant learning university.⁴ All funding to the public sector universities is provided by the Higher Education Commission or the HEC. However, the share of the private sector universities is expected to grow to almost 50% with the expansion of enrolment of students in higher education in Pakistan.⁵

The centrality of the public universities for the growth of higher education will continue mainly because of the differential in fees of public sector universities as compared to private universities. The famous private university, Lahore University of Management Sciences or LUMs, charges Rs 200,000.00 as fees for undergraduates and Rs 300,000 per annum for their MBA program, as compared to Rs. 12,000.00 at Quaid-i-Azam University. This places private universities out of reach for a majority of Pakistanis and caters only for the elite. Moreover, as yet most of them are not research universities and focus on disciplines for which there is market demand such as business administration and information technology or IT.

5. FAILURE OF STRATEGY

The HEC has failed to bring about any improvement in the public sector universities, even after 3 years of its existence. They continue to be islands of stagnation and frustration for the faculty. This is due a poor strategy.

5.1. A NEEDS ASSESSMENT STUDY

Such a study is the need of the hour. The programs that the HEC has launched have led to the wastage of enormous resources. This study is required to consider the current needs of the country, and plan for its needs in consonance with the expected economic growth in the future.

5.1.1. The MTFD is geared towards research, and does not deal with external efficiency and employability of the graduates. Only a small minority of them will pursue careers in research. No study has been carried out on graduate unemployment and the market needs for

⁴ Unpublished paper of Dr U.A.G. Isani on public sector universities. He is also the author of *Higher Education in Pakistan- A Historical and Futuristic Perspective*, National Book Foundation, Islamabad 2005.

⁵ UAG Isani, "The Evolution of Higher Education in Pakistan: Efforts to Meet the Challenges of the 21st Century", in *Pakistan After 9/11: the Turnaround*, Institute of Strategic Studies, Islamabad, 2005, p. 124.

graduates. Research on the quantitative and qualitative match between higher education and the needs of the economy is critical.⁶ So far all the programs for the expansion of higher education are being initiated in an ad hoc manner.

5.2. COLLEGES

A holistic approach to education is missing in all policy planning so far. The thrust of all initiatives has been directed towards the universities, and in that, primarily public sector universities, to the neglect of colleges. The realization that colleges have been neglected is expressed in the MTD Framework which states, “Structurally, post-secondary education is not able to deliver the required goals of competency, quality and relevance of education because the state has allowed college education to drop from the ‘radar screen’ as regards reforms which are being attempted at various tiers of school and higher education”.⁷

Public sector universities are heavily, if not entirely, dependent on public sector colleges for their intake of students. There are about 900 colleges with an enrollment of 400,000 students. They are the weakest link in the whole chain of education, because in all initiatives and planning colleges have been ignored. Their infrastructure is in a poor condition, and equipment and libraries almost non-existent. Most of the college faculties have little training and only a Master’s degree, no incentives for improving their qualification, and no facilities for research. Relying on outdated textbooks and learning by rote, they produce students who are badly equipped for universities.

The MTD Framework 2005-2010 envisages only 100 new colleges in the next 5 years,⁸ while the university level enrollment is supposed to double in the same period. The enrollment level in degree colleges is only 7% of the relevant age group, and half of these go to the universities. Thus the numbers for the universities just do not add up as the enrolment for the universities is planned to increase to 8% by 2010⁹. Moreover, unless the standard of college education is improved, how far can the universities go in transforming the level of education of a student who has graduated from these relatively backward colleges?

⁶ *Daily Times*, April 17, 2005, a report on Governor State Bank of Pakistan Ishtat Hussain’s speech at the Woodrow Wilson Centre in Khalid Hassan, “Pakistan unlikely to defy US on gas pipeline”.

⁷ Medium Term Development Framework 2005-10, p. 75.

⁸ Draft Medium Term Development Framework 2005-2010, Planning Commission, Government of Pakistan, March, 2005, p. 78.

⁹ MTDf, p. 482.

5.3. FACULTY

The most important stakeholders in the education sector are the faculty. The training of a university faculty member is both capital and time intensive. The attitudes and policies of our policy planners have alienated them to the extent that they are all leaving the public universities for either private institutions or going abroad for better emoluments.

5.3.1. LACK OF INCENTIVES

The salary structure of the university faculty has remained the same, much below their market value. In order to supplement their meager salaries the faculty at these universities are either moonlighting at other private universities and colleges, which are willing to pay higher rates per hour for teaching, or teaching in the evening in the self-finance scheme of their parent university. What the HEC claims to be a big revolution is the Tenure Track System (TTS), a much higher pay scale meant only for those faculty members with doctorates and who are productive researchers. However, what could have been a good initiative, has only created frustration, because so far only 35 faculty members have been selected for this system in the whole of the country.

The HEC's inability to understand the most fundamental axiom, that what distinguishes a university is the quality of its faculty, has been a major contributor to the failure of its policies.

5.3.2. RETIREMENT AGE AND THE RE-HIRING PROGRAM

In a country trying to double its enrollment of students in higher education and facing an acute shortage of well-trained faculty (faculty with doctorates from well-reputed universities), it is surprising that there has been no effort to raise the retirement age beyond 60, when most academics are at the height of their productivity.

As the depletion of sound academics from public sector universities continues, it would have made sense to launch a vigorous program to re-hire the more productive faculty with a good record. So far only 30 have been re-hired. Many a good professor is spending time teaching part-time in various private universities, when they could provide much needed supervision and teaching of research students at public universities. The public sector universities are faced with acute shortage of faculty, especially in the social sciences, who can supervise the thousands of students given scholarships by the HEC in the indigenous PhD program.

5.4. FOREIGN FACULTY HIRING

It is ironic that while the HEC is loath to give tenure track to its own faculty even if they have a brilliant record, it has launched an intense drive to recruit foreign faculty at an enormous cost. **The number of foreign faculty hired so far is 112, with the officially stated goal of hiring 300 per year, with the salary of a professor ranging from Rs 78,750.00 to Rs 257,250.00.** While a professor at a public sector university gets a package of about Rs 50,000.00. How irrational the policies of the HEC are, is borne out by the experience of the Mathematics Department of the Quaid-i-Azam University. This Department was one of the best in the country, but over the last few years has been depleted of half a dozen of its faculty who have left for better paid jobs either in the private sector or abroad. Meanwhile, 13 mathematicians have been hired under the foreign faculty hiring scheme at much greater remuneration.¹⁰ It seems that our policy makers are willing to pay more to import people in the same discipline, than try and retain our own faculty by paying it more.

Unfortunately this program too has been launched without careful planning or research, so instead of hiring academics in the disciplines where we have shortage or no faculty at all, we are just duplicating.

5.5. DIGITAL LIBRARY

None of the public universities possess what could be described as a research library, nor are they connected to each other through any kind of a library system. The organization, cataloguing and access to the libraries pre-dates the internet. No effort has been made by the HEC to modernize these libraries.

However, what the HEC has done is introduced a digital library. This basically provides Internet access to public sector institutions to 20 journals, all natural sciences related, and two publishing houses with a limited number of electronic journals. Modern library science does not exist in Pakistan, and the digital library can supplement but not be a substitute for research libraries.

6. DELIVERY AND IMPLEMENTATION

Unable to do any serious strategic thinking the HEC has launched a number of initiatives, which are laudable at one level, but have only added to the confusion in higher education because of poor planning and implementation.

¹⁰ www.hec.gov.pk/htmls/hpfacultyhiringprogram.htm

6.1. Indigenous Ph.D. program

The initiative is a sound one, given the dearth of Ph.D.s in the country. However, its implementation was so poor that it came under strong criticism.

6.1.1. Since Rs.5000.00 per month was to be paid for supervising PhD students with HEC scholarship, some faculty members enrolled as many as 37 under them.¹¹ With mounting criticism on this score, now a limit has been imposed on the number of PhD students any one-faculty member can supervise by the HEC.

6.1.2. The GRE test given by the HEC for the award of scholarship under the indigenous PhD program was so badly designed, that many of the Departments of the Quaid-i-Azam University refused these students admission in their PhD programs.

6.1.3. Under this program 5000 scholarships, 1000 per year, were to be given for the next five years starting in 2003¹². The number of scholarships awarded under the scheme had no relation whatsoever to the number of faculty members available for the supervision of students enrolled in the PhD program. This is another case of poor planning, which has become a hallmark of the HEC.

6.2. YOUNG FACULTY

The HEC has launched a scheme to hire fresh PhD's from good universities abroad, but only in the sciences. However, the working conditions of the public sector universities are so bad that they will not be attracted to them. In any case this scheme is only for natural scientists, once again at the neglect of humanities and social sciences.¹³

7. CONCLUSION

The significant and obvious decline in the condition of the public sector universities over the last few years, where 75% of students are enrolled, is testimony to the flawed policies of the HEC. To arrest this decline, the HEC must focus on improving the working conditions in the public sector universities.

¹¹ Pervez Hoodbhoy, Reforming Pakistan Universities-I, January 4, 2005, www.chowk.com.

¹² Annual Report of Higher Education Commission, 2003, Higher Education Commission, Islamabad, pp.29-30.

¹³ HEC website (www.hec.gov.pk), Placement of Fresh PhD Scholars Returning from Abroad.

8. RECOMMENDATIONS: THE WAY FORWARD

- There is an immediate need to have a master plan for the development of higher education for the next two decades at least, a document based on detailed and painstaking planning about the human resource needs of the country. Expansion of higher education in an ad hoc manner, which is happening right now, will lead to high graduate unemployment.
- Higher education cannot improve or expand in isolation. Improvement and expansion of colleges is not getting any attention or input from the HEC. A holistic approach to education is missing.
- There must be transparency and accountability of the HEC. There is a dire need for that given that Dr Atta ur Rehman is unelected and is therefore unable to answer any of the questions raised about higher education in the National Assembly and the Senate. The Prime Minister is asked to respond to all questions and queries and not the Education Minister. This situation is untenable.
- Public universities need serious reform and restructuring in order to retain good faculty and attract well qualified young PhDs. The good faculty (people with solid research and with doctorates from reputable institutions) should be given a higher scale immediately. The re-hiring of good faculty should take place on a large scale. The numbers of foreign faculty and re-hiring of our own faculty should be reversed. At the moment we have 112 foreign faculties and only 30 of our own faculty have been re-hired, this is a waste of Pakistan's resources.
- Pakistan's libraries should be modernized, its librarians given fresh training in library science. Digital library is a good addition but can only supplement and not supplant the need for research libraries.
- While the development expenditure has risen from Rs. 800 million in 2002-2003 to almost 9 billion in 2005, recurring expenditure has risen only 50%. So while the universities have a glut of equipment and books, the depletion of manpower continues. Much of the equipment is lying unused.

Higher education in Pakistan needs fresh strategic thinking; otherwise we will wake up too late to the fact that we wasted our precious resources.

Hina W. Chaudhry, M.D.*

Adhering to the Legacy of Ibn Sina: Medicine and Science Education Reform in Pakistan

The lack of adequate basic science education in Pakistan is a multifactorial problem that affects Pakistani society at many levels. Issues I would like to discuss include the static curriculum, lack of emphasis on conceptual and analytic learning, hierarchical issues of suppressing reason and independent thought, and the need for greater teacher training at all levels. The solution to these problems is attainable, and requires more of a widespread attempt at changing the ethos governing the system of education even more so than increasing the level of funding for various projects.

As we are here today to focus on issues of higher education in Pakistan, I chose the mention of Ibn Sina in my title specifically to point out that there has not been a single physician or scientist in the history of the world other than Ibn Sina, whose work dominated centers of higher learning in medicine and science for almost a millennium. His text, the 'Canon of Medicine' was the standard medical text in Western Europe for seven centuries. I can therefore be confident, therefore, that the part of the world where my ancestors have originated from is obviously home to individuals with the raw talent necessary to produce great scientists and physicians.

So what has happened? Most of the issues I would like to address are based on my own observations and biases. I would also like to point out upfront that I have solely lived and studied in the U.S. thus my exposure to Pakistani education is limited. Although I am an educator, I am not a specialist in education per se. I spent three months as a visiting medical resident at the Aga Khan Hospital and Medical School where I had the opportunity to teach medical students and interact with residents and faculty members. I have also tried to train a Pakistani medical graduate in my laboratory at Columbia and lectured earlier this year at the Armed Forces Institute of Cardiology in Rawalpindi.

Although I'm a cardiologist at Columbia-Presbyterian Hospital in New York, my real passion is studying the science that underlies the workings of the heart. I run an NIH-funded research program that focuses on cardiac regeneration- that is, the growth of new heart muscle cells in the damaged heart, such as after a heart attack.

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I would like to first address the issues of medical education in Pakistan, keeping in mind that the only direct exposure I've had was at Aga Khan University, which is arguably the best institute for medical education in Pakistan and one of Asia's finest. Even at this fine institute, there were several problems I noticed in the very beginning: firstly, there was a hierarchical system of learning (apparently modeled after the British) where the professor is considered akin to God Himself, and questioning the professors' statements and opinions is strongly discouraged. Students are given to cramming and memorization as the standard tools of learning. I had firsthand experience with this problem, as I was the only young person who would question the professors. I found that there were often circumstances when their knowledge was out of date and not in keeping with the latest literature in their given field. In my teaching at Ivy-league institutions in the west, I encourage the students to look up the latest data that impacts upon clinical decision-making and bring the papers to teaching rounds so that we can all discuss the findings and learn 'as a team'. We pride ourselves on 'data-driven' treatment approaches, and yet in Pakistan, the students would cower before their professors instead of interacting in a productive manner which would ensure that all members of the team would learn something new. This is not a problem which requires any money to solve, simply a problem of instilling more humility in Pakistan's professors!

Secondly, the methods of learning are very outdated. Memorizing facts from a book will not help students deal with modern medicine and science. These are extremely dynamic fields with important new discoveries being made everyday. Our lectures in the west account for the dynamic changes that occur on a daily basis. We prepare lectures here based on the current literature, not on outdated books.

Thirdly, the books and curriculum are not changed on a frequent basis. I think this was not such a great problem at AKU, but I have heard complaints on this topic from graduates from other institutions in Pakistan.

There are several possible solutions to these problems. One of the strengths of Pakistani medical institutions lies in the great number of graduates who are successful physicians in the U.S. Sadly, not many of them have chosen academic careers, focusing instead on the early financial gratification offered by private practice instead of contributing to world knowledge through academic research. However, they can also help by providing endowments to strengthen the educational quality of their alma maters. Those that are in academia can help to establish partnerships with American medical institutions. One obviously successful example of this is the connection between AKU and many of the top-name medical schools in the U.S. AKU students routinely spend about 5 months of their final year in medical school doing rotations in the U.S. at schools such as Harvard, Yale, and Duke, etc.

Thus this is a very achievable goal, and should be encouraged as a standard at all medical institutions in Pakistan.

One of the strengths of the Pakistani system of medical education is the clinical training that is provided. The students benefit from the government-run 2000-bed hospitals, and thus gain proficiency with clinical methods of diagnosis whereas we in the west rely heavily on modern technology. They also gain proficiency in surgical techniques. The exposure to greater clinical methods of diagnosis was one of the reasons I visited Pakistan as a medical resident. My ears improved greatly using my stethoscope more frequently to diagnose cardiac problems instead of relying so heavily on ultrasound as I do in the west. This can be used as a 'selling point' to encourage more exchange programs between western and Pakistani institutions.

Many of the problems in medical education stem from the lack of adequate basic science education, in medical school and across other levels of the educational system. This brings me to my next topic of concern: science education in Pakistan.

Science education reform is critical as it provides the solutions and resources for the tasks that lie ahead for a developing country. Pakistan needs to take full advantage of the current interest on part of the U.S. to aid in Pakistan's development into a more modern participant in the global arena. A number of initiatives are underway by the USAID to effect change in Pakistan. One pertinent project to the topic of science education reform is a USAID-led initiative involving Oregon State University. OSU hosted a Pakistani Teacher Education and Professional Development Program and hosted several groups of Pakistani educators and teacher educators in the areas of science education and English as a foreign language. This was a large, multi-year project funded by USAID. Given the growing political ties of Pakistani Americans with lawmakers in the U.S., we should be focusing on fostering more of these efforts on part of the U.S. government.

Science education at the higher education level critically depends on providing exposure and thereby a source of motivation at the more elementary levels of education. One excellent example of a solution to this problem is the Science Education in Pakistan Group (SEPG) organized by Pakistani students at MIT. SEPG was formulated with the aim of providing access to scientific equipment and enable students in Pakistani villages to perform experiments using a mobile science lab. This was proposed as part of a competition of ideas at MIT, and won a prize of \$3000. The group had estimated a total cost of \$13,000 to buy a vehicle and the necessary scientific equipment. This was based on furthering the students' understanding of the basics of science, to help them develop an intuitive understanding of the material by utilizing experiments and visuals that are of crucial importance in learning science. The first such mobile science lab was proposed for southern rural Punjab, where none of the villages have access to scientific

equipment. This project makes it clear that lack of funding is not the main problem; it is the apathy in our culture that needs to be addressed.

Pakistan's upper classes, although prepared to educate their own children, don't contribute to the education of the nations' children and show a reluctance to develop the country. From statistics published in the Daily Times of Pakistan, it was estimated that in 1999, the national currency holdings abroad were at least equivalent to the overall indebtedness of Pakistan.

The strengths of Pakistan lie in the media and the NGOs at work in Pakistan, both being a result of the strong and vibrant civil society. In order to harness the power of the media to reform education, one could propose the use of educational TV, a strong motivator of children's learning in the west. Educational shows in the west such as Carl Sagan's 'Cosmos' and the documentary from the 1970s by PBS 'The Body Human' were such powerful motivators in my own quest to study science as a young child. Once the imagination is captured at a young age, there is no limit to how far that individual can go. Newspapers also afford a wonderful opportunity to address the gaps in science education. By featuring more science-related stories, the public is kept at a higher level of awareness of the scientific discoveries of the modern world.

The greatest weakness of the Pakistani system of higher education lies in the cultural discrepancy displayed toward women. Until a society can motivate itself to realize that 50% of its population is basically being undermined, it can never join the modern global environment. Pakistani society places such great importance in a woman's role in the household, but where are the little girls who are taught to look up to Madame Curie, the *only human being* to win not one, but two science Nobel Prizes in Chemistry and Physics, and who also raised a daughter, Irene Curie Joliot, who also won a Nobel Prize in Physics?

In my mind, it is not a lack of funding, but a lack of inspiration that is so apparent in Pakistani higher education. Until Pakistanis return to the quest for logical studies and independent reasoning of Ibn Sina that culminated in the 'Canon of Medicine' and strive to emulate this 'Prince of Science' and 'Doctor of Doctors', they will not be able to realize their ultimate potential as members of the modern global environment.

Muhammad Iqbal, Ph.D.*

Science Education in Pakistan

To start with the paper has attempted to highlight the British Council equivalence of qualifications in many different fields of education from Pakistani institutions of Higher/Further Education (HE/FE) and those from the British counterparts.

The old education and administrative approach and practice of the affiliated colleges awarding London University degrees in the UK is still in vogue throughout Pakistan till the colleges are assessed academically as advanced enough to be designated to award their own degrees and diplomas in their own right. Accordingly, a genre of universities such as Government College Lahore University and Zamindar College (Gujrat), both in the Punjab, have recently come in to being. Needless to state that the courses they offer have been drafted by Course Committees and validated by the individual university at a par with, if not superior to, the same courses available at the old universities in Pakistan. The standards could not, however, be vouched potentially as vigorous and rich in course contents and credited as those from the British universities.

The paper refers to the Medical Colleges in Pakistan which have, by and large, been visited, assessed and approved for the depth of their degrees, provisions of libraries and laboratories by the General Medical Council (GMC), UK, thus enabling their graduates, if they so wish, to take GMC PLAB Tests Part I & II in order to make up the academic differential and work for the National Health Service (NHS) in the UK.

Teaching of Science & Technology (S&T) in the developed countries is based throughout the education system on search and inquiry which leads the graduates conveniently to Research & Development (R&D) in industry or to post graduate research for higher degrees. The under-graduate studies in almost all subjects are embedded with research projects and assignments which are considered as an integral part of all course modules. This does not hold good in the case of Pakistani Colleges.

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The paper purports to make suggestions how to redress this deficiency.

The paper quotes examples and case studies as collected in a 'Survey to Identify Sectoral Needs for Highly Qualified Pakistani Expatriates' by the Director General of National Talent Pool (NTP, Islamabad, 1994) to help alleviate through long and short term visits by the expatriate Pakistanis engaged in teaching and research in industry and HE institutions in the developed countries. The visits are currently being sponsored by the UNDP, HEC and the Government of Pakistan Ministry of Science and Technology, Islamabad. This is a benign approach as a developing country like Pakistan cannot afford to channel a major portion of her annual GNP to S&T and R&D. It is recommended to be continued with further impetus especially through twinning and linkages with the universities in the UK and USA.

The paper makes a brief perusal of the research contributions of Muslim scientists during the 13th and 14th Centuries AH, Government of Pakistan Ministry of S& T (Muhammad Ata'-ur-Rahim, 1981), followed by the current trends in cognitive research, for example in the fields of polymer chemistry, solid state physics, genetic engineering, organic and genetically modified food and upper space exploration to name but a few disciplines, have been exemplified. More specifically the rapporteur has pinpointed his own experience gathered together from several of his visits under UNDP and Ministry of S&T to different universities in Pakistan, teaching MSc students the use of spectroscopic techniques in synthetic organic chemistry and has highlighted the pitfalls and shortcomings all round.

