

Report on

The System of Education in Pakistan

THE SYSTEM OF EDUCATION IN PAKISTAN

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Introduction

Background to the Study Tour

The tasks of the ENIC/NARIC offices in Denmark, Sweden and Norway include work on issues related to education from Pakistan. All three offices receive applications and questions concerning recognition of education from institutions, representatives from the labour market and other stakeholders. The numbers of applications and enquiries are growing. All three countries have relatively large populations of persons of Pakistani origin settled in their countries, Denmark about 19,000, Norway 27,000 and Sweden 5,000 (2005).

A need to learn more about the country and especially the system of education has been felt for some time. The most important motivation for a study tour was to facilitate the work of giving advice concerning education from Pakistan and daily credential evaluation work. In addition to this, the Nordic ENIC/NARIC offices wished to achieve closer future contact and cooperation with the Higher Education Commission (HEC) in Pakistan.

The visit was planned and implemented in cooperation with the Norwegian Embassy in Pakistan and HEC, both located in Islamabad. HEC is responsible for the development and maintenance of higher education in Pakistan. The main focus of the study visit was to gather information about the educational system in the country; the financing of education, the organisation of public and private education, quality assurance work (QA) and the institutions' handling of these challenges. Information about future plans for education in Pakistan was also of great interest.

In addition to visiting HEC to gain general information about higher education and the various institutions of higher education, it was also important to visit the Federal Board of Intermediate and Secondary Education (FBISE). This board organises and works with the development of intermediate and secondary education.

The study tour was planned as a joint visit by the ENIC/NARIC offices in Denmark, Sweden and Norway from 24 September to 6 October 2005. The delegation consisted of 8 representatives and was organised as a combined visit to Pakistan and India.

Report Structure

The report is based on information and impressions gathered from the different organisations and institutions the delegation visited during the study tour. Information was also gathered from sources such as the websites of the organisations and institutions visited and from agencies including the National Office of Overseas Skills Recognition (NOOSR) in Australia, World Education Services (WES), UK NARIC and UNESCO/IAU among others. At several places in the text, sources have been specifically mentioned. An additional list of sources can be found in the appendices.

The report outlines the system of education in Pakistan. Chapter 1 describes the administration of the school system and primary, secondary and higher secondary education, while chapter 2 provides information about technical and vocational education. Chapter 3 outlines the institutional structure of higher education, both public and private. The degree structure and grading systems are described, and examples of some bachelor degree programmes are given. In chapter 4 teacher training at both higher secondary level and at university level is described. Chapter 5 describes the centuries-old system of Islamic education at primary, secondary and higher level. The last chapter deals with quality assurance work in education, both at secondary and higher level. Impressions and reflections about the system and how it functions are incorporated into the report in frames where appropriate.

Country Profile

Pakistan became an independent nation in 1947 when British India split into a Muslim state of Pakistan and a largely Hindu India. Pakistan is a federation of four provinces, each with a parliamentary system, federally administered Tribal Areas and Islamabad Capital Territory. The four provinces are Punjab, Sindh, Northwest Frontier Province (NWFP) and Balochistan.

Pakistan is located in South Asia, bordering India to the East, China to the North East, Iran to the South West and Afghanistan to the West and North. To the south is the Arabian Sea. Pakistan is an Islamic Republic. Since 1947 the country has experienced a variety of democratic and military governments. Since October 1999 the head of state is General Pervez Musharraf. He became president of Pakistan in June 2001.

Pakistan has around 162 million inhabitants (2005 estimate). 97% of the population is Muslim. The country is composed of several ethnic groups of which Punjabi is the largest. Punjabi is the most widely spoken language, with Urdu as the official language and English as the language of administration.

The population is young and fast growing with a median age of 19.58 years and a population growth rate of 2.03%. The country has an estimated literacy rate somewhere between 48% and 54 % depending on the sources and the definitions used (10 years+ or 15 years+) with big gender differences and differences between rural, tribal and urban areas.

32% of the population live below the poverty line. The main occupation is within agriculture (42%), while 38% of the labour force work in services and 20% in industry. The country has suffered from long internal disputes, a low level of foreign investment and conflicts with India. However, in recent years, aided by macroeconomic reforms and an increase in industrial production, Pakistan has experienced a positive economic trend, with an annual growth in GDP of 6.1%.

The Constitution from 1973 (article 33) requires development of an education policy to ensure the preservation, practice and promotion of Islamic ideology and principles as enshrined in the teachings of the Koran and the Holy Prophet. The National Education Policy (1998-2010) clearly states the objective of making Islamic studies the code of life incorporated in all education.

Sources:

- The world Fact Book. Pakistan. CIA, 2006.
<http://www.cia.gov/cia/publications/factbook/geos/pk.html>
- National Education Policy (1998-2010), Ministry of Education, Pakistan

Chapter 1 General Education