In the end, the paper proposes to make suggestions for learning/teaching skills for life in the fields of vocational education and trades, leading to awards of certificates and diplomas through either the existing polytechnic institutes or colleges in Pakistan. These trades men and women are a backbone of the infrastructure and base for a throbbing R&D in S&T. This is an age of computers. Chalk and dusters are out and power point and blackboard are in the classroom. Over 50% of the staff in an average university in the UK is academic support non-teaching members, highly essential for smooth transfer of knowledge.

Introduction

Everyone recognizes the birth right of all children as of paramount importance for a progressive and prosperous Pakistan. The highly qualified amongst them after their educational career would be the national asset.

The means and scope of Higher Education (HE) in Pakistan is, indeed, available for intellectually able, but for only a small percentage of them. With this fact in mind, Raziuddin Siddiqui in his keynote speech (International Symposium on Islam and Science, Government of Pakistan Ministry of S & T, 10-12 November 1980, Islamabad) suggested that 'the gifted and talented students at school level should be picked and looked after for their education at specialist colleges and universities'. In my view the gifted pupils need to be groomed at the very outset of their educational career. In the UK the children, after their primary education, study for General Certificate in Education (GCE) until the age of 16+, followed by AS and A Levels obtained at 18+ which qualification, according to British Council (BC) standards, is held equivalent to a degree from any of the universities in Pakistan except the engineering and medical colleges. A well-classified master's degree from Pakistan is equivalent to BSc (Hons) from the UK universities.

Teaching Science in the UK

The teaching staff at schools in the UK is highly competent and committed. His bread and butter depend on his pupils' performance in the examinations; the league tables of academic achievement of schools are annually published locally and nationally. The poor performing schools are so to say subjected to special measures which means that the Local Education Authority (LEA), Her Majesty's Inspectors (HMIs), the school governing councils become heavily involved in running of such a school, the weak teachers are axed, new recruitments carried out and school administration rehashed in order to rescue the school to normalcy.

As teaching profession is seen to be deficient in any area of teaching, so does the recruitment and retraining of staff become imperative for the Her Majesty's Department of Education & Skills (DE & Skills). Currently there is a shortage of science and maths teachers. The graduates in these areas are, therefore, offered incentives by way of exorbitant grants to undertake a yearlong training for a post-graduate certificate in education thus enabling them to teach in schools.

Teaching Aids

The school libraries in the UK are the repositories of innovative books on S & T. There are School Council Projects, the off shoots of the DE & Skills, whose job it is to produce text books, supplemented by general titles to afford easy understanding of commonly spoken about science issues smoothly. Here are two examples quoted in order to illustrate

how children are helped to learn and live science. Firstly, *Exploring Science, Series 7 – 11*, are the text books for science comprising biology, chemistry, and physics. They constitute a complete course for National Curriculum at Key Stage 3, i.e. 16 years of pupil's age. They conform to and match the Qualifications and Curriculum Authority (QCA) - another DE & Skills body – Scheme of work. It is fully illustrated, with experimental details and built in questions and answers, and summary of the lessons to memorize the key points of the subject matter. The series is supplemented by TV-ROMs, video clips and ICT skills. For double science the curriculum is further inflated with further details, pictures and narratives, of the individual subject.

The School Council Project comprises representatives from the DE & Skills i.e. HMs in a single subject, the educationists i.e. the university professors engaged in research in that area, and practicing teachers. A university with the excellence in a particular subject becomes the nucleus of activities, producing teaching modules for all key stages keeping in view, of course, the requirements of the QCA and Examination Boards. The material produced is discussed at a conference level and finally for pilot trials at designated schools before the polished modules are ready for eagerly awaiting leading publishers in the country. The OXBRIDGE and Lancaster Universities in the UK, for example, host School Council Projects for maths, chemistry and religious education respectively. The subject matter is presented thematically that instills desire in the pupil's mind and heart to explore it to further depths to eventually becoming a professional par excellence.

The publishers in the UK are playing a vital role in promoting education. In addition to School Council Project books, they have the scholars in specialist subject area writing books that essentially find their way in to school libraries.

Exploring Science is supplemented by an interesting series of books namely *Elements*. For example, there is one called *Elements Chlorine, Fluorine, Bromine, and Iodine*. 'Elements', writes the publisher, 'is designed to provide an accessible approach to chemistry. Each volume carefully and concisely presents the characteristics, behavior, occurrence, isolation and uses of the most elements and their compounds. Laboratory demonstrations are illustrated with step-by-step photographs that are linked to real world applications. A wealth of definitions, facts and supporting information ensures that readers will never be lost in this challenging but essential subject.'

Another series of books published under the title *21st Century SCIENCE: Energy, Transport, Space, and Telecom*. They are easy to read and information guide to present knowledge and future trends, the interface between S & T and repercussions of S & T. For example, the book 'Human the Living Machine' deals with break downs in the body, the body under attack by bacteria & virus and respective diseases and infections, fighting back, resistance and immunization, coping with

cancer, the world's biggest killer, scanning and screening, complementary medicine i.e. acupuncture, homeopathy, herbal and aromatherapy, the tools of the trade i.e. X-ray, ultra sound, MRSA, above all the knife, genetic screening therapy, engineering followed by fertility treatments & IVF, stem cell research and cloning humans.

The Pupil's Formative Scientific Base

The private Beacon Schools and others are using these kinds of books which are expensive to buy for use in public sector schools in Pakistan. The children from poor background have no access to this kind of education. The National Muslim Education Council (NMEC), an organ of the Union of Muslim Organizations in the UK & Ireland (London), founded in 1978 of which the rapporteur happens to be Chairman for the past 10 years. The Council is collaborating with other educational charities in the UK to promote at least as pilot projects in Pakistan science education from the very early age of the school child. The Shahiwal and Rochdale (Greater Manchester City Council) education project in Shahiwal and the Kashmir Education Trust (Bradford, UK) along with the Bradford City Education Authority Project in Azad Kashmir are aimed to introduce English skills and teaching techniques at the very secondary school level in those areas. A number of leading expatriate educationists have made trips to oversee these projects and have compiled encouraging reports.

Over the years the NMEC has organized several national and international conferences in London at times in collaboration with the Her Majesty's DE & Skills on different aspects and perspectives of education. The NMEC has been advocating with Muslim graduates to train as teachers and join the teaching profession. The Council is currently considering to collect the numbers of Muslims at all echelons of teaching profession.

The NMEC along with other Muslim pressure groups in the UK has been instrumental in setting up of Muslim primary and secondary schools/colleges which encouragingly enough are in comparison with the state schools performing well in the GCE's and AS & A Level Exams.

Incentives for Acquisition of Education and Knowledge

There is no lack of incentives from one's Faith or traditions for encouragement to improve one's lot, individually or collectively. What is desired is to apply and exert one's self and work hard to produce results? Live simple as if one is to die tomorrow and work hard as if one is to live forever. The *Holy Qur'ān* and the Holy Prophet's (ﷺ) traditions are most explicit in this regard;

- The *Holy Qur'ān* insists on the believers to observe and think over natural phenomena and one's environment and that they should endeavor hard to conquer the elements.

- The *Holy Qur'ān* lays a great deal of stress on thoughtful reflection; it has the word *yatafakkarun* (contemplation) mentioned many times over in order to have a synthesis of one's surroundings to one's material and spiritual benefits.
- Acquisition of knowledge is obligatory on every Muslim male and female. Without education one cannot even recognize and worship one's Creator properly.
- There are other *Qur'ānic* injunctions that insist on the believers to lead orderly lives with love for the fellow human beings, thus establishing peace and amity on the face of earth.

The *Holy Qur'ān*, in fact, has explained most of the common natural phenomena of life, e.g. galaxies and constellations, hail stones and rainfall, and human reproduction. Now then intellect is the most important gift of Nature, but there is no substitute for hard work which is not at all disregarded and unrewarded by the Creator in the life here and the Hereafter. The idea is, however, not to amass the worldly riches, rather spend them as per the criterion laid down in a well-known *Hadith* of the Holy Prophet | who said:

“O the son of Adam! you call this wealth as yours, (repeat) you call this wealth as yours! Your wealth, in fact, is only that what you have eaten for living; your wealth is only that what you have worn out; and your wealth is only that what you have given away in charity and saved for the afterlife.”

The believers, by and large, are not as generous as were the first generation who answered to the call of the First Caliph of Islam, Hadrat Abu Bakr As-Siddique é, to pay *Zakāt* (poor due) to the full. This enriched the *Bait-ul-Māl* (treasury) for the Second Caliph of Islam, Hadrat Umar Farooque é, to sustain his ever expanding and the largest Muslim Empire, and setting up social security system for the benefit of the poor, the needful, the infirm, the widows and the orphans. When a leading Muslim scholar was asked the reason why it was not so today, he simply replied: “Amongst many other factors the believers are, above all, not God fearing as much!”

Current State of Higher Education in Pakistan

Currently, only a small number of students can access HE in Pakistan seems to be the concern of this symposium. The contention of the rapporteur is, however, that, besides, expansion of HE, it is equally important to watch the existing educational standards especially at the university level. We know the depth of the courses and syllabi, but what about their standardization and the availability of statistics on academic achievements and performance, staff competence and development and refereed research publications especially in the foreign journals! How rich the libraries and well furnished the laboratories are! These are the sorts of questions asked when any twinning of institutions is considered.

The universities visited under UNDP Programmes seemed to have scientific equipment and chemicals in order to undertake a meaningful research in any branch and field of chemistry. The necessary basic gadgets and instruments such as ir and uv spectrophotometers for day today use are available. The more sophisticated nmr and mass spectrophotometers and HPLC were to hand at the local PCSIR Laboratories for research purposes. Additionally, the uv, ir, nmr and mass spectra data banks are ubiquitously available in reference books. Accordingly, research is made easy these days compared to the times when the luminaries like the late Dr Salim-uz-Zaman Siddiqui who really struggled hard to identify alkaloids, the *Ajmalines*, as anti hypertension drugs named after the well known Hakim Muhammad Ajmal Khan of Delhi. The research reviews indicate that Dr Siddiqui was a worthy and brilliant lieutenant of the Muslim researchers especially in the field of agricultural research in the Indian sub-Continent.

A common character-trait of disinterest and lack of motivation seems to be prevalent among the university staff, academic as well as the academic support, in Pakistan today. Seeing this one begins to wonder that the university staff has the research degrees from abroad as licenses for jobs, but not as initiatives to undertake further research. The majority of final year postgraduate students simply rewrite the old projects in total disregard to plagiarism as a part in fulfillment of the master's degree. Except in few cases all other assignments are neither original nor relevant to any current industrial or scientific research.

The faculty staff is reluctant to engage the expatriate Pakistani academics in the first instance. If at all their services are requisitioned the research projects introduced by the visiting expatriate scholars are abandoned as soon as they leave the institutions. Notwithstanding, their contributions by way of teaching assignments and seminars are invaluable and worthwhile exercise to make the young students aware of the cognitive research in their subjects of interest. The reporter has in hand a dossier of current trends in modern organic chemistry research as applicable to and in the context of third world HE institutions.

Linkages with British universities are unfailingly beneficial to both the parties though a long time is entailed in preparation of necessary documentation, followed by signing on the twinning instruments by the respective heads of the institutions. Notwithstanding, the opportunities are thus made available especially for post graduate split degree research programs conducted under joint supervision partly at the home university and partly abroad. The British universities as well as the Pakistani research students stand to gain financially. The Huddersfield University has a twinning arrangement with Karachi Institute of Information Technology (KIIT) whose founder, the late Syed Mazhar Ali, happened to be chairman of the Government of Pakistan IT Commission and had the ardent desire to popularize and introduce computers to all walks of life. The KIIT is awarding the Huddersfield

University degrees in computing sciences and electronics. This university has similar programs in place with, for example, Amman University (Jordan) and Cairo University (Egypt). The School of Education and Professional Development here had established with Madras University (India) in late sixties. The Indian teachers teaching at all levels benefited from our courses and exchange of staff took place on regular basis. The Government of Pakistan HEC should look actively look into this sort of bridging not only with universities in the developed countries but others especially in the Muslim World under the aegis of Islamic Foundation for Science Technology and development (IFSTAD) of the Organization of Islamic Conference (OIC) based in Jeddah, Saudi Arabia. The IFSTAD has its own data bank of the highly qualified academia from throughout the Muslim World. The Director General of IFSTAD writes about the aims and objectives of this Foundation: "The IFSTAD is to play a dual role. The first role is that of a consulting agency using its own personnel including a network of advisers who may be linked on a job basis to IFSTAD. These advisers are Muslim experts living anywhere in the World. The second role is to serve the function of a clearing house wherein IFSTAD may perform the role of a quality controlling agency for consulting companies in member states or Muslim consulting companies in non-member states or even non-Muslim foreign consulting companies in non-member states if so required by a member state (IFSTAD Consultants Profile V 1, July 1984, Jeddah). The National Talent Pool (Islamabad) in collaboration with the OIC had previously been taking up this aspect of HE and motilities for linkages within the Muslim World, hopefully, to some satisfactory conclusion.

Conclusions and Recommendations

To sum up, whatever the industrial base Pakistan has, it is imperatively desirable that it is further developed at a rapid pace primarily for industrial produce for consumption within the country with embargo on import of commodities which are home grown. The country has made tremendous progress in the past. The process of industrialization must be afforded further impetus. This should not, however, take place at the expense of agricultural make up of the land. In actual fact mechanization of agriculture in all perspectives should be the target. In addition, water, sewage and sewerage management along with development of all kinds of energy resources would, to all intents and purposes, go a long way in eradication of Poverty, Ignorance, Disease and lack of Communication (PIDC).

The foregoing is all possible if effective science education at all levels is achieved at the earliest. A brief parallel of science education in the UK has been attempted purely to this end.

In tandem with the Text Book Boards in Pakistan, School Council Projects as outlined above must be introduced and English as a

medium of instruction for teaching/learning of especially sciences and maths must be considered in view of the fact the English language as a modern language has already been offered from the very primary school level in Pakistan.

A complete rethinking and remodeling of primary and secondary education as based on 'search and enquiry' needs to be attempted in order to help with meaningful tertiary and higher education which incorporates free dialogue and discussion of the related subjects between the student and the staff. This element is altogether missing at this moment in time, hence the stagnation of research and development in the HE institutes in Pakistan. The British model of science education could be explored for emulation.

Although twinning and linkages of universities is not an area of priority with the British Council these days, yet expatriate Pakistani teachers of science subjects in British universities should be able to help. The rapporteur has developed such an understanding with the area universities of Huddersfield, Leeds, and Bradford for likely linkages. It is highly recommended that The Punjab University, Lahore, should work actively towards a linkage with either the University of Leeds or Bradford in the UK.

The expatriate Pakistani teachers must be involved in visiting and vetting the current courses and syllabi in vogue in Pakistani universities. This could be undertaken by those who are currently working in Pakistan under Foreign Faculty Hiring Programme of the HEC.

Introduction of vocational and technical education must be invigorated. It could as well be carried out within the university/college ambit. The idea of National Vocational Qualifications could be explored for adoption in Pakistan. This will be providing a systematic accreditation and award of certificates, diplomas in embedded skills. One can only surmise that the sectoral needs as referred to above and identified by the Director General of the National Talent Pool are duly attended to and in all earnestness.

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The undersigned records his heartfelt gratitude to Promotion of Education in Pakistan Foundation for moral and financial help thus making it possible to attend the symposium and meet fellow educationists from different disciplines and institutions. My thanks to Rudina Xhaferri, the Executive Director, for bearing with me and my never ending queries. Nor should it be forgotten to put down the readily forthcoming good wishes and prayers of Dr Syed Aziz Pasha, the Secretary General of the UMO and National Muslim Education Council (UK) for the successful deliberations of the symposium and meaningful implementation of the recommendations of the symposium. The reporter acknowledges provision and use of the ICT facilities at the University of Huddersfield (UK). Finally, I express my genuine wish for an on-going dialogue of the attendees across the Atlantic.

Session II

Needs, Requirements and Power of Higher Education

Mohammad Idrees, Ph. D.*

Effects of Globalization on Higher Education in Developing Countries

We are witnessing history of higher education in its making. Powerful business interest, opportunities and challenges with an unprecedented speed and scale shaping and branding higher education in developing countries. Corporate spirit is flourishing in this domain. This avalanche, with the power of destructive creation is hard to halt. Globalization made it possible for increasing cooperation and collaboration between and across border institutions, faculty, and staff and students exchange programs, sharing and training in research and development areas, distance education, e-education and e-books.

Effects of globalization, good or bad, on higher education in developing countries is fluid and unlike financial and trade transactions is hard to assess in numerical terms. While many developing countries have a long tradition of sending or allowing their students to study abroad, especially in specialist areas of particular need, what is new is the entry of foreign providers either by establishing separate campuses or working with local universities and colleges.

It is a fitting event for narrowing the gap of competitive advantage between rich and poor economies. Developing countries need to espouse the process of globalization of higher education aggressively, with a clear socially genuine policy. Teaching and research is a civic trust. Universities, their curricula, their scholarly research and other programs should all be designed to serve civic purpose

1. Introduction

“Globalization refers to the advancement of a global mentality, a borderless world through the use of information technology to create a partnership across the globe to deliver value added services and products.” (Abdullah, 1996).

The impact of globalization on higher education has been mix, positive and negative. In historical perspective, human quest for knowledge is

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not new. What is new, is, its unprecedented size and speed. We are now living in the bold new world, exploring and using its 4th dimension (Knoke, 1996). A wide range of cause and effect is redrawing the global economy and higher educations map. Noam Chomsky warns us, "Event of 9/11 has open people's minds, to make them think they'd better raise questions about what's going on in the world.' (Thought and Action, Fall 2005). **"Globalization is an irreversible process, not an option. It is a positive force, but it is also blind and therefore needs to be carefully harnessed."** (Annan, 1999).

2. Expanding Markets

Higher education is one of sectors of the global economy has been experiencing a rapid and sustained growth. There were 48 million people in higher education worldwide in 1990. By 2010, that figure is expected to have increased to 97 million and in 2025 it is expected to reach 159 million, 87 million of whom will live in Asia. Total global expenditure on education is expected to double by the end of 2006 from around \$US 1.5 trillion to over \$US 3 trillion. Longer-term projections are for a further doubling by 2012. It is notable that several traditional importer countries in the region are pursuing education export strategies. Singapore is seeking to become a regional education hub, and is selectively encouraging foreign providers onto its soil to attract international students. Malaysia is aiming to become a net exporter of education, and is promoting itself as an education destination by establishing offices in China, Indonesia, Vietnam, the United Arab Emirates and South Africa. India is establishing transnational education operations in Sri Lanka and China.

The basic drive that sets and maintains the capitalist engine in motion comes from the new markets, the new or improved product, the new methods of production, delivery and the new organization structure. What Schumpeter seen the creative power of capitalism in the automobile industry (Schumpeter, 1943), we are now witnessing in personal computer and Internet markets. Global demand for higher education, especially in developing countries, is huge and suppliers are eager to supply. For example, the British government set a target in 1999 to have 25 per cent of the global market share of higher education students, and to double the number of international students for higher education by 2005 (Blair, 1999). Extra recruitment of non-EU students has already generated over £1 billion for the economy (McNulty, 2003)

UNESCO's report cites that most Asian countries have experienced rapid and impressive growth in student enrolments and expansion in higher education since 1998. Many countries whose higher education systems are at critical development phases have experienced rates of expansion far higher than anticipated. In China, for example, expansion

of higher education in the public sector has resulted in total student enrolments more than doubling from 6.4 million to 15.1 million between 1998 and 2002, while in India enrolments increased from 6.2 million in 1993 to 9.3 million in 2000, in Kazakhstan from 272,700 to 442,400 between 1995 and 2001, and in Bangladesh from 801,733 to 962,567 between 1998 and 2001. In China, undergraduate enrolments alone increased by 135.2 per cent between 1998 and 2001.

3. Private Sector's Growth

In the last five years the number of private colleges and universities in Malaysia has increased from 100 to 690, while in Bangladesh almost 100 new private higher education institutions were established between 1998 and 2001. Over the same period, 46 new private institutions were established in Mongolia, 20 in Nepal and 83 in Kazakhstan. Higher Education Commission of Pakistan lists 54 private and 55 public institutions of higher education.

4. Distance Learning and E-education

Traditional campus-based universities have for several decades been extending their educational activities into distance education, and some new "open" or "virtual" universities are steadily appearing. (Shapiro winter, 2002). Traditional university providers will, however, neither monopolize nor necessarily dominate e-education. E-education is a natural extension of existing "core business" for powerful commercial interests from the telecommunications, internet servicing, publishing and software development sectors, and it at least appears to offer them a highly profitable leveraging of existing infrastructure. Thus, it may be that the most successful global e-education enterprises will have strategic alliances and/or partnerships between traditional universities and new providers for new skills, infrastructure, technologies and expertise.

Asia consisting of 40 countries is the largest region of the developing countries containing more than half of the world's population. Populations range from the world's largest, such as China (1.3 billion) and India (over one billion) to smaller Pacific island nations such as Fiji (0.8 million), Samoa (0.2 million) and Tonga (0.1 million). Ten of the world's sixteen cities with populations exceeding ten million inhabitants are located in Asia, including Tokyo (over 26 million people in the year 2000), Mumbai (16 million), Karachi 11.8 million), Jakarta (11 million) and Shanghai (nearly 13 million). (Marginson et al 2004). According to World Bank Asia had 3.5 m students in 2000 – China Central Radio and TV University has 1.5 million students and it enrolls over 100,000 each year. AIOU and Virtual University, Lahore has over 60,000 Students

Foreign as well as regional virtual and distance education institutions also are increasingly offering courses in the region. These include the Asian-based institution, Alama Iqbal Open University in Pakistan, the first and one of the largest of its kind in Asia, offers programs to international students. Similarly, Indira Gandhi National Open University in India offers programs in United Arab Emirates, Kuwait, the Sultanate of Oman, Doha, Mauritius, the Maldives, Ethiopia, Liberia, Singapore, Viet Nam and Myanmar (UNESCO's *meeting in Bangkok, 25-26 February 2000*)

5. Online Research

Major and the most visible impact of globalization of higher education is online search that one can do from anywhere at any time. Some of the research resources have become more accessible and cheaper. Researchers and students in developing countries are increasingly using sources such as e-library, e-books and Google-style interface etc. Through these tools faculty and student in higher education can search from scholarly papers to blogs.

Blog Search, a Google search technology focused on blogs, has accelerated recently. Blogging is a self-publishing phenomenon that students and researchers in developing countries can explore and use this blogging universe more effectively, and perhaps inspire many to join the revolution. Whether looking for a book review, political commentary or anything else, students can find out what people are saying on any subject of choice. Blogs are written in English, French, Italian, German, Spanish, Korean, Brazilian, Portuguese and other languages.

Unfortunate downside of it is that many developing countries still do not have a reliable highspeed Internet infrastructure. It is like having a Roll Royce without a high way.

6. Collaboration

Globalization of higher education made it possible for increasing cooperation and collaboration between and across border institutions, faculty, staff and students exchange programs, sharing and training in research and development areas, distance and e-education and even in use of text books. Globalization facilitates the movement of people and knowledge across international borders depending on economic, social, cultural, political, environmental, technological, business and other factors.

Globalization is not about competition, it about collaboration (Kiggundu 2000). In China there are almost 700 joint programs with overseas institutes at certificate level and 191 at college level. Major American IT

companies, including IBM, Microsoft and Cisco, have established certificate programs. In Kazakhstan, partnerships have been established with Russian, Turkish and British institutions. In Malaysia there are four branch campuses of foreign universities while many of the 690 private colleges have established overseas partnerships. Globalization of higher education is redrawing global economy map. Textbook industry is also rapidly changing. Textbook is largely an American invention, produced by profit-making corporations, and it can be seen as McDonaldizing of the textbook publishing industry (Ritz, 2004)

7. Corporate Universities

Use of the world's 4th dimension, the Internet, is rapidly expanding and accelerating with an unprecedented speed. This space shrinking technology (Dicken, 2003) has taken the corporate world to a new height in forming corporate universities. There are 52 corporate universities cater their own education and training programs such as corporate education and research, benchmarking and advisory services for the enterprise-learning marketplace. The corporate universities of multinational companies such as Microsoft, McDonald's, GM, Pfizer, IBM, Toyota, Rolls Royce, BMW, Thomson Learning and Intel having employees dispersed around the globe integrate their learning efforts with the business strategies of their parent organizations. Interest in training of employees through CUX model is expanding. Companies based in Argentina, Kuwait and Saudi Arabia has recently become members of **Corporate University Xchange**. Not yet fully exploited, the corporate world has discovered a trillion-dollar industry of higher education in developing countries. Even with a sizeable resistance, this capitalism gold rush will be hard to halt. The immense power of *creative destruction* of capitalism has far-fetched ability to create new products and improve old ones. (Schumpeter, 1943)

8. McDonaldization of Education

A recent study shows that globalizing instructional material is being emerged in the corporate world (DeBry, 2002). Designing instructional materials at global level is not only limited to translation, it involves adaptation to specific cultures and other factors (Laroche et al., 2000; Schwartz, 2001). In many nations where the American use of the textbook was frowned upon not too long ago, one now finds American textbooks are in use and growing in popularity. In some cases, successful American texts are being revised by replacing of American examples with local examples. There are even "grobal" textbooks—books that have been written in such a way that they can be used in many different nations. This cookie-cutter approach is increasingly being imposed on textbook writers by publishers, especially for the large

introductory courses. The authors have to follow the general pattern laid down by the successful texts in the field. Its centralized conception is control and exercised by publishers that are major factors in making textbooks. Of course, there is great variation in the degree and extent to which this cookie-cutter and Big Macs approach is applied, both in and out of the educational system (Ritz, 2004). The Southern Civil Society's Choike¹ reports, "McDonaldization" of education is the slow but relentless process of integration of higher education into the capitalists market. In its defense, UNESCO's Assistant Director-General for Education, John Daniel, underlines three aspects: a) In spite of its ubiquity, this food chain approach offers only a small portion of what people eat; b) It sells because people like what it serves; and c), the key to its success is its limited menu which is replicated with exactly the same flavor, aspect and quality and sold in identical stores throughout the world. (Southern Civil Society 2005)

An illuminating fact is that among the world's top 100 transnational corporations printing and publishing company, Thomson Corporation, ranks #1. Its 98.6% asset and 92.5% employees are located outside the Company's home country, Canada. Well known companies of the world, McDonald's and Coca Cola in this index rank 24th and 26th respectively in the world. (Dickens 2003)

9. Role of World Bank, UNESCO, WTO and GATS

In 2000, the Task Force on Higher Education and Society was convened by the World Bank and UNESCO. Higher education experts from 13 countries concluded in their 135 page report, "*Peril and Promise: Higher Education in Developing Countries*", that without more and better higher education, developing countries, home to over 80 per cent of the world's population, will find it increasingly difficult to benefit from the global knowledge-based economy without improving the efficiency and resources for higher education. Pakistan was one of the first countries to consider how the Task Force recommendations could be applied to the local context. In 2002 the Pakistan Task Force on Higher Education prepared a 78-page report as a follow up to the International Task Force on Higher Education. In line with the Government's strategic plan for development of knowledge-based society in Pakistan, this report reviews national higher education system and provided recommendations including quality improvement. The report is published by the Pakistan Ministry of Education and is available in PDF. (Ali, S.B. 2002)

10. Challenges Facing Developing Countries:

- Lack of resources and competitive pressures hampering the strive for becoming knowledge-based economies

- Lack of internationally qualified workforce
- Difficulty in aggregate gauging the extent and effectiveness of faculty-to-faculty or department-to-department or even institutional to institutional level of collaboration. In most cases collaborations tends to fall outside the government data-gathering systems in both the provider and the receiver countries.
- Unemployment of graduates is a serious waste of human resource and cause for potential social unrest
- Lack of experience and will for new methods for quality improvement persists. It deters the new ways of institutional management.
- Lack of clear and appropriate strategies and policies to face the challenge of the globalization of economies and the role of higher education
- Resistance of faculty unions regarding the GATS provision of educational services
- Lack of experience in curricula development and accreditation systems

11. Conclusion

Globalization is changing the future landscape of higher education with an unprecedented speed and size. Even with a sizeable resistance, the avalanche of globalization will be hard to halt. Higher education leadership should take it as a positive force for developing short and long range appropriate policies and strategies with passion.

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1. **NOTE: Choike** is the Mapuche name for the Southern Cross, the constellation that helps travelers find their way. In the same way, Choike.org helps Internet users find the best of the South on the web.

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Diane Ravitch, Ph. D.*

Improving Standards and Opportunity for Higher Education in Pakistan

The most reasonable and productive way to increase participation and improve standards in higher education is to strengthen and expand the institutions that prepare students for higher education. The educational system of a nation is inevitably shaped like a pyramid, with the highest and narrowest point—higher education—at the top of the pyramid. In Pakistan, the top of the pyramid is very narrow (with less than 3% of young people ages 17-24 enrolled in college or university) as compared to developed nations (where 50-75% of this age group are so enrolled). If Pakistan seeks to have the very substantial benefits that flow from having a highly educated population, if it seeks to create an educational system that will contribute to the nation's economic and social development, then it must sharply improve the quantity and quality of elementary and secondary education so that a far larger portion of the population, including both boys and girls, are prepared to enter institutions of higher education.

When I was invited to participate, I asked myself what I could tell an audience of distinguished educators from Pakistan about their own country. I am not a specialist in the study of education in Pakistan or in Asia. I am a historian of American education. I have studied American education for forty years. I do not claim special qualifications to comment on your country. But, over the course of a long career of study, I have learned quite a lot about the role of education in the development of a nation. I eagerly accepted the invitation to prepare a paper for this symposium because I wanted to learn more about Pakistan and wanted to do whatever I could to help your country improve its education system. I hope that what I have written will prove helpful to educators in Pakistan.

If Pakistan seeks to improve its economy and raise the standard of living for its citizens, it must improve the educational opportunities available to all of its citizens. Education should be the right of every child. Education is the most essential means of self-development. Education is the foundation of national prosperity. Education is the most important mechanism for building human capital. Education is the primary means of creating and multiplying intellectual capital. Education

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is society's instrument for widely distributing intelligence and knowledge. Education is the fundamental engine of economic growth, social development, and cultural vitality.

Education does not solve all economic and social problems, but it directly increases the proportion of the population who are empowered to contribute to the solution of those problems.

So long as large percentages of the population do not have access to basic literacy, a nation cannot develop its full human potential. So long as large percentages of the population do not have a chance to advance to secondary and postsecondary education, the nation's ability to improve its standard of living will be stunted. So long as higher education remains available only to a tiny proportion of the most advantaged members of the population, the nation will restrict its capacity for full economic, social, intellectual, and cultural development.

Many nations in the world have recognized that education is the key to development, and they are devoting significant shares of their national income to improving their schools and universities. Those nations that do not invest in education will fall farther and farther behind in the global economy.

With the fullest provision of education, a nation can identify talented individuals in all geographical regions and in all social strata of the population and can enable them to develop their minds and talents for the benefit of their family, their community, their region, and the entire society.

At present, only a tiny proportion of young people in Pakistan are enrolled in a college or university. This proportion should be increased, but this cannot happen unless Pakistan improves the quality and availability of schools for young people below the age of 17. It is unrealistic to expect that enrollment will grow in higher education unless the number of youngsters who are prepared for postsecondary education increases.

Expecting to improve the quality and standards in higher education without improving the availability and quality of schools is a mirage. It cannot happen. It would be like attempting to build a building without first establishing a strong foundation.

The proportion of students who are ready for higher education cannot be substantially increased until Pakistan addresses severe problems in the availability and quality of elementary and secondary schools. In order to increase the proportion of young people who are prepared to enroll in higher education, Pakistan must increase the proportion of young people who attend and graduate from secondary school.

The problems are daunting. But there is no alternative to finding solutions, to taking the steps that are necessary to solve these daunting problems. Pakistan must set goals and pursue them consistently by applying the necessary ingenuity and committing the necessary public

and private resources. Certainly Pakistan has many competing national priorities, but education is the one activity that promises to help in the solution of all other problems. It is the one activity that will expand the reservoir of educated citizens and thus supply the skills and the brainpower to solve problems in every community and region throughout the nation.

On March 12, 2005, Minister of Education Javed Ashraf, spoke at a symposium at Johns Hopkins University, where he described the current situation. According to Minister Ashraf, Pakistan today has one of the lowest literacy rates—51.6%—in the region. The literacy rate includes a large gender disparity, with 63.7% literacy among males, and 39.2% among females. Similar gender disparities are found across the education sector, in primary school enrollment, in secondary school enrollment, and in the proportion of those who complete secondary school and enter higher education. (Ashraf, 2005)

In a paper presented at a symposium at Johns Hopkins University on April 4, 2005, Dr. Shahid Hafeez Kardar estimated that as many as 30% of the relevant age group of children are not enrolled in primary school, and that nearly 60% are not enrolled in secondary school. Nearly twice as many boys complete primary schools, as compared to girls. Nearly twice as many boys enroll in secondary schools, as compared to girls. Barely 10% of the relevant age group completes secondary schooling, again with large gender disparities. Dr. Kardar reports that the percent of public sector spending on education declined between 1990 and 2002. (Kardar, 2005)

These numbers portray the sharpness of the pyramidal structure in which less than 3% of young people between the ages of 17 and 24 are enrolled in higher education. They also show that girls and women are consistently less likely to gain access to basic education or to the education necessary to prepare for higher education.

I need not point out to this audience that women are as capable of contributing to the advance of science, medicine, technology, business, and the arts as their male counterparts. For a nation to squander their talents by failing to provide them equal educational opportunity is a serious and unnecessary loss to the nation.

In July 2005, Pakistan was ranked last out of 14 Asian Pacific countries in a report investigating the commitment of developing nations to basic education. This report was published by the Asian South Pacific Bureau of Adult Education, a network of some 200 organizations involved in adult education. The report found that 58.9% of adults were illiterate. It gave Pakistan an “F” rating because of the nation’s high levels of adult illiteracy, the large proportions of children who are not enrolled in primary or secondary school, the persistent gender disparities at every level, and low per capita spending on education. (Daily Times, 2005)

Most certainly, the government must continue to expand its programs to increase adult literacy. The demands of the modern world are such that persons without literacy will be permanently excluded from participation in large sectors of the economy and are far more likely to experience poverty, ill health, and a shorter life span than those who are literate. Illiteracy is remediable, and in the twenty-first century it is unpardonable to tolerate it.

The most strenuous efforts must be taken to assure that all children in every province and geographical region enroll in and complete primary school, and that enrollments in secondary schools steadily increase. Government efforts must also be directed to the improvement of teacher training and the modernization of school curricula.

The reasons that children do not enroll in school or do not remain in school are well-known: poverty, the cost of school fees and uniforms, the distance of the school from their home, parental hostility to the education of girls, and inferior physical facilities. Many schools lack not only qualified teachers but also classroom furniture, books, blackboards, electricity, and toilets. Some communities do not even have a functioning government school.

It is the responsibility of the regional or national government to ensure that there is a well-equipped primary school in every town and village. Government should supply bus transportation for students who live in rural areas so that they can attend school. Government has the obligation to make sure that every student has the opportunity to attend a free school with free textbooks. No student should be excluded from opportunity for education because his or her parents cannot afford the cost of tuition, uniforms, books, or supplies. Government has the responsibility to examine teachers and certify that they are competent to teach. Government must also take a leading role in persuading the public that girls have the same right to an education as boys.

Various scholars have reported that the private sector is more efficient and more successful in educating students than the public sector (European Commission Report, 2002). Neither sector has been successful in reaching all children or retaining a sufficient proportion of students in school through secondary completion. Clearly there is a need for promotion of both sectors and increased collaboration between sectors to achieve their shared goals of higher enrollments and higher completion rates.

Government, in collaboration with the private sector, should explore the uses of technology to provide “distance learning” for secondary students in hard-to-reach areas or in hard-to-staff school subjects. Distance learning is often utilized to bring education to students in inaccessible geographical regions or to bring instruction in advanced subjects or technical studies to schools that are not large enough to offer those subjects or that are unable to hire a highly

qualified teacher for the subject. Technology today makes it possible for a single teacher who is teaching an advanced subject—for example, physics or calculus-- to offer instruction and to interact with students in many locations at the same time, enabling students to ask questions and get answers immediately.

The government might consider a program of scholarships allotted to families or students to be used in either public or private schools that offer a modern scientific curriculum. Such a program may well encourage local authorities or private schools to open new schools, expand their offerings, and increase their enrollment. Such a program might involve larger stipends for students who are unlikely to enroll—such as girls in rural areas-- or provide bonuses to schools based on increasing the overall graduation rate, thus giving the schools a financial incentive to enroll these students and retain them until they finish secondary school.

Pakistan will be unable to expand its higher education enrollment until it has taken significant and decisive steps to address the problems of primary and secondary education. The government should set concrete annual targets, intended to make progress towards the following goals:

1. To increase enrollments in primary schools
2. To increase enrollments in secondary schools
3. To increase the secondary school completion rate
4. To reduce the disparity between boys and girls in enrollment and completion at every level of schooling.
5. To increase the adult literacy rate.

The government should invite representatives from the public and private sectors to develop a comprehensive plan to make steady progress towards these goals. These goals should attract very broad support. Without advancing on these five fronts, education in Pakistan will continue to languish and to hinder the development of the nation.

Implementation will undoubtedly require a higher level of government support for education at every level. Yet no one can doubt that Pakistan's future development depends on its current commitment to improve education and guarantee the right of every child to a sound education.

The children and youth of Pakistan need an education that prepares them to participate in the modern industrial and postindustrial world. This means that the curriculum of the schools must be secular, scientific, and attuned to the changing economy of the modern world. Students must become accustomed to asking questions and thinking critically about whatever they read and whatever they study. They should study science and mathematics, as well as history, language, literature, and the arts. Students in secondary schools should have access to studies that prepare them for higher education, and also to

technical and vocational studies that prepare them to work in a modern office or workplace.

What should the higher education sector look like a generation from today in Pakistan? Let us assume for the sake of the discussion that many of the problems I have described have been successfully addressed. Let us assume that instead of 10% of youth graduating from secondary school, that the figure is 50% or more of the relevant age group. Many, perhaps most, of these young people will want to attend college or university. Among them will be people with a wide diversity of interests, ambitions, and capacities. What they have in common will be their desire and need for more education beyond secondary school.

Pakistan can best meet the needs of its people for higher education by creating a system with different kinds of institutions. The higher education system in California is, I think, a useful model.

At the top are elite institutions—like the University of California at Berkeley or the University of California at Los Angeles-- that have very strict admissions standards and offer a challenging program of liberal arts and sciences; the graduates of these institutions frequently plan to engage in postgraduate or professional studies.

In the middle tier are state universities where the standards of admission are less demanding than the elite institutions. These public universities offer a broad array of courses in liberal arts and sciences, as well as courses in business, modern management, and technical careers. Their students may continue on to graduate or professional studies or enter the workforce.

In a third tier are community colleges that offer a two-year degree. These colleges accept anyone with a secondary school diploma, with no entrance examination; many of them do not even require a secondary school diploma. They offer a wide range of courses, many of them in technical, vocational, and practical studies, which prepare students for jobs and careers.

I should point out that students ought to have the opportunity to transfer to a more rigorous institution or to a less rigorous institution, to one that is more academic or one that is more vocational, reflecting their own choice and ambition for the future.

There are other models that no doubt would serve the purposes of Pakistan quite well. The important point with higher education is the recognition that students have different purposes and different goals. Higher education best serves them and the nation if it includes institutions designed to meet different purposes.

Pakistan, perhaps, will create its own model that works best to meet the needs of its citizens and society. The national experience of Pakistan is unlike that of any other nation. Educators in Pakistan are best qualified to decide how to proceed in designing a system of higher education. They will do so, I hope, with full knowledge that higher education is the apex of a national system of education, whose success

is directly dependent on the quality and availability of elementary and secondary schools. And they will do so, I hope, with full recognition that education is a great engine of national development, social development, intellectual development, cultural development, economic development, and individual development.

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Habibeh Rahim, Ph. D.*

The Necessity of Incorporating Critical and Philosophical Thinking in Higher Education

For many decades now, economic personal gains or an intellectual quest has motivated people to acquire higher education in Pakistan. Education is not only a personal resource but must be considered to be of value for the larger community. Communities and nations progress or decline depending on the level of the education of the citizens. Particularly at the higher level, education is a valuable resource and recipients of this value should be made aware that the use of it should be for the benefit of the *greater good* together with the personal advantage. This idea can only be propagated by incorporating critical and philosophical thinking in the higher education curriculum. Specially, economically disadvantaged nations should formulate a curriculum that includes the component of philosophical critical thinking which would bring about the realization in all fields of study that education must be shared and used as a collective resource. This realization would prompt the educated elite of not merely investing their intellectual competences in metropolitan arenas for personal financial return, but rather to take their competences to rural and underprivileged areas and assist therein in further human resource development.

Additionally, the use of technological and factual know how in all content areas must be moderated by humanistic and humanitarian principles. This is a valid approach in all arenas of knowledge (humanities, social sciences, sciences). Thus for all subjects, though completely unrelated as biology, physics, accounting, history, journalism, the common criteria would be the suitable development of critical thought. For instance, in the areas of stem-cell research or other critical issues, the expertise must be tempered by principles that would govern the ethical propensities of the knowledge base, so that wisdom accompanies all practical applications.

The problem as evident:

As per the Higher Education Commission, the curriculum is the “throbbing pulse of a nation.” This pulse can actually throb by creating a nexus not just between the ivory towers of the classrooms and the ivory towers of the corporate work places, but rather by creating also a nexus with the masses who desperately need the initiative and the imagination

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of the educated elite to find hope in their daily life. As stated by the Aga Khan IV:

There are those who enter the world in such poverty that they are deprived of both the means and the motivation to improve their lot. Unless they can be touched with the spark which ignites the spirit of individual enterprise and determination, they will only sink into apathy, degradation and despair. It is for us, who are more fortunate, to provide that spark.

For the most part the curricula presented in the 2004 and 2005 minutes of the HEC are well planned. However, most of the learning engages the student in the memorization and the pedagogy of facts and figures, data processing and adhering to known solutions. The Service Learning and Problem Solving components are absent. For purposes of a comprehensive curriculum in the Higher Education of Pakistan two crucial components must be incorporated to facilitate the development of critical thinking:

- 1) Service Learning Component
- 2) Problem Solving Component

What is Service Learning?

This is a pedagogical method which combines service to the community as part of the classroom curriculum. It fosters a sense of civic responsibility by creating awareness with the students about the needs of the wider community. This component provides a context for students to realize that *what* they know has additional value with *how* they can use it for the service of others. This component enables them to further realize that their education is not only of importance for the economic value added to their earning potential but that they must contribute some of this value to the society. By interacting freely with those who are not thus privileged and have not received education, the students understand their role as facilitators for positive changes in the community.

Service Learning has three practical results: First, it establishes a “we are all one” social sensitivity. Instead of thinking themselves as an elite group, the educated youth are enabled to view themselves as “points of light” for the larger society. Their responsibility is now not only to further their own economic wellbeing, but also to add value in the lives of their fellow citizens who are not thus privileged. The act of being a student is hence not merely an end in itself but rather a means to become a more committed citizen. Second, it enhances academic performance and personal maturity. Students who are committed to the welfare of others would be motivated to study better themselves. They begin to comprehend their pedagogical opportunity as a gift that must

be used in the best possible way. By interacting with the economically disenfranchised they begin to view themselves as proponents for the welfare of the greater good. This provides them with the initiative to see themselves not merely as “passive recipients” of decisions made by others, but as providers of active community benevolence. They are thus not merely dependent students but are independent responsible members of the community on whose energies the society is dependent. Thus the very act of servicing others facilitates the maturity of the students. Third, service learning establishes norms for later life. Students who actively engage in assisting others continue to remain lifelong active members in their communities. There is a strong sense of “give-back.” So as the work years progress the give-back ratio increases. From small student projects the individual with the civic sense will be inspired to engage in ever increasing community projects. Hence there is a change of ethos in the wider society. The ethics of service becomes a driving spirit behind all national efforts aimed at progress.

What is Problem Solving?

Problem solving is linked to Service Learning. The confidence gained from serving others fosters the initiative in the students to use the education to solve and resolve problems. The solutions and the problems may be small ones at the student stage but the experience gained and the empathy for the “have-nots” will energize and motivate major public service benefactors. The classrooms will hence become juxtaposed with the surrounding communities as students get involved in them. Education will be viewed in a broader context. The end result of being educated is not simply to solve the problem of one’s employment and to procure the funds for rent, but rather education be used as a tool to solve the woes of society. The service-learning component could include problem-solving components.

Recommendations:

According to reports there are 54 accredited universities in Pakistan. The program for service learning must be implemented over a five-year plan to achieve a 100 percent student participation. In the first year about 10 universities could be selected. During this year the guidelines would be provided to the academic registrar’s office. This office could be in charge of the program whereby in order to graduate every student must provide between 100 to 150 hours of community service. These projects during the first three years must be supervised by a central implementation committee that would assist the registrars’ offices in the universities to plan, implement and supervise the student projects. Each year an additional 10-12 universities must be added to

this list of institutions with Service Learning/Problem Solving curriculum. The process could initially start with the Bachelors programs and move upwards to the Masters and Doctorate programs with another 100-150 community service hours at each level as part of the graduation requirement.

Examples of community service:

- 1) Students could volunteer their time in area hospitals and health clinics. They could assist nurses and doctors to enhance patient care. For instance, in a geriatric ward they could read to the old and frail folks. In an oncology ward they could provide assistance with personal grooming. They could assist in teaching rural women how to cook nutritious foods, and so forth.
- 2) Students could volunteer their time with local municipalities. They could arrange to take water samples for testing. They could identify the pollutants, look for the source and seek assistance to remedy the situation. They could also visit the shantytowns and teach the local communities how to maintain cleanliness. They could team up with the local youth and embark on a systematic cleanup of public beaches, etc.
- 3) They could volunteer their time with educational groups or start one themselves and teach folks at different levels how to read and write. They could collect the narrated historical experience of the elderly folks and create a data bank of community and folk narratives.... The list is endless.

Examples of Problem Solving:

If in a neighborhood there are not enough drinking wells or access to electricity or primary schools, etc, a group of students could get the necessary permits to make the neighborhood gain these benefits. In a country with modest resources, the energy of the educated youth will very soon make a difference in the growth potential of the entire society.

Possible Results of Service Learning/Problem Solving initiatives in the Higher Education Curriculum:

Folks in the rural areas and economically depressed areas would not remain disenfranchised and alienated. Students with higher education would gain an insight into real life issues and concerns. They would also be facilitated to develop a “can-do” energetic attitude. While looking for a job in their respective fields after graduation, they could remain involved with community service. This voluntary post-graduation community service would further engage them to “give-back” to those in

need on a more permanent basis. Merely monetary assistance and donations are very frequently not sufficient. Time and personal engagement are needed to work on an elementary level to show communities how to prosper and achieve success to in socio-economic matters. Most important the ideas associated with the procurement of higher education would gradually be restructured. From a personal-gain oriented activity, it would be transferred into a activity that would concern itself with the well being of others as well.

Some ways to foster the spirit of Community Service/ Problem Solving initiatives:

1. Establish a National Youth Service Day to honor the best projects.
Universities would send the recommendations to the central planning committee for Service Learning/Problem Solving projects completed by the students. The Committee would chose the ten best projects. The President of Pakistan then could confer an award for the projects.
2. Establish a weekly “every-day hero” award on local and national levels.
Again on a continuous basis the above committee would evaluate the weekly project reports from the universities and issue “every-day-hero” certificates. This weekly acknowledgement is necessary to maintain a high energy level for serving others and solving issues.

My contribution:

I would be happy to provide a detailed analysis of each subject area so as to include the Service Learning/Problem Solving components. Moreover, if a committee is formed to oversee the introduction of these components, I would be happy to serve.

Session III

The Role of Private Sector and Non-Profit Organizations in Higher Education: Ways to Make a Strong Partnership Work

Syed Tahir Hijazi, Ph. D. *

Role of Private Higher Education Institutions in Pakistan

Introduction

Provision of higher education in private sector is relatively a new phenomenon in Pakistan. In 1985 there were 22 universities in the public sector, where as in year 2005 there are 111 authorized universities and degree awarding institutions all over country. Out of these 57 are in the public sector and 54 in private sector. This increased number is mainly demand driven. Two decades ago when there were no private institutions in the country, only option with students for higher education was public sector universities. These institutions were providing education in a number of disciplines, however, the number of seats available were a lot lesser than the number of applicants. With limited opportunities of higher education, students diverged to lesser important disciplines, abandoned plans of further education or went abroad for higher education if they could afford.

Entrance of private sector in higher education was positively received by students. Initially it provided opportunities left over of public sector universities. For instance where one thousands applied for business administration program in public sector university in Islamabad only forty were admitted. Amongst the balance of 960, those who could afford joined private institutions or went abroad. Unfortunately those who could not afford abandoned further education. Initially there were many issues related to private sector institutions e.g. fee was higher, the facilities were inadequate, at times the quality was low, campuses were in limited spaces besides uncertainty of recognition and continuity

In the beginning government had no clear policy on private higher education. Later charters were given to few private universities. Some other universities were refused government permission to award degrees. Some of the institutions even continued teaching various programs without charter and formal recognition of degree. Interestingly enough despite non-recognition of their degrees by government students kept joining these institutions for higher education. This trend is still continued, however in recent past after establishment of higher education commission, government started taking punitive action against non-chartered universities¹⁴. The issue of academic standards in private sector is still debatable. Where some of the private universities are providing high quality education, some others are

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14 List of universities declared illegally by HEC is attached.

looking after lower strata of students' population. Thus various education standards are met by private sector in response to market need. The base of education standards in Pakistan provided by sixty years of public sector education institutions is low. There are many explanations for this fall in quality in the public sector education including politics on public sector university campuses, fading out of research culture, withdrawal of research funding, bureaucratic and inefficient administrative structure, low salaries of teachers, indifferent approach of vice chancellors appointed from a group of retired bureaucrats, military personnel's and retired teachers. The issues were highlighted by various researchers including Boston group as below;

“The problems that are identified in the system are legion. These include poor quality of teachers, low student motivation, lack of relevance of the course content to social or economic needs, gender and class disparities, student discipline, outdated curriculum and course materials, fiscal insolvency, and absence of research. Teacher quality is affected adversely by the poor salary and benefits and perverse incentives provided by systems of retention and promotion. Students face an unsatisfactory learning environment, overcrowded classrooms, rote learning, inadequate and outdated teaching materials, and a highly charged political situation. The result is that the vast, rather the overwhelming majority of students emerge from Pakistani universities and colleges with no significant social or technical skills.”¹⁵

Private sector entered the market with the above state of affairs. It has to define its role which it did responding to market demand, perception of the people and foreseeing the future world trends.

The second issue of concern in higher education is quality. Though a number of public sector universities are providing education across the country the standard of education is much below the requirement of market. Population of a country is considered as an asset and human resource, its productivity plays a vital role in the development of economy, it can be increased to produce more. Mao addressing the issue of high population in China once said” man is more a producer than a consumer”. Population of Japan is almost the same as Pakistan, but the difference is in the productivity of workers. Productivity is directly linked with education, training and better management. Higher

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education has a strong role in it. Inherited system of education practiced during last six decades has proven to be insufficient to meet challenges of twenty first century. The Boston group explains this phenomenon as below,

“Notwithstanding the rhetorical commitment to scientific and technical education, the actual quality of technical institutions has deteriorated over the last three decades. In other areas, the situation is even more depressing. There is little emphasis on communication, languages, writing, or the humanities. Built on the tradition of the British system from the 19th century, the educational programs purport to train students for employment in the public services, and therefore do not provide any training in entrepreneurship, marketing, or other skills that would be more relevant. An environment that encourages cheating and corruption mars even the training for public service. More generally, the course content as well as the extra-curricular environment ill-prepares the students for participation in the social and political development of the country.”¹⁶

The institutional dynamics set by public sector higher educational institutions has adversely affected the culture of learning. Private sector has to face many challenges in light of existing culture. It emerged as savior to come out of this vicious circle of falling standards. It provided shortcut to achieve objectives of high standards, increased productivity and competitive environment to meet the market needs.

Government regulations and private sector institutions

In eighties a number of small institutions emerged to provide education in field of computer science and business administration to meet demand of disciplines in Middle East. It was soon followed by a few private universities and institutions of relatively better quality and facilities. In response to political pressure government in nineties agreed to provide charters to private sector. This followed with mushroom growth of private institutions in country. Because of loose regulation system, affiliations and additional campuses grew at a faster rate. Some influential people sold campuses and affiliations without meeting prerequisites of educational facilities leading to virtually selling degrees under chartered universities. With establishment of Higher Education Commission with its new mandate this practice was restricted. However, too stringent conditions were put on private sector which was more focused on physical facilities rather than academic

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standards. A university was to show endowment fund of Rs 100 million and campus and land provision of almost same amount. This killed initiative of academicians to establish a quality education facility. Instead industrialist and big businesses entered education, redirecting focus of education from quality to commercialism.

There is lack of information on part of applicants, and HEC can well fit in by providing that information through data collection, rating of institutions, developing faculty profiles etc. Currently there is an element of harassment by HEC by producing advertisement, categorizing only private educational institutions on the basis of physical facilities. Where International Islamic University a public sector institution started in one room, functioned in hired bungalows and borrowed Faisal mosques space for twenty years before constructing campus, private sector is asked by HEC to establish campus within first few years of its establishment. Thus focus of private university is forced to move from quality teacher hiring to acquisition of land and construction of campus. Response of market is fast growing in favor of private institution graduates in general. This is a healthy sign and in due course of time some of the private institutions will emerge as global players.

Current role of HEC towards private higher education institutions include provision of funding for MS and PhD only. It also looks into requirement of private institutions including two PhD per program. It attests degrees of graduates provide equivalence certificates to transfer students. Grants for research and development are only available to public sector institutions. Similarly teachers training, conference funding and other academic activity is funded for public sector. Private sector is given dead lines for making campuses, acquiring qualified faculty and asked to follow procedures laid down by HEC. Public sector having similar weakness is ignored. Unfortunately many of the potential private sector institutions were closed because of inability to meet requirement in short run. Since they were all providing training and developing human resources it is a big loss to the economy. There is a need to assess requirement of education market. Higher education has a pivotal role in increasing GDP growth rate, expansion in export, productivity of workers and eradication of poverty.

Shortage of higher education facilities

Shortage of higher education facilities in Pakistan is visible. Currently there are 24.5 million male and female in age group of 18-26 years¹⁷. This is expected to grow to 27 million in year 2010 and further to 30 million in year 2020. Based on HEC statistics only 423236¹⁸ or 1.70 percent of total population in age group are enrolled in colleges and universities. If enrollment keeps increasing at the rate of 25 percent per

17 International Labor Organization Islamabad

18 Higher Education Commission Statistics 2004.

anum as reported in last three years demand for higher education will increase to 515,000 students in years 2010 and 628,000 in years 2002. Enrolment in universities is around 130,000¹⁹ of which 24 percent are in private sector. In comparison to United states where enrolment in higher education is about 3 million²⁰, based on population projected ideal enrolment in Pakistan should be around 1.5 million instead of only .130 million. This can improve if quality of education and enrollment increase at school level.

Ratio of private sector enrolment to public sector is 24:76. It is important to note that most of the private sector educational institutions are providing degrees in professional fields which are greater in demand, where as number of enrolment in professional programs in public sector is less than half of total. In this sense private sector is meeting more human resource needs of the economy. Focusing on major fields like business administration and computer science, MBA's produced in India per anum are one hundred thousands in a population of 1000 million. In United states MBA produced are 95,000 in a population of 290 million. In Pakistan MBA produced annually are around 7,000. Based on estimates of population of developing economy like India, in Pakistan number of MBA's should have been 15,000 and compared to developed country like USA it should have been 47,000. Thus there is immense shortage of MBA produced in Pakistan. This is interesting to note that in 1988 when private sector was not active there was only 300 MBA's produced in Pakistan annually. In the of field computer sciences there are only 3000 computer software developers in Pakistan compared to India where there are 300,000. This has come up by active consideration of government to develop computer skills through private and public sector in India.

There is dire need to first fill up gaps, and once these gaps are filled than standards are pursued. It is important that either private sector be allowed to fill gaps by identifying potential market demand, or alternatively government explore avenues through research and initiate new programs.

Private sector establishment has taken a heavy load off government by providing higher education on cost of public. Based on per student recurring cost incurred by public sector of Rs 200,000 per student private sector is saving over Rs 6 billion of government revenue to be spent on higher education. This is also to be noted that private sector is providing this education to public at much lower cost. Currently people are spending to the tune of \$600 million (RS 36 billion) in foreign exchange by sending students abroad for higher education. Many of those foreign institutions having admission agents in Pakistan are of

19 It excludes college population.

20 National center for Education Statistics USA
<http://nces.ed.gov/programs/projections/>

very low standards. This foreign exchange can be saved if government recognize and support private sector instead of considering them a profit making bodies delivering nothing.

Estimates Expenditure Public & Private

Sector	Estimated Recurring expenditure (Rupees)	Estimated Assets (Rupees)	Per student cost (Rupees recurring expenditure)
Public Sector Universities	26 billion	2300 billion	200,000
Private Sector	2.5 billion	< 20 billion	80,000

Source: Estimates based on interview of some private sector university management. Figures are approximations.

Current status of private institutions

Private institutions are striving hard in Pakistan to survive. It is understood that institutions who do not meet requirement of market will not survive in long run. But each educational institution is catering to the needs of different strata of applicants, those who are willing to go to stronger and competitive programs and those who want to get degree with less effort. In fact market needs different level of professionals. There cannot be one across board standard of education. This is in addition to other factors affecting quality of education in public sector. When private sector established, they have to charge higher fee to cover expenses of competitive teachers which restricted market size and put more challenges on creditability. Government in general is hostile to private sector so is it to private educational institutions making it goes through hurdle race. 57 universities in the private sector have government charter to operate. There is a bigger number of others who do not have the charter.

Required regulations for private and public sector

It is important that parents be updated on status of all institutions, both private and public by transparent rating system. It will also be very useful if government do rating of institutions abroad, and equip parents and applicants on standards of education in those institutions. Learning from Indian education ministry experience request to private universities

to charge fee equivalent to government fee and claims balance. There is no restriction in India on starting a private institution. Bulk of manpower trained in computer science field during last two decades came from private sector. Result is obvious, today India is earning foreign exchange of \$10 billion from IT related services alone which is out come of its liberal policy towards education.

Thus to develop a culture of quality education HEC and government should go hand in hand with private sector, and focus on out comes. Provision of scholarships to students studying in private sector, funding for research and facilities, provision of land for establishing campuses, support in getting faculty, consultation to improve academic standards, communication and effective and transparent rating system can improve quality of education. Regulations should be there but not to police education but to support and strengthen education.

Impact of private sector on education standards in Pakistan

a. Academic quality has improved

With inception of private higher education institutions quality of education has improved in general. Some institutions are providing education at much higher level than many of the European and universities. New programs and new ideas are generated. In pursuit of getting share in job market private universities are updating their curriculum regularly. In terms of students transfer and admission abroad students of private sector are successful in getting credit transfer to reputed international universities. Technique of teaching is also updated and graduate produced is making significant contribution to the economy. With the availability of MBA graduates many businesses has replaced MBA's in place of ordinary graduates to improve their performance. Demand for MBA is rising at much faster rate than graduates produced every year. Previously only a few hundred graduates produced were hired by multinationals. It is understood, and as trend shows quality will improve over time.

b. Curriculum flexibility introduced

Previously a set pattern of curriculum was followed in most of the public sector universities. With the start of private sector, new trends and approaches are followed. Students are involved now into case writing and article publishing in national and international journals. Group discussion, seminars, and field work is essential part of many university curriculum. Looking into market response private sector graduates is drawing much higher salaries than public sector institutions.

c. Education for everyone

Private sector has increased education opportunities within their means. It is important that government take its role and provides adequate facilities for higher education to increase productivity and economic growth. Government should also take view of social aspect and provide equal opportunities for applicants pursuing higher education. Since base is very small only 0.123 million are enrolled as against requirement of 1.5 million, it is important that government should provide all possible support to private sector to increase number of graduates produced in Pakistan. In this regard first step should be to bridge gap, once gap is filled standards and quality to be pursued. Since private sector is more conscious of future market needs it is expected to improve standards in response to market demand and introduce new programs as they are needed. For an example, viewing expected need of the market in future it is private sector that started BS Bio-informatics program in Pakistan.

Conclusion and Recommendations

Current enrollment of university students in Pakistan is only 0.13 million. Estimates based on developed countries current university enrollment should be at least 1.5 million. Cost of educating of 1.5 million students at existing level of government budget allocation will be Rs 300 billion per annum. Government can never be able to fund that sort of higher educational program. It is understood that at this stage there are not enough students passing secondary school examination to enter university, however, government have to rely on private sector to help them in meeting its objective of educating youth. Even today private sector is taking of government burden by an amount of Rs 6 billion.

Indian experience guides us that private higher education institutions through market forces improve quality of education. Fairly enough, India has increased foreign exchange earning through export of information technology services from nil to \$10 billion in fifteen years through a liberal policy towards private sector education initiation. Same policy is followed by United States. Viewing successes of these countries there is no room for over regulating private sector initiative.

Currently there is a huge gap of human resource needs in Pakistan and its availability. If private sector is willing to contribute to improvement of human resource needs government should encourage them with all possible facilities rather than over regulate them and discourage investors through stringent conditions. Once the gap is filled, government may interfere and establish standards to be followed.

There is need that government watch against fraud in education sector, as it is needed in the economy as whole. Government can do this

through inspections, data generation, transparency of information; regular review of programs etc. without harassing the private sector. Government should accurately provide this information to public without biases subjective comments. The information should be correct, verifiable and should not adversely affect an institution reputation.

Publishing rating of all public and private sector universities annually, through a transparent system of evaluation will be a useful exercise, providing accurate information to parents and stakeholders. It will also increase the healthy competition, clear direction incentive to work hard.

Government should treat students of private sector institutions similar to students of public sector. It is understood that all of them are equally taxpayers and citizen of Pakistan. Therefore, instead of only subsidizing public sector students, private sector students should also be given opportunity through open merit entry test system.

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ANNEX - A

List of local chartered universities operating unlawfully through their campuses/affiliated institutions beyond their territorial jurisdiction:

Name of University/ Institutions	Unlawful operating campus/affiliated institutions
Al Khair University, Mirpur, Azad Jammu & Kashmir	Institute of Professional Studies (Canal Campus) 4-A, New Muslim Town, Near New Campus Bridge, Lahore
	Al-Burhan shopping Circle 3rd Floor Bld-B on Top of Burger Time Restaurant Opp. Main Haidry Market, North Nazimabad, Karachi
	59-C DHA Phase-II Karachi
	College of Information Technology C-652, Eid Gah Road, Sukkar
	24-E-II near French Center, Gulbreg III, Lahore
	Campus Distt. Central Block -E North Nazimabad, Karachi
	College of Education, A-130 Block 10A, Gulshan-e-Iqbal, Karachi
	College of Education, Gate No.8, No-4 Mahmoodabad, Karachi
	College of Technical Education, Langlay Road, Lahore
	College of Education, New Muslim Town, Lahore
	Matrix Institute of Emerging Sciences, Gulberg III, Lahore
	Quaid-e-Azam College of Information Technology, Main Ferozepur Road, Lahore
	Modern College of Commerce, Allama Iqbal Town, Lahore
	Centre for Health & Population Studies, Chamba Lane, Lahore
	College of Business Administration, Gulberg II, Lahore
	Lahore School of Information Technology, New Garden Town, Lahore
	Proceed Institute of Management & I.T., Gulberg III, Lahore
	Institute of Computer Technology, Gulberg III, Main Ferozepur Road, Lahore

	College of Professional Studies, Peoples Colony, Faisalabad
	Institute of Management Sciences, Canal Road, Peoples Colony, Faisalabad
	Iqra Girls College, Satellite Town, Sargodha
	College of Business Administration, PAF Road, Sargodha
	College of I.T., 6th Road, Satellite Town, Rawalpindi
	University College, 6th Road, Satellite Town, Rawalpindi
	College of I.T., Bank Road, Rawalpindi
	Jinnah Islamic College of Commerce, Satellite Town, Rawalpindi
	College of Global Technologies, Peshawar Road, Rawalpindi
	South Asia Institute of Management & I.T., Hali Road, Westridge, Rawalpindi
	UK College of Information Technology, Club Road, Muzafargarh
	The National College, Abbot Road, Sialkot
	College of Management & I.T., Lala Rukh, the Mall, Wah
	Shiblee College of I.T. & Management Scs., Satellite Town, Gujranwala
	Arqum College of Science & Arts, Court Road, Gujranwala
	College of Management Sciences, Civil Line, Sialkot
	UK College of Technology, Ahmed Pur East Road, Bahawalpur
	College of Professional Studies, Gulgasht Colony, Bosan Road, Multan
	The National College, Bosan Road, Multan
	Educare College of I.T., Baldia Road, Bahawalnagar
	Sadiqabad Polytechnic Institute, Sadiqabad, Distt. Rahim Yar Khan
	Chenab College of I.T., G.T.Road, Gujrat
	College of Business Administration & Computer Science, PECHS, Karachi
	College of I.T. & Management Sciences, Main Korangi Road, Karachi
	Pakistan Institute of Professional Sciences, Gulshan-e-Iqbal, Karachi
	SPIRIT Institute of Management & Computer Sciences, North Nazimabad, Karachi
	Institute of Science & Management, Shaheed-e-Millat Road, Karachi

	College of Computer & Management Sciences, Block B, Latifabad, Hyderabad
	College of Education, Management Science & I.T., Minara Road, Sukkur
	Al-Khair College of Commerce, Mian Channu
Mohi-ud-Din Islamic University Nerian Sharif, AJ&K	Leads Institute of Management Sciences, 24-K, Gulberg-II Lahore
	Central College of information Technology,5-E/4 850, Officer's Colony Boson Road Multan
	Pyramid Education Centre, D 135, Malik Abad Road, 6th Road, Saltellite Town Rawalpindi
	Institute of Information Technology & Management 40/3 Jahanzeb Centre Opp Gakhar Plaza,Bank Road Saddar Rawalpindi.
	Abbotabad Interntational Medical College, Abbotabad
	Wah Institute of Management and information Technology, Sadat Plaza Lalarukh, the Mall Wah Cantt:
	Independent Medical College 177- Jinnah Colony, Faisalabad.
	Soft Vision Center of Information Technology, 4-A Muhammad Hussain Road, Model Town, Bahawalpur
	University College Of Information Technology (UCIT), Jampur Road, Fareedabad Colony, D.G Khan.
	Chanab Institute of Information Technology, Shadab Colony, Opposite Canal Rest House, Jhang
	College of Management & Information Technology, Mumtaz Plaza, Jinnah Road Gujrat
	Gandhara institute of Management Sciences & Teacher Education, House 127 Street-3, Sector-I, Shaikh Malton, Mardan.
	Rawalpindi Institute Of Technology, Ojri Camp, Murree Road, Rawalpindi
	Nice Degree College of Information Technology, Jamiatul-Farooq Road, Rahim Yar Khan.
	Multan Institute of Management Sciences, 2-A Gulgasht Colony, Boson Road, Multan
	Abbottabad Institute of Education and Applied Sciences, H#933, Sethi Masjid, Mansehra Road, Abbottabad

	SYSTEX Institute of Technology, 14-L, Model Town Extension, Lahore
	College of Management Sciences & Information Technology, 114-A, New Muslim Town, Bank Stop Wahdat Road, Lahore.
	ABACUS College, D-102 M.A Road, Satellite Town Rawalpindi
	College of Advance Professional Studies (CAPS), 85-E, Farid Town, Sahiwal
	LIONS College, 3-A, Canal Colony, Farid Town Road, Sahiwal
	Pakistan Institute of Emerging Sciences, House No, 2, Aim-ud-Din Colony, Mian Channu
	College of Information Technology, Circular Road, Chowk Islamabad, Sialkot
	South City Institute of Management and Technology, 50-M, Block-6, P.E.C.H.S., Karachi.
	E-QUEST College, 6th Dasti Avenue, Muzaffargarh
	NK & Fact, 14 -A Block -L Gulberg-III, Ferozepur Road Lahore.
	Wah institute of Management & Information Technology, 5-E/4, Officers Colony, Wah Cantt.
	College of Management & Information Technology, Jalalpur Jattan Road, Near Civil Lines Police Station, Gujrat
	Orientation of Research in Business & Information Technology, 2nd Floor Muhammad Din Plaza, M.M No 2, Jada Road, Jhelum
National Group of Textile Collage	IC-1, M M Alam Road, Sir Syed Stop, Gulbreg III, Lahore
	99A/1, Satellite Town, Rawalpindi
	Near Civil, Hosiptal, 45 Civil Lines, Gujranwala
	10-A, St No.44, F-8/1, Islamabad
Preston University, Kohat	Canal Campus, 179-A Abubakar Block, New Garden Town, Lahore
	OPSTeC Campus,11 F, Model Town, Lahore
	11-B, Bosan Road, Gulgast Colony, Multan
	103 -C/2, People Colony, Kohinoor Chowk, Faisalabad
	Opp. Income Tax Complex, G.T Road, Gujranwala
	15 /B Phase -II, Shahbaz Town, Quetta

	70-A, Dubal Orkazai Plaza, Murree Road Rawalpindi
Preston University, Karachi	Hyderabad Campus 641/B, Unit No 2 Latifabad
University of Lahore, Lahore	Arqum College of Science & Arts, Court Road, Gujranwala

Foreign & Local Institutions Operating Unlawfully

Name of University/institutions	Unlawful operating campus/affiliated institutions
	46 Margalla Road, F-8/2, Islamabad
American International University	7 Up Chowk, Gulbreg III, Lahore
	Faisal Town, Lahore
American International College	National College of Business Management & Technology, 365-M, Model Town, Lahore
American University of London	Western Graduate College, St-20 Block-17 Gulshan-e-Iqbal, Karachi
	C-7/A, Daman e Koh, KDA Officers Co Operation Housing Society Opposite PNS Bahadur, Stadium Road, Karachi
American School of International Business	22-A, Tipu Sultan Road, Karachi
American World University International (AWUI)	Liaison Office, 203-Kasam Court, Block-5, Clifton, Karachi 75600
Boston University	12 Shahid Nauroz Plaza, Blue Area, Presidency Road, Islamabad 44000
	Domino Education Services Karachi.
Collage Swisse Switzerland	71, Jinnuh Co-operative Housing Society Off Shahrah-e-Faisal (Near Duty Free Shop), Karachi
East-West University Chicago	Institute of Advance Studies of Information Technology, Dadyal, AJ&K
	Pak Kasmir Institute of IT, Mirpur, AJ&K
	Agha Computers, Al-Noor Esquire, PICIC Bank Building, Mansehra Road, Abbotabad
	National Collage of Computer Sciences, Banuu
	Rafiq Institute of IT & Computer Education, Mardan Road,

	Buner
	Islamabad Computer Institute College Road Jaba, Dargai
	Commercial Computer Training Institute, Rehmania Road, Haripur
	NIDA Computers, Tehsil Road, Near N.B.P, Karak City
	Micro Sense Institute of Information Technology, Shahrah-e-Raisham, Mansehra
	IBM Computer College opp Police Lines, Mardan
	Flash Institute of Computer Studies, Sheikh Jee Plaza, Industrial Estate, Jamrud Road, Peshawar
	Square Soft Systems, Kashmeery Bazar, Manzoor Market, Shinkhari
	College of Computers & Information Technology, Matta, Swat
	Max Tech Computer Institute, Kabal Chowk, Swat
	Global College of Information Technology, College Road, Thana, Swat
	Global College of Information Technology, Sohary, Buner, Swat
	Myers Institute of Technology, Myers's Avenue, Chakwal
	IT Studies, Umar Hayat Mohallah, Rekhti Jaffar, Qazmi Street, Chiniot
	Jinnah College of Computer Sciences Gakkar Plaza, G T Road, Dina
	City Computer College, 127, Post Office Road, Gojra
	Latif Institute of Management Sciences, Jalil Plaza, Gujranwala
	Advance Micro Computer Center Post Office Road, Hafizabad
	Nice Institute of Computer Education, Goal Bazar, Haroonabad
	Soft Valley College of Computer Science & IT, Lahore Road, Jaranwala
	Alpine Computer Institute, 514/B, Model Town, Khanpur
	Ghanis College of Computer Sciences, GT Road, Kharian
	Global University System, Shalimar link Road, Lahore

	Boston Computer College, Glora Market Ballo Khel Road, Mianwali
	Progressive Computer College, Khaban-e-Aziz, Bosan Road, Multan
	The Oxford College, 21-A/B, Gul Gasht, Multan
	Brain Computer City, Pattoki
	National Institute of Computer and Advance Studies, 37-A, Satellite Town, Rahim yar Khan
	Hi-Tech College of Computer Sciences, Sahiwal
	Soft Inn Information Technology, Chandi Chowk, Sargodha
	Punjab Comupter Centre, Katchery Bazar, Sargodha
	Oxford College of Information Technology, Shorkot Cantt
	E-tech Computer College, Wazirabad Road, Sambrial
	The Knowledge Institute of Commerce & IT, H.M.C, Texila
	Mumtaz College of Computer Sciences, G.T Road, Wazir Abad
	Shah Latif Institute of Information Technology, Bhattai Chowk, Kandhkot
	Super Tech Computer Institute, Samaro Town, Distt Mirpur Khas
	Edutech University Collage of Information Technology, Changaiz Plaza, 1-9 Markez, Islamabad
	College of E-Commerce, 2D Street 31, G-6/2, Islamabad
	4 A, 15 C Rehmat center, Blue Area, Islamabad
	VIP Computer Institute of Information Technology, 3-Salma Plaza, F-10 Markez, Islamabad
Glamshire University	D-12/1, KDA Improvement Scheme opp.Laiquat Library Adjacent Liaquat National Hospital, Stadium Road Karachi
International University of America, USA	D-47, Muhammad Ali Housing Society, Karachi
The International University, USA	40-J/A, Block 6, PECHS, Shahrah-e-Faisal, Karachi
Newport University USA	4-D 6th Road, Satellite Town, Rawalpindi

	64-B/1, Gulbreg-3, Lahore
The Open International University for Complimentary Medicines (OIUCM), Columbo	9-C, Block-2, Kashmir Road, PECHS, Karachi
	69-C Kasmir Road, (off) Block-2, PECHS, Karachi
	International College of Acupenture, E-4, Iqbal Plaza, Phase II, II-C-1, North Karachi
Planwell University, USA	A-1, I.C.H.S., Block 20, Gulisan-e-Jauhar, Karachi-75290
Washington University, USA	532/1, Business Recorder Road, Garden East, Karachi
University College Sedaya International, Malaysia	College of Accounting & Management Sciences, Karachi
Western International University	C-41, Block 6, Gulshan-e-Iqbal, Nipa Chowrangi, Near Aero Club, Karachi
	26 Basement, Mall Plaza Rawalpindi
	Gulshan-e-Iqbal Campus I, A-127 Block 13/C, Gulshan-e-Iqbal, Karachi
	Gulshan-e-Iqbal Campus II, C 48 Block 13/ F.B Area, Gulberg Flower shop, Main Road from water Pump to Sakhi Hassan, Karachi
	Gulshan-e-Iqbal Campus III, RK House, A-510 Block 5, Gulshan-e-Iqbal, Karachi
University of Economics & Technology	30 Block -A Opposite Mehren Clinic, Sindhi Muslim Society, Karachi
Univeristy of Houston Clear Lake	D-77, Block 2, Clifton opposite Bilawal House, Karachi
Abubakr Islamic University	ST 7 A/1, Block 5, Gulshan -e-Iqbal, Karachi
AL Qasim University	38-D, Lawrence Road, Lahore
The Elites University	Sector 11-A, Hashim Town Sindh Karachi Housing Society , Scheme No 33, Karachi
Islamic Missionary University	St 2/5, Block 5, Gulshan-e-Iqbal, Karachi
Lincoln Institute	D-18, Block-8 Punjab Colony, Ch.Khaliq uz Zaman Road, Clifton, Karachi
Pak Lawrence University	93, Shadman, Lahore
Sattaria Islamic University	Block-6 Main University Road, Gulshan-e-Iqbal, Karachi
University of Islamic Studies	Block-7, Gulshan-e-Iqbal, Karachi

University of Southern Pakistan	Comit Campus, St 6B, Block-14, Gulshan-e-Iqbal, Karachi
London College of Excellence	London College of Professionals, near Askari Bank, F-10 markaz, Islamabad
Pembrokshire College- University of Glamorgan, UK	Pyramied Education Centre, 4, Nazimuddin Road, F-11/4, Islamabad
American University of Hawaii, Hawaii, USA	203, Main Shahra-e-Faisal, 2nd Floor, Karachi
Staffordshire University, UK	The City-APIIT, Lahore
Central Pacific University, USA	E-Tech College of Business Information & Technology, Gujrat
Other Institutions	INFOVISION Institute of Management & Information Technology, Lahore
	University of Southern Punjab, LMQ Road, Multan
	PICCS, Layyah
	Shibly College of Commerce, Karor, Layyah
	Khyber College of Commerce, Kot Sultan, Layyah
	Kynat College of Commerce, Kot Sultan, Layyah
	Pioneer College of Commerce, Kot Adu, Muzaffargarh
	Ahad College of Commerce, Kot Adu, Muzaffargarh
	KIMS, Kot Adu, Muzaffargarh
	Islamia College of Commerce, Kot Adu, Muzaffargarh
	Global Colelge, Kot Adu, Muzaffargarh
	Shah Suleman College of Commerce, Taunsa, D.G. Khan
	DG College, Taunsa, D.G. Khan
	Abdul Qasim College, Taunsa, D.G.Khan
	University College of Commerce, Peoples Colony, Khanewal
	Muslim College of Commerce, Khanewal
	Quaid-i-Azam College of Commerce, Khanewal
	Punjab College of Commerce, Peoples Colony, Khanewal
	National College of Commerce, Mian Channu
	Allaid College of Commerce, Mian Channu

	Quaid-i-Azam College, Mian Channu
	International College of Commerce, Mian Channu
	National College of Commerce, Burewala
	Leads Law College, Burewala
	Comtech Law College, Gulgasht Colony, Multan
	Comtech Degree College, Gulgasht Colony, Multan
	Supreme Law College, Gulgasht Colony, Multan
	Pakistan Mission Law College, Neel Kot, Bosan Road, Multan
	The National College, Bosan Road, Multan
	Multan Postgraduate College, Gulgasht Colony, Multan
	Multan College of Commerce, Jhang Road, Muzaffargarh
	Opstech College of Computer Science, Lahore
	College of Management Sciences & Information Technology (COMSIT), Lahore
	Lahore University of Computer Excellence, New Garden Town, Lahore.
	Al-Kausar University, Sector H-8, Islamabad

Source: Higher Education Commission Website www.hec.gov.pk

Ahmar Abbas*

Value of Private/Public Partnership in Promotion and Improvement of Higher Education

Blackboard Inc. provides educational software to over 2000 Higher Education institutions worldwide. Blackboard has created numerous programs and partnerships that facilitate promotion and improvement of Higher Education across this vibrant community of practice. This includes a Global Idea Exchange and recently announced grant program called Greenhouse Awards to cultivate innovations in e-learning, support the organic growth of knowledge and recognize exemplary campus service programs.

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D. Bruce Johnstone, Ph. D.*

Higher Education Reform in Pakistan In Light of Worldwide Trends: Implementing Cost-Sharing

Higher education²¹ in the 21st century has become increasingly important: not only to individuals, for the sake of enriched lives, enhanced status, and greater earning power, but also to the larger society, for the sake of economic prosperity generally as well as for the advancement of democracy and social justice. However, in spite of (or ironically, in part because of), this universally recognized importance, public higher education in most countries, rich and poor alike, is suffering from increasing austerity, a diminishing priority for scarce tax revenues, a diminishing confidence in its quality and cost-effectiveness, and an encroaching private sector that is both a threat and a partial solution.

In response to these challenges is a worldwide higher education reform agenda, promoted by scholars and policy analysts and by international agencies such as UNESCO, the Organization for Economic Cooperation and Development, and the World Bank (Ziderman and Albrecht, 1995; Johnstone, Arora, and Experton, 1998; Task Force on Higher Education and Society, 2000; and The World Bank, 2002). This agenda is politically contested and unevenly implemented, but nonetheless gaining currency in the highly developed economies of the OECD, in the so-called *transitional countries* of the former Soviet Union and Eastern and Central Europe, in the diverse range of countries such as Pakistan that are sometimes labeled “low income,” or “developing” (and that may feature some of the elements of centralized planning and widespread sense of entitlements characteristic of the transitional, or post Communist countries), and in the range of countries that are middle income, or “in between.”

Common elements of this reform agenda include the strengthening of university management (which includes greater autonomy together with greater accountability), attention to the non-

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²¹ The term *higher education* is used in this paper generically and refers as well to any of the even larger universes of *post-secondary* or *tertiary* or even *post-compulsory* education.

university sector, encouragement of non-tax revenues (including tuition and other fees), and the encouragement of a private sector. Much of this agenda is fueled by an increasing higher educational austerity, traceable to a combination of dramatically increasing cost pressures and static (or sometimes even diminishing) revenues. These diverging cost and revenue trajectories, in turn, are the basis for the worldwide shift to alternative sources of revenue: mainly to parents and students in the forms of tuition and other fees (particularly to fees for what may once may have been governmentally-provided food and lodging).

Cost-sharing, as these forms are known, may provide relief on the revenue side; but it can also create potential barriers to access that must be addressed with subsidies targeted to low income families as well as ways that permit students to bear some portion of these costs, either (or both) from contemporary earnings and/or from deferring their share of costs until after they have left the university and are presumably employed and able to pay. This paper is an attempt to look at higher education reform in Pakistan in the larger context of worldwide higher educational reforms, such as reflected in the new Higher Education Council and in the emergence of new private institutions, with an emphasis on increasing revenue diversification through cost-sharing.

Higher Educational Reform in Pakistan

Many of the recent (i.e., 2002-2005) elements of higher educational reform in Pakistan were contained in the influential Task Force Report: *Improvement of Higher Education in Pakistan: Challenges and Opportunities* (2002). This report was stimulated by a joint UNESCO – World Bank Task Force on Higher Education and Society report in 2000 entitled *Higher Education in Developing Countries: Peril and Promise*. The Pakistan task force, chaired by Syed Babar Ali and Dr. Shamsh Kassim-Lakha, was also supported financially by the World Bank and was influenced by the World Bank – UNESCO report and its co-chair and staff director, Professors Henry Rosovsky and David Bloom, both from Harvard University.

The 2002 Pakistan Task Force reiterated the problems with Pakistani higher education that had been identified in 1998 as:

“...limited access to higher education, and a tilt toward arts education, low investment, politicization and polarization of the faculty and student body, outdated curricula and system of assessment, lack of merit, low quality of students and education, inadequate student support services and deficient physical infrastructure, unresponsiveness and inefficiency, and mal-administration;”(p. 70)

This is a common litany of supposed weaknesses in higher education systems of developing countries as seen through the economic development eyes of World Bank officials and policy analysts. Similarly, the recommendation for a Higher Education Council in Pakistan was consistent (at least on paper) with the commonly-recommended reform of removing public higher education from the direct control (and frequently the political intrusion) of the government or the ministry, and vesting control over public higher education (and sometimes also the private higher education sector) in a lay board, appointed by and accountable to—but also *buffered from*—the government itself.

This recommended “distancing” of a new higher educational governing mechanism in the form of the Higher Education Council was accompanied in both the World Bank/UNESCO and the Pakistani Task Force reports by a recommendation to grant to the university—that is, to the university’s governing board and its management—essential autonomy in such critical tasks as:

- appointing—or at least recommending the appointment of—the president or chief executive officer;
- hiring and promoting (or terminating or failing to promote) the faculty and staff;
- determining the wages and other employment conditions of the faculty and staff;
- initiating proposals for programs and setting the curricula;
- admitting and setting graduation standards for students;
- setting (and periodically raising) tuition fees and other fees; and
- allocating (and reallocating) resources.

As many of these functions were to be devolved to the new Pakistan Higher Education Council and presumably thence to the individual universities, and as the Council has now had several years to establish that critical and difficult balance between the necessary and proper exercise of establishing missions and goals for the universities and holding their leaders accountable, and devolving even further authority to the individual universities, it would seem useful at this time to examine this important reform for evidence of success (or problems).

Financial austerity and Cost-Sharing

Aside from weaknesses in governance and accountability and the consequent problems in quality, most of the problems—in Pakistan as in most countries, regardless of wealth—seem to come from a serious and worsening financial austerity. In Pakistan and other developing countries, this austerity may be manifested in such problems as overcrowding, capacity limitations (which can exclude large numbers of qualified potential students, especially from lower income families),

deteriorating physical plants, restive student bodies, and overburdened faculty. In other countries not so burdened with the need to absorb expanding enrollments (including the wealthy and highly industrialized countries of the OECD), there may still be an austerity where severe overcrowding, threats of faculty and staff lay-offs, soaring debt loads and tuition fees may co-exist with good salaries (for those who keep their jobs), modern equipment, and state-of-the-art (even if deteriorating) facilities.

In virtually all countries, this austerity may be traced to some combination of rising costs and static or even diminishing revenues. The rising costs are a function of two main factors. The first is the inexorably rising per-student costs of instruction, reflecting an industry (higher education) that has little opportunity for the continuous productivity-enhancing substitution of capital for labor that is the main engine of rising productivity and economic growth in the manufacturing and construction sectors of an economy.²² The second contributor to the rising costs is the expansion of enrollments (or at least the expansion of the enrollment *pressures*), which in turn are a function of the underlying growth in most countries of the university-age population (especially in the so-called *developing world*), greatly accelerated by the rising proportions of these growing university-age populations that are prepared for, and desirous of, higher educational opportunities. Thus, the underlying higher educational cost trajectory in most countries is very sharply upward: beginning with rates of increase in per-student costs that are above the rate of increase in the costs of living generally (as in most labor intensive industries) and accelerated in most countries—very clearly so in Pakistan—by the rapidly rising higher educational participation rates of these rapidly increasing youth cohorts.

Higher educational costs—at least in the public sectors that predominate in most countries—have been largely and sometimes entirely dependent on public revenues.²³ In fact, even in countries with relatively low higher educational participation rates (much of South Asia and Sub-Saharan Africa, for example), public higher education takes a disproportionately high percentage of the total education budget and

²² What may sometimes appear to be improvements in productivity—that is, lower costs per student—can, of course, always be forced upon a university—and indeed has been so forced upon universities in recent years all over the world. This can be done simply by increasing teaching loads and class sizes, failing to replace equipment, renew journals, or purchase library materials, or failing to pay the faculty and staff even the salary increases that are paid to workers in the goods-producing sectors of the economy. But *reducing costs* must not be equated with *increasing productivity*. In the examples given, the quality of the products—whether learning or the creation or application of knowledge—is almost inevitably diminishing.

²³ Even in the United States, which is thought to have one of the most privatized public sectors in the world—and becoming more so—the percentage of full undergraduate instructional costs borne by taxpayers still remains in most states in the range of 60 to 70 percent.

indeed, along with basic education, public health, defense, and the costs of government itself, takes a substantial percentage of the entire governmental budget. But these revenues are limited, and in most countries are unable to increase at the same rate as the rapidly rising higher educational costs would have them. The inability of governmental revenues to increase “at pace” may be due to the slow (at times even the negative) growth of the underlying economies, as in so much of the African continent, some of the countries of the former Soviet Union, or some of Latin America.

Where the underlying economies are growing, governments may still be unable to tax effectively—or especially to increase taxes with any degree of progressivity. For countries unable to effectively increase taxes, the option of simply printing additional money and confiscating the people’s purchasing power through the resulting inflation is increasingly limited by their dependence on world capital markets and on international donor agencies. Finally—and this may be the most limiting of all—even if most of the countries of the world could increase taxes (and increase them with some degree of progressivity), there remains the inescapable dilemma of the high *opportunity costs* of additional resources to higher education. Opportunity costs are the foregone alternatives implied by an economic choice, and in most countries—and again, especially in the developing and middle income countries—the queue of yet-unmet needs in oftentimes desperate need of additional public revenues is socially and politically compelling: teachers and classrooms at the compulsory levels of education, public health (including measures to control traditional scourges such as malaria as well as new pandemics like HIV-Aids), public infrastructures such as safe drinking water, transportation, telecommunications—and on and on. In short, even if countries were able to fairly and efficiently increase their taxes (which is highly unlikely in all but the most industrialized countries), the likelihood of such increased revenues going in substantial amounts—and with regular annual increases—to higher education is remote.

Thus, the fundamental condition of higher education, especially in the low and middle-income countries such as Pakistan, is dominated by the radically diverging trajectories of higher education costs and available governmental revenues. Problems of inefficiency, bureaucratization, corruption, politicization, and other problems common to so many countries—but especially endemic to the developing world—exacerbate the underlying financial dilemma and stand in the way of measures that could contribute toward solutions, whether widening participation or improving quality.

This divergence between the trajectories of costs and the likely available governmental revenues is the underlying driver of the worldwide search for other-than-governmental revenue sources for

higher education—with the most obvious, albeit politically contested, sources being some combination of parents and/or students, commonly referred to as *cost-sharing*. Cost-sharing may take many forms, including tuition fees to cover a portion of the costs of instruction, full or at least more nearly “break even,” fees to cover all or most of the expenses of food and lodging that may have been borne formerly by governments (or taxpayers), and measures that reduce the purchasing power of stipends and other subsidies. Such a reduction in subsidies may be compensated for by additional family contributions, by the student taking out loans or earning more through part-time work, or by a reduction in living expenses generally, such as moving “back in” with the parents. Such reductions, in turn, may be brought about by outright reduction of subsidies, the narrowing of the criteria for awarding subsidies, the conversion of non-repayable grants to repayable loans, or simply by freezing the grants or stipends in the face of inflation that erodes their purchasing power and requires supplementation by other sources. Still another form of cost-sharing—and one that is increasing rapidly throughout the world—is the encouragement of private, tuition-dependent institutions or the opening of tuition-dependent tracks in the public institutions, both forms of privatization accelerated by restricting the capacity of the free or very low cost higher education to fewer and fewer students, forcing more and more students into private institutions or into the fee-dependent tracks of the public universities.²⁴

All forms of *cost-sharing* create potential barriers to access that may be addressed in a number of ways, including targeted, or means-tested, subsidies and with ways that permit students to bear some portion of the costs of higher education (mindful in Pakistan of the complexities of borrowing and lending in Islamic countries). The worldwide reform agenda also includes the more productive use of available revenues via appropriate sector diversification and through such *process reforms* as budget transparency, accountability, comparable data, institutional autonomy, and appropriate managerial authority. The remainder of this paper is an attempt to place the clearly emerging higher educational reform agenda in Pakistan—including the new Higher Education Council and the emergence of new private institutions—in this larger context of worldwide higher educational reforms, with a special look at the increasing emergence of the several forms of cost-sharing and student assistance.

²⁴ The underlying theory of cost-sharing as well as the description of its worldwide reach were developed from 1986 through 2006 mainly by the works of Johnstone and his international Higher Education Finance and Accessibility Project at the State University of New York at Buffalo. See Johnstone (2003, 2004a, 2004b, 2004c, and 2004d), available along with many other works through 2006 at the Project Website at <<http://www.gse.buffalo.edu/org/IntHigherEdFinance>> as well as Woodhall (2002).

Cost-sharing—which term reflects both the simple fact that the underlying costs of higher education are shared by governments (or taxpayers), parents, students, and philanthropists, as well as a description of a worldwide policy trend of these costs being increasingly shifted from governments to parents and students—has three principle rationales. The simplest is the *austerity*, or the *sheer need*, rationale, which is a function of the above-mentioned divergence between increasing costs and available taxpayer revenues. Such a rationale is the most politically and ideologically neutral and is probably in itself sufficient to account for most of the recently observed shift in costs from governments to parents and student.

Many economists and policy analysts also see an *equity* argument for cost-sharing. They observe that free higher education (especially when “free” is extended, as it was in most formerly Communist countries, to free tuition, free room, free board, and sometimes even pocket money) is virtually everywhere partaken of disproportionately by the sons and daughters of the elite, who will clearly benefit handsomely in greater occupational choices and prestige, and usually in income, but is in almost all cases (including the centrally-planned countries of the then-Communist world) paid for by the average citizen and worker. Finally, *efficiency* arguments have been advanced in favor of cost-sharing: based on the principles of market economics, among which is the assertion that having to pay at least a part of the costs of the higher education should make both parents and students more discerning consumers—just as having to charge at least a partial price for the higher education (or the food or the lodging), particularly with some competition, should make the university and/or the government a more efficient and responsive provider.

The Fundamental Questions and Issues of Cost-Sharing

If Pakistan were to move further toward cost-sharing (as was recommended by several commissions, including the 2002 Task Force Report, *Improvement of Higher Education in Pakistan: Challenges and Opportunities*, and as has been at least partially implemented already), there are ten critical questions, or issues, that must be addressed at the very outset by the Pakistan implementing authorities. These are:

1. **The role of the parent:** If there is to be a stable policy of cost-sharing in higher education—part of which would be some form of tuition fees to supplement government revenue with revenue from either parents or students or both—what portion of these tuition fees should be assessed up front, mainly therefore from parents, and what portion deferred and repaid later on by the students? It is especially important to address this question at the very outset, as there are two very conflicting traditions in the world regarding the

appropriateness of an expected parental contribution. The Scandinavians have long rejected the concept of an officially expected parental contribution toward the costs of instruction, believing that this is entirely the financial responsibility of the government—just as the costs of student living are primarily the financial responsibility of the student (which is borne largely by loans). The Australians, the Scots, and most recently (2004), the rest of the UK has followed suite by actually rolling back the already established tuition fees and replacing them with deferred obligations that will be recovered (with interest) as a sort of surtax on future earnings of the graduate.

Such a scheme is politically popular with parents and has been shown to be popular even with students—who seem to respond favorably to the absence of an *up-front* tuition fee and the implied financial independence from their parents more than they worry about their increased indebtedness (which is obscured by official reference not to a loan, *per se*, but only to an *income contingent obligation*). However, as many Pakistani families have demonstrated their willingness to contribute toward a portion of the underlying costs of instruction (in part by the success of the growing private sector), Pakistan must weigh the political attractiveness of such a deferred contribution—which may simply add further to a burden that students are already bearing—against the substantial costs of forgoing the contributions that parents are already making.

2. ***The tuition fee:*** If there is to be an up-front tuition fee (paid by all or most parents and/or students), what ought it to be? As the underlying per-student costs can be expected to rise continually over time, the most helpful answer to this fundamental question is to establish some portion, or share, of these (increasing) underlying costs that would appropriately be borne by the tuition fee and this portion then paid by whomever—parent or student or both—is to be responsible for payment (Marcucci and Johnstone, 2003). In the United States, where tuition fees at public universities have been rising dramatically, the portion of undergraduate instructional costs that are to be covered by tuition fees ranges between a low of 20 percent to a high of 35 or 40 percent of costs: a reminder that public education is still primarily the financial responsibility of state taxpayers. Presumably, since a universally applicable tuition fee in Pakistan would be both new and controversial (in addition to a considerable burden for very many parents), a percent of costs in the range of 10 to 20 percent would seem appropriate.
3. ***The variability if the tuition fee:*** If there is to be a tuition fee, how ought it to vary—that is, should it vary:
 - not at all (at least not for most undergraduates);

- according to the underlying cost differentials of various instructional programs (i.e. higher for science, and lower for most humanities and social sciences);
 - according to a market (i.e. higher for popular programs such as management, computer science, law, and the study of English);
 - according to the prevailing remuneration of the graduates (i.e. according to the ability of the student to repay a debt); or
 - according to the institutional mission (i.e., higher for research universities—reflecting the higher costs of the research mission—and lower for most non-university and short-cycle institutions).
4. **The rate of increase of tuition fees:** If there is to be a tuition fee, how ought the fee to increase over time? The most obvious answer—particularly if the tuition fee were initially set according to some deemed-to-be-appropriate percentage of underlying per-student instructional costs—is that the percentage ought to be held constant, and the rate of fee increase ought thus to mirror the rate of increase of these underlying costs. Politicians who were against the notion of tuition fees to begin with, and most students and most parents, however, probably would be expected to argue for *no increases*—while the institutional leaders almost certainly want a regular tuition fee increase that at least mirrors the rate of increase in their underlying costs. (If there is a freeze on tuition fees, and if costs continue to press upward, then of course the government has to increase its share by more than the rate of increase of costs—which is unlikely—if the institution is to be shielded from even further cuts. See Johnstone, 2005b for an accounting of the consequences of a prolonged tuition freeze in Ontario, Canada.)
5. **The authority for the establishment and the setting of tuition fees:** If there are to be tuition fees—and if these tuition fees are to increase (or not) over time—by whose authority are these rates to be established and changed. This is a critical question mainly because the setting of tuition fees seems to be so politically contentious, and the farther such decisions can be removed from the floor of a parliament or legislative assembly, the more likely they will be able to adhere to some underlying policy. In this regard, some authority that is still answerable to the government—such as a higher education governing board or some kind of appointed commission—might be the best compromise between the institution and the ministry.
6. **A means-test:** If there are to be tuition fees, but they are to be accompanied by some form of discounts or financial aid based on the low income of the student and/or the parents, how ought this low income, or *financial need* be established? This is especially critical in most developing countries, where incomes are so frequently multiple, variable and hard to “capture, and where the bases for taxation—such as sales or property—may also be problematic. In

such cases, incomes or earnings need to be declared, but then might be vetted against several categorical indicators that are hard to hide or shift, such as parental education, parental occupation, location or type of residence, or whether the prospective student went to a tuition fee-charging secondary school (Tekleselassie and Johnstone, 2004).

7. **Deferred payment (or loans):** If the student is expected to contribute to the underlying costs (whether a share of the tuition fee or simply toward the costs of his or her food and lodging), there needs to be some way to defer the payment, which means some form of loan. There are two basic forms of repayment obligation: according to a fixed or an income contingent schedule (in both cases, regardless of the effective rate of interest, which can even be zero). Although an income contingent schedule is frequently presented as inherently better for both the borrower and the lender, this is not necessarily so, and there are substantial complications with the income contingent form of lending in developing countries (Johnstone, 2005a, 2004d).
8. **The risk of non-repayment.** All loans carry a risk of non-repayment. For a national program of student loans—or *deferred obligations*—this risk may in theory be borne by the lender, by the government, by a parental or family co-signatory, or by some other entity appropriately funded with reserves. Most student loan analysts believe that governments must play a major role in the assumption of risk, but that parents or families can also carry some of the risk, provided that the program has a way to shift all of the risk to the government in the case of low-income parents who may have no credit and thus may not be suitable as a co-signatory.
9. **The repayment schedule:** This is an essentially mechanical matter, but nonetheless must be resolved at the outset. Payments can be deducted by the borrower's employer or made by the borrower himself or herself like any other kind of consumer debt. The important element in the setting of a student loan policy is to *not* equate the income contingent form of repayment obligation with the mechanism of collection by the employer along with income tax and pension contribution withholding—which can be the mechanism of collection for *any* form of repayment obligation.
10. **The interest rate on the loan:** This may be problematic in some Islamic countries or cultures to the degree that the charging or payment of interest may be forbidden or discouraged by Islamic tradition or law. It is not clear whether this would be a problem in Pakistan. If interest cannot be charged, there would be an additional implicit cost to the government or other lender of interest subsidization, the level of which would depend on the prevailing real rate of interest, or cost of money. added to the costs of student loan

administration and defaults. However, there are ways to bring savers and borrowers together even under Islamic law, and there may be ways of covering some of the costs of money for student loans even if Islamic law were to prevail. At the worst—from the standpoint of cost recovery—there can still be some element of cost-sharing even in cases where interest cannot be charged.

There may be other questions and issues to be faced in the consideration of a policy of increasing the higher educational costs shares borne by parents and/or parents. But these are essential to be faced and answered as a part of any cost-sharing policy.

Without question, such policies are difficult and contested. Some of the contestation is ideological: for example, a defense of Socialist principles and a resistance to any shift away from the state, or the taxpayer, being responsible for all of the costs of higher education. A related objection is the charge that placing any financial responsibility onto parents and/or students may prevent students from low income families being able to access higher educational opportunities. It is possible (if sometimes still contested) to answer these objections in part through the provision of means-tested grants and student loans, and in part by referring to the advantages of a more market-oriented higher education, or pointing out that equity is arguably better served by placing at least some of the higher educational cost burden on those who will greatly benefit, rather than depending entirely on the regressive value-added and consumption taxes paid for mainly by those who will benefit less, if at all. But in the end, the more compelling—and considerably less ideologically contestable—rationales for turning to parents and students for at least some of the burden of higher educational costs may be the following summary points:

1. The increase in higher educational costs for a country like Pakistan, where both the increasing size of the relevant age cohort and the increasing percentage of this rapidly growing cohort that wants and deserves access to some form of higher or post-secondary education, is both great and unrelenting—and is almost certainly above the capacity of the country's tax revenues to meet.
2. In the absence of other-than-governmental (i.e. tax) revenue, both the quality and the capacity of the higher education system will inevitably suffer—and they almost certainly already have—with the burden falling most on those from low income families or living in remote areas.
3. Some parents can clearly pay for some of the costs of higher education—as vividly demonstrated, in Pakistan, as throughout the world, by the growth of tuition-dependent private higher education (which is in most cases inferior in quality to that offered by the public universities and colleges).

4. Many more parents and students—including those from low income families—could afford a modest tuition fee and to bear some or all of the costs of student living if there were available targeted, or means-tested, grants (non-repayable) and generally-available student loans.
5. None of this is meant to deny the need for the government of Pakistan (or any country) to continue—and in fact to increase—its support of higher education. Parental and student participation must *supplement, not supplant*, the larger financial role in support of higher education, which must remain the state. But in light of the enormous revenue needs of the public higher education system—and in light, too, of the enormous competition for additional revenues from such needs as elementary and secondary education, public health, public infrastructure, and all other social services—it seems unlikely that there can be enough additional resources, increasing each year, devoted to higher education to meet the rapidly growing needs.
6. This emphasis on financial solutions on the revenue side also must not deter the Higher Education Council and the leadership of the Pakistani universities from aggressively pursuing other financial solutions on the cost, or efficiency, side. Such measures should consider, for example, changes to the current retirement age, teaching loads, and the ability of university management (with proper attention to employee rights) to shed less productive members of the faculty and/or staff.
7. Finally, the emphasis on financial solutions, whether on the revenue or the cost side, must be accompanied by attention to improvements in quality—which must begin with the installation of systems of evaluation and accountability.

Higher education in Pakistan has begun the reform process. It is imperative that the successes be recognized and applauded, and that further steps be taken.

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Session IV

Resources and Implementation

Shahid Javed Burki*

Financing Higher Education and Accountability

In the brief time available to me for making a statement, I will concentrate on three issues. First, why the previous strategy of focusing primary education – a strategy advocated by the World Bank and pursued by Pakistan in the 1990s – was misplaced. In that period Pakistan as well as the donor community poured large sums of money into primary education but there is little to show from that endeavor in terms of human development. For the development of human resource, it is essential for the state to focus on education at higher levels.

Second, a large and young population such as the one Pakistan now has can be a burden if it is not adequately educated and trained to function in a modern economy. It can also be an opportunity if it is developed as a resource to be used both at home and abroad. The phenomenon of “demographic asymmetry” that has resulted from a sharp decline in the rates of fertility in much of the developed world while the populations in many parts of the developing world continue to increase offers a window of opportunity to countries such as Pakistan that should be fully exploited. This will require the systematic development of the abundant human resource available in these countries.

Third, there is an important role for the state in developing higher education. This can take several forms. For countries with weak institutions of governance which is the case in Pakistan, the state should not get directly involved in promoting higher education. It should work with the private sector as a facilitator. Facilitation can be undertaken in several areas. I will provide some examples for illustrative purposes. These include the establishment of regulatory institutions that should be managed by the private sector but within a framework developed with the help of the state. These regulatory institutions should provide accreditation to institutions based on criteria developed jointly by the state working with the private sector. Such accreditation is necessary in order to provide guidance to the users of institutions of higher learning. The state should also provide financial support to students by using the financial system to provide scholarships and loans to students from low-income families. The state should encourage the establishment of prizes and rewards for academic

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achievements in various fields by allowing tax incentives to private foundations and individuals. Perhaps the most important role the state can play is to encourage the private sector through policies such as tax incentives to establish institutions of learning in the areas where Pakistan needs a trained and educated workforce and can also fill gaps in demand in the global market place. There is a great deal to learn from the Indian experience in this respect.

The following notes were used for the presentation at the PEP seminar of higher education in Pakistan.

1. Should the government increase funding for higher education, focusing this time not just on primary education? The answer is obviously yes and to some extent this has been done by the Government of General Musharraf. Going beyond the amounts already provided would be difficult because of the serious constraints on domestic resources.
2. Given that the Government has already increased the amount of funding available for higher education – a 14-fold increase – what is the best way of dispensing this money?
3. It appears that the current Higher Education Commission – centered model is not working. By concentrating resources in HEC the government has created a monopoly which appears to be operating (a) without a plan which is based on an assessment of what the market needs, (b) funding of programs on an ad-hoc basis with little recognition of what the economy and the society need.
4. Should the government (a) undertake careful manpower assessment and thus develop an education plan based on it or (b) should rely entirely on the private sector?
5. The Indian model helps to answer the question. The Indians, more by accident and less by design, invested in creating institutions that provided graduates that had a high level of international demand forty years later. Jawaharlal Nehru, who took the decision in the early 1950s, to invest in IIEs could not have anticipated the global demand for computer engineers generated by the Y2K problem or outsourcing made possible by the collapse of the dot.com boom in 2001. The Indian model, therefore, underscores the need for carefully watching opportunities in the market place without dispensing resources based on manpower development plan.

6. How to translate this approach into public policy? This can be done by fostering public-private sector partnership in developing higher education. This partnership should be based upon a foundation that has the following design: (a) the state should pull back from the direct management of universities. These institutions should be given full autonomy. (b) Students must pay for education at the higher level; the gap that currently exists between what is charged by the Quaid-Azam University in Islamabad and LUMS should be closed. (c) The government should run an educational finance program to help (i) children from poor families, (ii) children from more backward regions, and (iii) women to attend higher education institutions. Funds should be dispensed by the commercial banking sector using the criterion developed by the HEC. (d) HEC should identify areas for development, new disciplines to be encouraged, and the expertise to be developed. The best way for doing this is to turn HEC into a research supporting institution based on America's NIH model. The NIH provides research grants to individual researchers, research institutions, universities and colleges on the basis of competition in identified arrears.
7. Accreditation of the private sector should be the responsibility of the government to be undertaken with the full cooperation of the private sector. An accreditation council should be established with the members drawn from among the educators in the private sector and the criteria developed ex ante should be strictly followed. History should not be taught just by public sector institutions. It should issue charters for the establishment of new institutions as well as accreditation certificates annually to the institutions to guide the consumers.
8. Higher and rising costs of higher education are exacerbated by rising enrollments. Inability of government (tax payer) funding to keep up with rising costs is due to (a) difficulty of adding new and progressive taxes, (b) more compelling priorities that demand government's attention and (c) political and ideological opposition to charging fees from the students that would be commensurate with the cost of providing education to them. In light of these difficulties what is the best approach to get more resources to flow to higher education?
9. There are several ways of doing this including a) cost sharing between the public and private sectors with tax incentives to individuals and businesses for investing in education, c) charging higher fees from the students with arrangements for scholarships and loans to deserving students from low income families, d)

devolution of authority to the local governments where resources through taxation would be easier to generate for the institutions located in the area, e) measures to strengthen management, and f) enhanced accountability on the part of the managers of educational institutions.

10. Commercial banks, because of their work on consumption loans, have developed the expertise to assess the means of the borrowers. In the US, "means test" is based almost entirely on looking at the parents tax documents.. These are not available in Pakistan for a large segment of the population. Nonetheless, the banks have the ability to determine the net-worth of the families who would want to obtain funds for their children.

Sarbuland Khan*

Multi-Stakeholder Partnerships in Promoting Higher Education in Pakistan

What is a Partnership? Is it contributing resources, sharing of tasks and objectives or does it involve more? - What levels of partnership engagement? - Who are the stakeholders? - What are the key areas of their interest and responsibility and how can a common basis for collaboration be developed? - What are the incentives and disincentives and how can these be changed? - Can partnerships help transform the traditional roles of the key stakeholders? - How can this be brought about in the higher education sector?

What are the key areas of collaboration in higher education? Resource mobilization; research and development, participation in market-oriented solutions with corporate social responsibilities by the business sector and participation by non-profit and civil society organizations in advancing social objectives?

What is the experience in Pakistan and how can we break new ground in changing the cultural and psychological barriers to bringing about new forms and innovations in partnership building to advance the goals of higher education in Pakistan?

What are the next steps in moving forward? Define a broad template for partnership drawing from experiences in the sectors/countries – Define a clear set of objectives and priorities – Develop a business plan and a marketing strategy to mobilize national and international support.

In the Quranic story of creation, God asks the angels to recite the names of things. When they are unable to do so and reply that they know only what 'thou hath taught us', God turns to Adam who recites the names of all things.

The meaning of this parable is quite clear: knowledge not only imparts a decisive advantage to man, over other creation, it is also an essential part of, what defines and distinguishes us as 'human'.

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Ignorance and illiteracy, on the other hand, not only perpetuate poverty, they also degrade our humanity.

The crisis of education in Pakistan is not just a sectoral crisis; it is a national catastrophe that affects every facet of our national life. The problem thus needs to be approached not in a piecemeal sectoral approach, not just by setting up a Task Force, although that may be a first step, or by formulating a new Educational Policy, although that may also be required, but by collective soul-searching as a polity resulting in a fundamental reordering of national priorities and a systemic effort at national mobilization that taps into the capacities and energies of all the key stakeholders in society and helps sow the seeds of a transformation, whereby 'education' and 'the search for knowledge' are placed at the center of our national life and the organizing principle of our communities – our villages, towns and cities.

It is not for nothing that in advanced societies, entire communities, towns, cities and suburbs are organized around schools, colleges and universities and property values and 'quality of life' are determined, in great part, by the quality of the educational institutes in an area, so much so that the fate of politicians in local and sometimes even in national elections, turns on public perceptions of their commitment to providing and improving educational services.

If as a nation and as a Muslim polity, we are prepared to embark upon a path that places 'education' at the pinnacle of our national priorities, then many of the questions that arise in educational policy: public vs. private, elitist vs. progressive, quality vs. quantity, efficiency vs. freedom, public subsidies vs. market-based cost structures, must be resolved through open national debate and full participation of all the stakeholders in society and not through arbitrary answers and capricious changes derived from the latest trends in the policies recommended by external institutions, who at best have only an insufficient understanding of local conditions and needs and are often influenced by the latest fad in international development theory and practice.

But for such a national debate to be meaningful and real, the stakeholders must first have a 'stake', which means they must contribute in some form or fashion to the national educational endeavor. I would therefore argue that we need to foster a national partnership for promoting education at all levels: primary, secondary and tertiary. We must encourage the involvement and commitment of our families, our business leaders and our civic groups to participate in and work with our educational system to enhance the quality of existing educational

institutions and to expand access to educational opportunities for the growing student body at various levels.

A Roadmap to a Working National Partnership

The problems and constraints hobbling our educational system are well known and these have been clearly diagnosed and articulated by national and international experts and educationalists in a number of reports and surveys in recent years, including the report of the World Bank Task Force and the survey of Higher Education by PEP itself. I do not need to dwell on this. They are better known and understood by participants in this seminar than myself as was evident in the preceding sessions of this seminar. The issues can be perhaps best summed up as relating to access, cost, quality and quantity and the key constraints are financial and human resources, as well as the socio-cultural milieu that hampers the growth of quality education in Pakistan.

The solutions and remedies proposed in the national educational policy articulated by the government, together with the high priority and expanding resource allocations to the educational sector indicate the seriousness and commitment of the present government to address the educational crisis. We should welcome this as a major step forward.

However, the magnitude and complexity of the challenge is such that even with the best of intentions and a well-designed educational policy, the government alone cannot meet the challenge adequately. Indeed, this is clearly recognized in the current education policy which emphasizes both the role of the private sector and the need for public-private partnership. While this recognition is a step in the right direction, I would beg to submit that it does not go far enough in recognizing the roles of the family and the community, and even of the business sector in a far more ambitious partnership approach.

A national partnership must be built from the ground up, in the systemic sense. It needs to be rooted in locally elected community leaders, business leaders who are willing to contribute resources, and civic leaders who are willing to volunteer and devote their time, energies and organizational skills to the task. Thus, locally constituted 'Community Educational Boards' composed of local stakeholders, closely aligned with the local government, can serve as the foundation of a pyramid of partnerships that can be replicated at the district, provincial and national levels. These bodies could serve as springboards for defining educational priorities, mobilizing resources and serving as accountability mechanisms for quality control. Such an approach would complement and strengthen the government's current

policies for decentralization and devolution of administrative and financial responsibilities to the district and local levels.

A critical element of a successful partnership remains resource mobilization, both financial and human, and by all stakeholders. If I may venture to suggest, once again, a multi-stakeholder effort in which, the public, private and the non-profit sectors, contribute according to their optimum capacities. In the public sector, consideration could be given to instituting a one percent 'educational or school tax' to be charged and collected as part of the property tax in urban areas and as part of the 'land revenue' tax in rural areas. Similarly, a one percent 'educational contribution' from net profit of local businesses could be considered. The revenues from these measures should be gathered, retained and managed at the local level through local and district multi-stakeholder educational foundations. Third, a culture of voluntarism, social responsibility and philanthropy needs to be fostered on a much large scale than at present, as a social mobilization, among the educated, professional and business classes through a system of incentives and rewards, so that the responsibility to 'give back' becomes a habit of mind and not an exception as is currently the case. For example, national awards for different levels and categories of contributions and services to education could be instituted, both for individuals and organizations. A volunteer National Education Corps could help channel the human capacities of educated classes in the private and public sectors that are currently untapped to fill the gaps in the educational sector. Community and educational services could become part of the curricula and included as a requirement for obtaining certification at secondary and tertiary levels.

Multi-stakeholder Boards could also contribute to improving the quality of education, by helping develop national standards, monitoring their application and strengthening the capacity of institutions to adapt, evolve and modernize in response to changing national and global conditions. They could also help in developing curricula and research and development programmes that are relevant to local needs and designed to devise local solutions to national problems.

One of the great drawbacks that our educational system suffers from is its lack of functionality and its inability to adequately prepare students for the real work-place environment. The current efforts to expand vocational training and develop closer linkages between the business world and educational institutions are welcome steps in the right direction. But, perhaps there is need to drill deeper to the primary and middle levels and find ways to impart the critical capacity to students' from the start to 'use their hands' and gain 'life-skills' that enhance self-confidence, unleash their latent creativity and prepare

them to become productive members of the community, even if they do not go on to higher levels of education. The Community Educational Boards could help draw upon the traditional skills of craftsmen in the community, such as farmers, masons, carpenters, electricians, mechanics and plumbers in the community to teach these trades to students at very low cost at the primary and middle levels. Training in regional, national languages and English should be obligatory at the primary and secondary levels and again the Boards could tap into the local communities for voluntary teachers from its educated segments of high school students as in fulfillment of their community service requirement.

Finally, I would like to make a special plea for a national level strategic commitment to use information and communications technologies to nurture and underpin the networking and systemic capacity needed to build a sound system of education that is rooted in local communities, and supported by strong multi-stakeholder partnerships and yet has the capacity to plug into global networks of higher education and advanced research and development to be 'an courant' with the latest research and technical advances and take advantage of them by adapting them to local conditions and needs. Clearly, the private sector can and must play a crucial role in building such ICT-based networks, but the government can create a favourable environment by providing tax incentives and public support. For the private sector, there can be no better avenue for socially responsible market expansion and deepening than the educational sector which will generate expanding demand for ICT products as students of today become the professionals and consumers of tomorrow.

Let me conclude my remarks on an optimistic note. While sitting here in New York, we all lament and bemoan the low educational standards and limited access to our educational institutions, the high dropout rates, and the poor motivation of the people, I am convinced that things are looking up back home. The reason for my optimism is based on a very personal experience. On my recent visit to Lahore, my family suggested, as usual, that I contribute to the support we provide for people working for us by buying ten sewing machines for their wives and daughters. However, when I checked with them, they unanimously came up with the suggestions that I buy them computers rather than sewing machines, so that their children can compete in the world in the age of globalization.

Khalid Iqbal, Ph. D.*

A Nationwide Plan and A Public-Private Partnership to Help Improve Higher Education in Pakistan

Higher Education has been suffering from a serious neglect in Pakistan since its independence in 1947. During the last fifty years, several degree and professional colleges have been renamed as universities but only one major new public university, the Quaid-e-Azam University, has been established in Islamabad, the capital of Pakistan. These neglects have resulted in a serious shortage of qualified faculty at the Pakistani colleges/universities. The cost of education in public colleges and universities is extremely low, but, then, so is the standard of education. Several specialized private universities have considerably higher education standards than the public universities. However, these private universities are beyond the economic reach of all, except a small upper middle class of Pakistanis. It is critical and as well as urgent that Pakistan implements a leaping forward plan to improve the quality and accessibility of higher education to its citizens. A public/private partnership can be of significant help to the Government of Pakistan in this matter. The Promotion of Education in Pakistan (PEP) Foundation, Inc. has developed a model of public-private partnership to establish non-profit institutes of excellence in higher education in Pakistan at the existing public college/university campuses. This model, the "PEP Model", is designed whereby organizations and individual donors establish the institutes of excellence where quality higher education is made accessible to young men and women irrespective of their economic status. This model can improve the standards and introduce new educational programs in public colleges/universities, and make quality higher education accessible to all young men and women in Pakistan.

This article describes recommendations for leaping forward and the role of public/private partnership in addressing the higher education needs of Pakistan.

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Why Education and Why in Pakistan?

The world has been undergoing a scientific and technological revolution for the last half of the twentieth century. Neuroscience, information technology, biotechnology, and other innovations are setting the basic requirements for developing the economy and well being of countries. One of the most effective tools to preserve with such rapid changes is quality higher education and its accessibility to the masses.

Whereas equipping the next generation with skills and knowledge is the first step to ensure national achievements, this process becomes a serious challenge to developing countries, including Pakistan.

At present, quality higher education, particularly in life sciences is limited to only a few institutions. Most of these institutions are private, profit making and financially beyond the reach of all except a very small upper class, therefore beyond the ability of young talented students that cannot financially afford to attend them. While private universities are far away from the reach of the average family, public universities do not have the capacities to accommodate all the requests that they get yearly.

Thus, the urgent need in Pakistan for new educational institutions of excellence with international standards is coupled with the necessity of making quality education available to young men and women, especially those that come from economically disadvantaged background.

In a developing country such as Pakistan, the need for education is not only a necessity for survival, but also it defines the social, political and economical make up of it. Currently, there are quite a few official and un-official “shadow” institutions in Pakistan that offer degrees and certificates in various fields from business management to computer technology. Their credibility and quality of services leaves considerable room for improvement. In this environment, a number of young students face a lot of difficulties not only in finding the right institutions to attend, but also in finding the means to achieve proper education, that would lead in the future to prospective employment.

A field study of the state of university education in Pakistan conducted from April, 1999 to September, 1999 confirmed an urgent need for universities where both undergraduate and graduate quality education is available. Currently less than 3% of young Pakistanis in the age group of 17-24 are enrolled in a college or university. The participation rate for the same age group in developed countries is 50%–75%. At present the total number of universities and other

institutions of higher learning in Pakistan is about the same in New York City or Tokyo, alone. The standard of education in the public sector, especially in science and technology, is quite modest, and limited in resources, facilities and in opportunities offered for development. It is critical and as well as urgent that Pakistan launches and implements a nationwide plan to improve the quality and accessibility of higher education to its masses.

Recommendations:

One of the most effective approaches to address the problems of higher education in Pakistan is through a public/private partnership. The President of Pakistan, through an executive order, establishes a National Education Trust (NET), which oversees the education needs of the country as follows:

Establishment of a National Education Trust

The National Education Trust (NET) may be made up of accomplished educationists, scientists and businessmen, and other members of the civic society with interest in the development of education in Pakistan, but with no conflict of interest.

Central and provincial education ministers, finance ministers and science and technology ministers or their representatives not below the rank of joint secretary and the Chairman of the National Commission on Higher Education may serve as ex officio members of an Advisory Board to the Education Trust.

Working in close collaboration with the Central and provincial ministries of education, finance and science and technology the Education Trust oversees the marching plan for the promotion of education in Pakistan as follows:

1. The Trust oversees the establishment of a new national non-profit university each five years. Each university to have all faculties and is completed over a period of approximately 10 years.
2. Starting spring 2010 the elementary school education is made mandatory in Pakistan.
3. Starting spring 2015 the education is made mandatory up to 6th grade, followed by the next higher grade each succeeding

year up to 10th grade, i.e. by year 2020 education is made mandatory up to high school (10th grade) throughout Pakistan.

4. The curricula for both school and college education are made for reason-based learning as opposed to rote learning.
5. Starting 2010 it is required that no student can graduate with (1) bachelor degree (BA/BS) without one academic year of full time work (paid or voluntary) as a teaching assistant in a high school or higher secondary school (FA, FSc), (2) a master degree (MA/MS) without one semester of full time work (paid/voluntary) as a teaching assistant to bachelor degree or higher secondary school students, and (3) a doctoral degree (Ph.D..) without two full semesters of full time teaching to Master or Bachelor degree students.

Source of funds for The National Education Trust:

Establish an Education Tax by an executive order of the President/Prime Minister, followed if required, by approval of the National Assembly as under:

- (1) Every Pakistani National in Pakistan pays Rs. 60/year as an education tax which may be collected at the time of issuing/renewing, and by the agency issuing, the national Identity Card. This alone can raise approximately \$145 million/year.
- (2) All visa fees for visa to visit Pakistan include a fee of Rs. 100/visa to be collected by Pakistani Consulates and Embassies abroad.
- (3) All national and international flights to and from Pakistan include an education tax, the equivalent of Rs. 100 and Rs. 200, respectively, per passenger.
- (4) All foreign companies doing business in Pakistan or with the Government of Pakistan pay 0.5% of their total revenues of business (in/with Pakistan) as education tax.
- (5) The hotel tax includes an education tax of Rs. 60 per night per room.

- (6) At least 10% of all aid from international donor countries for social sector and infrastructure projects goes to the National Education Trust.
- (7) The Trust is allowed to institute and operate an Islamic Lotto where 50% of the total gains are awarded in the form of Government Bonds and the remaining 50% goes to the Trust for use as financial assistance for students from economically disadvantaged families.

All education tax collected from various sources is transferred to the National Education Trust treasury on six monthly basis by the Government of Pakistan.

PEP's Contributions and the Model:

Whereas recognizing the problems in the current higher education crisis in Pakistan and searching for the reasons is the first step, to actually find and apply the right approach is, perhaps, the most challenging step. Promotion of Education in Pakistan (PEP) Foundation Inc., New York has undertaken this challenge and incorporated to its vision, strongly believing that dreams can come true.

PEP Foundation's mission is to promote the right of all students in Pakistan to access quality higher education and to equip young people with the academic skills and social conscience needed to become active participants in the development of society. In particular, the Foundation strives to address the needs of economically disadvantaged but academically gifted students who would otherwise be denied higher education.

PEP Foundation was founded by two Alzheimer disease scientists, Dr. Inge Grundke-Iqbal and the author of this article in December 1994. Starting from the University Without Wall (PEP Fellowships) program, where over 300 students were financed for MD, PhD, and other professional and graduate degrees, PEP Foundation has embraced a greater vision, the establishment of Institutes of Excellence in Higher Education in different disciplines at the existing public universities in Pakistan. These institutes will enhance the academic resources and the strength of public universities. Moreover, the institutes will strive to have up to 50% of its total student enrollment come from economically disadvantaged families.

The Institutes of Excellence will require all students enrolled in different degree programs to complete 48 credit hours of a core

curriculum. The core curriculum will consist of seven areas: Communication, Analytical Skills, Natural Science, History, Arts and Humanities, Modern Issues and Physical Education. Classes from these areas will cover a diverse range of topics including basic economics, history of world civilizations, Islamic history, human rights, visual and performing arts, the environment, and an introduction to computers and the Internet.

The institutes will recruit an open-minded and qualified faculty, students with high motivation to learn and become model citizens, and an administration qualified to work with both students and faculty. These elements combine to form an environment that is committed to academic freedom, and a physical and organizational infrastructure that is user friendly and conducive to academic and intellectual learning and a free exchange of ideas.

The first institute, the National Institute of Excellence in Neuroscience will offer undergraduate (four year) and graduate degree programs and postdoctoral training in Neuroscience.

The PEP Foundation's project aims to produce highly trained graduates in various disciplines who, through their respective expertise and fields of specialization, will bring immense benefits to the economic and social sectors of Pakistan. Well-trained and equipped graduate students will be able to take independent action in their work, and to translate theoretical understanding into solving problems in their workplaces. They will help meet the country's need for specialized professionals and civic leaders.

The Foundation's special effort to make half of the student body consist of young Pakistanis from economically disadvantaged families, will not only materialize the dreams of many to have access to higher education but will also facilitate the production of outstanding professionals and leaders from this sector of society. Through their education at the Institutes of Excellence these young people will be able to emerge from the shells of poverty to help their immediate families and also become a significant economic and social force in the country. A well-trained graduate is an asset not only to himself/herself and his/her family but also to the whole nation by virtue of the professional and private contribution he/she can make.

Amir A. Dossal*

The Role of Private Sector and Non-Profit Organization in Higher Education: Ways to make a Strong Partnership Work

Distinguished Ladies and Gentlemen,

It is a pleasure and an honor for me to join you here today. I must thank the hosts of this event, His Excellency Counsel General of Pakistan, Mr. Muhammad Haroon and Mr. Khalid Iqbal President of the PEP Foundation, and their collaborators for organizing this meeting. I am also very grateful for the opportunity to moderate the session on *The Role of Private Sector and Non-Profit Organization in Higher Education: Ways to make a Strong Partnership Work*.

We have a highly eminent panel of experts in this field from which we will hear shortly - a credit to the organizers for bringing them together.

Partnerships, the Private Sector and Sustainable Development

Let me start by sharing with you a few thoughts on partnerships.

Even before going into the substance I want to mention how gratifying it is to see **partnerships** as a common theme for the entire conference!

Public private partnerships used to achieve development and institutional goals is not new – in fact, the first such partnership recorded in this country was in 1652, when the Water Works Company of Boston began providing drinking water to citizens. At the United Nations, we have been building partnerships for well over 50 years. But as globalization and information technologies draw the peoples of the world closer, so do they knit together social, economic, political and cultural challenges. It is increasingly difficult to work in any one of these areas without considering the impact or repercussions in another. From this, a space has formed that did not exist before – a space where public private partnerships among governments, civil society, foundations and the private sector are gaining recognition as a promising approach for addressing social challenges.

When Secretary General Kofi Annan took office in 1997 his mantra was “We can not do it alone. We must engage all the actors if we are to make a difference in this world.”

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Having said this allow me to quote his report “In larger freedom: Towards development, security and human rights for all”, released in March 2005.

“At no time in human history have the fates of every woman, man and child been so intertwined across the globe. We are united both by moral imperatives and by objective interests. We can build a world in larger freedom – but to do it we must find common ground and sustain collective action.”

We have concrete examples that development in any sector whether Health, Environment or Education, can only succeed in a sustainable manner if it is done through a process which brings together all the stakeholders.

Why partnerships in Higher Education?

Vital to achieving sustainable development is a higher education system closely tied to a number of areas including advanced research in science and medicine, the humanities, information technologies, economics and political relations. In this, civil society, foundations and the private sector play a vital role in developing and developed countries alike, supporting the activities and good governance of states world-wide.

There is greater recognition that through partnerships: **public private; north-south; south-south;** we can achieve significant advances in scientific research, technology and other fields that will support global development. **We create greater wealth when we partner.** Pooling expertise and best practices can only lead to positive results for all stakeholders. Partnership between Government, universities and businesses is an ideal combination for creating more innovation, more competitiveness and more wealth and prosperity. HIVAIDS and other diseases, climate change, global poverty, peace, security, and human rights concerns transcending national boundaries, can be addressed more effectively if our higher educational and research institutions work together.

The basic ingredients of **shared commitment to openness, mutual respect, equality, and shared values** and an understanding that all partners have unique strengths to contribute to the partnership have proven time and time again to help us **achieve our development goals.** Bilateral and multilateral academic collaboration is vital to building capacity in the developing country and will help **minimize brain drain.**

The United Nations encourages partnerships in Higher Education

Partnerships between higher educational institutions, south-south and north-south levels, and with research institutions and the private sector are vital for the advancement of science, medicine, as well as peace and security, to name just a few benefits. Partnerships of this kind can also enhance and enrich the faculty and student bodies of any given institution and can also be a source of additional funds.

Mr. John Daniel, Assistant Director General for Education at UNESCO wrote in 2003:

At no time in human history was the welfare of nations so closely linked to the quality and outreach of their higher education systems and institutions. Education at all levels nourishes the development of societies that are both democratic and free and communities that live in peace and practice justice. Higher education is especially important, not just for training those who maintain and promote the infrastructures of democracy and justice, but also, by developing the capacity for forward thinking in a wide swathe of the population, to create the conditions where liberty, justice and democracy and prosper.

UNESCO is the main UN body with a mandate to support national capacity building in higher education. The Organization plays a leading role in the worldwide reflection on higher education reform. It also provides a platform for dialogue on how best to adapt education systems to the emergence of knowledge societies and the new social, cultural and economic challenges of an increasingly globalized world. UNESCO builds international and regional networks/partnerships to assist with a range of issues in higher education: academic mobility, international exchanges of excellence, research on education systems and knowledge production, curriculum innovation, leadership roles for women educators, teacher development, and the defense of quality in higher education qualifications.

- In Iraq, for example, UNESCO is launching several initiatives in collaboration with partners to revitalize the higher education system. These initiatives aim at tackling the most urgent needs faced by Iraqi universities, including:
 - Supplying laboratory and engineering equipment
 - Providing textbooks and reference books for universities
 - Promoting short-term fellowships for faculty members
 - Creating an International University Network for Iraq

- The UNESCO Forum on Higher Education, Research and Knowledge is a follow-up activity of two UNESCO world conferences: The World Conference on Higher Education (Paris, 1998) and the World Conference on Science (Budapest, 1999). The Forum constitutes an open platform for intellectual exchange. The building blocks of this initiative are researchers and research. Every year, global Forum events are organized at UNESCO. Parallel meeting and activities are organized in the regions, contributing to shaping the agenda for the global discussions. At the global and regional gatherings, data and research are discussed by researchers, experts and policy-makers from all parts of the world, so as to trigger critical interaction. These activities serve to highlight research and to bring out challenges facing institutions and countries. In this way, the Forum seeks to build on and complement existing and ongoing research, and to facilitate networking and synergistic partnerships between actors.
- In October 1998 over 50 global partners including educational institutions and members of civil society adopted at the UNESCO led conference on Higher Education the World Declaration and Framework for Priority Action and Development in Higher Education. The Framework highlights priority actions to be taken at national levels, at the level of systems and institutions and at the international level for the renewal and revitalization of higher education.

The role of the United Nations Office for International Partnerships (UNFIP)

My office is an example of what the UN can do in the facilitation of partnerships. Established by the Secretary-General in March 1998 to serve as the interface in the partnership between the UN system and the UN Foundation (UNF) - the public charity responsible for administering Ted Turner's \$1 billion contribution in support of UN causes, **UNFIP promotes new United Nations partnerships and alliances worldwide. Working with companies, foundations and civil society organizations, UNFIP engages partners not only on a financial level, but also in strategic planning and in policy dialogue, transferring new technology, expertise, and innovative delivery systems to achieve the MDGs.**

- Through the generous funds of UNF, UNFIP facilitated in 2004 the **United Nations Dialogue with the Global South: Building UN Capacity through University Partnerships** - The project is designed to build stronger relationships between the United Nations and universities located in developing countries includes 5 academic

partners: **Jawaharlal Nehru University in New Delhi, the University of the Witwatersrand in Johannesburg, American University in Cairo, the National University of Mexico and Tsinghua University in Beijing.** The project aims to : a) create a dynamic network of Partner Universities located in developing countries to work with the United Nations on peace, security and humanitarian issues; b) provide opportunities for UN fellows and scholars from Partner Universities to contribute insights and innovative thinking to the policy discussions of senior UN decision makers on issues of international peace and security; c) generate greater awareness of the views and perspectives of the Global South for United Nations activities in political, peace keeping and humanitarian affairs.

Higher Education and the Millennium Development Goals

As you are certainly aware the Millennium Development Goals are currently the overarching principles of the UN Organizations' objectives. This set of overriding global goals that 191 world leaders agreed to in the year 2000 includes achieving universal primary education, reversing the spread of HIV/AIDS, eradicating poverty and protecting the environment. They have become a framework for focusing the work of the entire United Nations system, and guide the Organization's efforts to build partnerships. The aim is to meet the eighteen targets of the MDGs by 2015. We have made significant strides since then, but we still have a long road ahead before we achieve them. Since the Goals are time-bound and measurable, they shape our efforts not only in these days but will also continue to determine work and success of the United Nations in the forthcoming years and decades.

Millennium Development Goal 8 calls for the development of a global partnership for development and reflects the means by which the other goals and 18 targets will be achieved. Along the same lines I will add, engaging all actors of civil society is not only the best chance; it may be the only chance we have to reach the Millennium Development Goals.

Viable Higher Educational Institutions built on solid south-south/north-south partnerships are the answer to our success in achieving the MDGs and beyond. We must work together, NGOs and academic institutions, governments and private sector, international organizations and individual philanthropists.

Partnerships are a key factor on the road of achieving our common goals. The dynamics this process of pooling our efforts has reached during recent years, should encourage us to continue in this direction.

If we are to benefit from the rich heritage and experiences from across the world we must focus not just on North-South but also on South-South and with that of the regional collaboration which has shown to work well.

We wish the Promotion of Education in Pakistan (PEP) Foundation, Inc. continued success in all their future endeavors.

Annex 1

Examples of partnerships in Higher Education

There are numerous such examples of partnerships. Let me share with you a sample of the many success stories that we can easily adapt and emulate:

- **Agha-Khan University, Karachi** - The AKU Institute for Educational Development aims to contribute to socio-economic development by improving the quality of education through human resource development, institutional capacity building, research and dissemination, and policy analysis and advocacy. The academic programmes AKU-IED have been developed in collaboration with the partner universities -**Ontario Institute of Studies in Education, University of Toronto; and Department of Educational Studies, University of Oxford**. In addition to partner universities, AKU has links with **Sheffield Hallam University (UK), Phillips Academy (USA) through the International Academic Partnership (IAP) and Oslo College (Norway)**. Currently it is also collaborating with the public sector educational institutes of 10 countries: Pakistan, including Northern Areas and Chitral; Zanzibar; Uganda; Tanzania; Kenya; Bangladesh; Tajikistan; Kyrgyzstan; Syria and Afghanistan. AKU-IED activities have received contributions from European Union, the Canadian International Development Agency, the United Nations Development Programme, and Aga Khan Foundation. Specific grants for its programmes and activities have also been received from USAID, IDRC, SC (UK), NORAD, etc.
- **Academy for Educational Development** - AED has been working for more than 40 years in partnership with schools, colleges, and universities in the United States and around the world. Through the **Pakistani Teacher Education and Professional Development Program (PTEPDP)**, AED provides U.S.-based training to Pakistani educators to increase the number of skilled, high performing Pakistani of mathematics, science and English as a second language. The program also promotes cultural understanding between the US and Pakistan. Thirty-five Pakistani educators are currently in-training in the U.S.
- **National Virtual Universities (NVU)**, evolved out of the dot.com boom, are (generally) aiming at expanding and improving flexible learning at national (and sometimes international) level. NVUs have been established in **Canada, Sweden, Switzerland, Denmark, Norway, Finland, the Netherlands, Syria and Pakistan**. There are four main types/models of NVUs: 1) export-based 2) widening access and participation focused 3) research and development focused 4) industry focused in partnership with foreign providers.
- **Massachusetts Institute of Technology** has made enormous strides to promote collaboration with the private sector and higher educational

institutions world wide. To boost science and technology for a better world, MIT has partnered with **Merck, Ford Motor Co, Nippon Telephone and Telegraph, Merrill Lynch, DuPont, Microsoft, Hewlet Packard** resulting in developing new products, jobs and services, biotechnology and the environment promoting advancement in the economy and quality of life across the globe.

- **MIT**, dubbed by UNESCO as the “**trailblazer**”, established in 2001 the Open CourseWare (OCW). Universities in 5 continents participate in the movement leveraging resources to improve education around the globe. OCW is a free and open educational resource available to faculty and students as well as self-learners around the globe advancing knowledge and education. It is a web-based electronic initiative providing access to MIT’s course and educational materials.
- The **MIT and the Kuwait Foundation for the Advancement of Sciences** partnership is devoted to progress in key environmental hydrological and energy goals through research and higher education.
- Universities in Thailand, Singapore, Europe and USA joined together to form the **Global Enterprise for Micro-Mechanics and molecular Medicine –GEM4** – bringing together scientists, engineers and health professionals to address global medical challenges as infectious and cardiovascular diseases, cancer and environmental health.
- **Sorbonne in Paris and University of Tbilisi in Georgia** have joined forces to encourage student and faculty exchanges in European studies, environmental studies, economics, Literature and Musicology.
- University of Florida, Makere University in Uganda, University of Botswana, University of Dar es Salaam, Gaston Berger University in Senegal are collaborating in the fields of zoology, human rights and peace, environmental studies through joint training and research.
- Coca Cola World Citizenship Programme established in 1998 by the Coca Cola Foundation with UNESCO, UNAIDS, World Vision, ICRC, Save the Children and the University of Florida, fosters north-south/south-south internships and exchanges for students in countries in Africa – Uganda, Zimbabwe, Ethiopia, Swaziland and others to advance research and studies in areas such as Agriculture and food security as well as HIV/AIDS.
- **The Bristol Computer Science Industrial Partnership** promotes partnership between the Department of Computer Science at the **University of Bristol and Companies in computer and related industries**. Its aim is to facilitate cooperation and collaboration with the industrial sector across all aspects of the Department's activities in Research and Teaching. a number of companies have helped fund and support long term research at the University.

- **IBM** works with a number of universities including **Cambridge** in the UK, **Concordia** in Montreal Canada, **U of Pittsburg** and the **Swiss Federal Institute of Technology** in Zurich Switzerland to name a few. These programs support the institutions in technology related research.
- Nomura Holding Group a Financial Services Group with subsidiaries all over the world is supporting the University of Oxford through establishing the Nomura Centre for Quantitative Finance for research in state-of - the-art financial engineering. They also fund annual lectures on special topics to foster learning in a variety of disciplines. These lectures are done in partnerships with other **universities** including the University of Princeton, Chulalongkorn University in Thailand benefiting students in Master of Arts in Business and Managerial Economics programs.
- In November 1999 **University of Bergen, Norway** and **[Makerere University](#)** in **Kampala, Uganda** signed an agreement for collaboration in research, scientific competence building, student and staff exchange, and institutional development was signed between during a fifteen-year duration. The agreement is an important element in the strategic work between scientists from the two academic institutions.
- **University of California in San Francisco** promotes North-South and South-South collaboration in Clinical Training UCSF Global Health Sciences through a grant from the US Health Resources Services Administration (HRSA) to develop a pilot training program following the twinning model. UCSF's program brings together experts in clinical training of healthcare workers in the management and treatment of HIV disease and offers the opportunity for both north-south and south-south interactions with two distinguished medical schools in southern Africa, **University of the Witwatersrand** and **University of Zimbabwe**. Training will cover HIV/AIDS medicine, counseling techniques, family centered care strategies, and delivery of care strategies, among other topics.
- Consortium to Respond to Effectively to the AIDS/TB Epidemic (CREATE) - **Bill and Melinda gates Foundation** donates \$18 million to the London School of Hygiene and Tropical Medicine to tackle HIV/AIDS and tuberculosis in developing countries through the CREATE in partnership with **University of Zambia, Stellenbosch University in South Africa, John Hopkins and WHO**.
- **The Abertay Conversation** - the association of African Universities (AAU), the Association of Commonwealth Universities (ACU), the Commonwealth of learning (CoL), working partnership with Scottish Executives, the UK government, and the University of Abertay Dundee convened the Abertay Conversation of leaders of African Higher education institutions (HEIs) and organizations to conduct a

conversation in July 2005 on the sidelines of the G8 meeting at Gleneagles. The conveners agreed on a communiqué inviting the governments of Africa, the leaders of the G8 meeting at Gleneagles and all development partners to:

- implement fully the recommendations of the Commission for Africa, in particular those relating to the renewal of Africa's HEIs;
- commit the necessary investment and support for new strategies for science, technology, and innovation;
- recognize that funding on the scale indicated in the Africa Commission's report is a prerequisite for higher education's full contribution to sustainable development, economic growth, and the good governance of the continent;
- act immediately to address the issues of institutional capacity constraints;
- provide the means to enable the transformative capacities of ICT to be released across Africa;
- facilitate an Africa-led process for defining the criteria, models and priorities for establishing new centers of excellence; and
- promote close cooperation between public and private HEIs, and other partners in the public and private sectors, to maximize the impact of investment in renewal.

Session V

Student Forum

M. Omar Chohan, M.D*

I am a graduate of a private medical school in Pakistan. I have a very optimistic view about the future of higher education in Pakistan because I have seen, in Aga Khan University, a successful model of an institute of higher education. Before I discuss what many of my fellow alumni including myself, think as one of the main reasons of Aga Khan University's success; let me share some general points for comparison purposes on the quality of education provided at Aga Khan.

1. Public sector medical institutes admit 4-5 times as many students per year as the Aga Khan University while the faculty numbers remain roughly the same. Students at Aga Khan are at a particular advantage especially during their clinical years when the student to teacher ratio drops to about 5-6:1 (as the whole batch is divided into smaller sub-groups). In some of the sister public medical institutes throughout Pakistan the number of students in a single batch could be as high as 450.

2. Aga Khan University follows a structured and organized curriculum for medical education which has a system wise approach to the study of human body in health and disease. Curricula at numerous public sector institutes are disorganized whereby a student would be studying one organ system at one time while seeing a completely different system in the clinics (an example would be, studying the anatomy of the heart while seeing patients with mental disorders; the very same students would get to study the normal brain function, perhaps a year later, while seeing patients with heart disease!).

3. Students Research Council at Aga Khan serves as a very strong motivator for students when it comes to research. A recent survey published in the Journal of Pakistan Medical Association (JPMA) showed that 77% of all research papers published in the student corner of JPMA from 1998 to 2003 were contributed by students from Aga Khan University. Many students with research interests are encouraged to develop research proposals and submit for competing funds as high as \$50,000 along side junior faculty.

4. Lack of political activism is also one of the backbones of success of the Aga Khan University. Everybody in Pakistan is aware of how politics

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in many public sector universities have sabotaged the very meaning of education!!

When I was asked to present at this forum, I involved fellow alumni in the discussion about improving higher education in Pakistan and the role of private institutes like Aga Khan. What I learned from these discussions was very clear: the key to success in improving standards of higher education in Pakistan lies in repatriation. Moreover, money alone seems to be too easy an answer. The United States, nation of some 280 million, admits a million immigrants every year. Probably half a million enter illegally. Developing countries like Pakistan routinely lose large numbers of highly qualified professionals to the United States where affluence and professional satisfaction await. It is a crippling demographic hemorrhage in which developing countries lose the very people whom they would most stand to benefit. Many institutes and organizations like Aga Khan, are now giving internationally competitive salaries to their employees, yet they are continuously being defeated by the powerful magnet of corporate America. It is not just the greener pastures of the West that lure many of us into serving developed nations. It is also the security, professionalism, and a lack of fair and free atmosphere of self grooming that is keeping many of us away. The other nagging apprehension is the proper recognition of merit.

Many of my fellow alumni think of private institutes as mere factories which produce high quality product only to be exported to the West. But I think we are now beginning to see a reversal of brain drain, or “brain gain” as one of the alumni puts it. In the field of medicine, there are now over 200 US trained and many fold UK trained professionals who are back in Pakistan. Those who have returned contribute hugely, becoming standard-setters for clinical practice, academic leaders in education and research and, increasingly, influential voices in health policy and public health. With the commitment that the current government has in attracting many highly qualified professionals back to Pakistan, there may be a very real opportunity now to augment this “brain gain” phenomenon. One strategy, as a fellow alumnus puts it, would be to set up a National Repatriation Commission that expatriates can approach through internet and e-mail with the expectation of being matched to a rewarding opportunity where they could best be of value and which would also recognize their true worth. The HEC is already working along similar lines by offering internationally competitive salaries to accomplished expatriate Pakistani scientists. This is worth expanding to other fields.

In the end, I think we cannot expect the government to do everything. Private-Public partnerships are the key. Institutes like Aga Khan not only provide quality education for those who manage to get in,

but also have a spill over effect on other institutions goading them to improve their standards. For expatriates, these institutes provide the quality of professionalism and infrastructure that can help these individuals make a difference. Many of us do want to return and are returning. The atmosphere is beginning to change, and the time is not far when everybody will be welcomed home!

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Salman Abdul Baset*

University Leadership

One of the main reasons for the transformation of higher education landscape in Pakistan in the last few years is due to the presence of good leadership in the form of Dr. Ata-ur-Rehman. The good leadership must dwell down to the public sector universities so that they can fully achieve the potential of educational reforms. The 80s and 90s have given violence, nepotism, and party politics to public sector universities. The government's attempts to control them have been in the form of the appointment of vice chancellors, who are mostly retired armed force officers, with little or no educational background. While they might have been able to put an end to the dirty politics in the universities, one wonders if the same could have been achieved by backing the decisions of an academican vice-chancellor, who understands the needs of an academic environment.

University Environment

Academic Honesty is still not emphasized in Pakistani universities. In computer science, there has been an instance of plagiarism which caused uproar in the international research circles. These instances cause embarrassment and mar all the good that has recently been done by the higher education commission (HEC). It is imperative that the universities emphasize on their students the need for publishing only the truthful research and strictly penalize those who do not follow it.

In the United States, many students cover their financial needs by working on campus. On-campus job culture is virtually non-existent in Pakistan. I strongly believe that this culture should be introduced in Pakistani universities. Not only it will help needy students to earn money to cover their needs, but it will also provide them with an opportunity to work in a real environment.

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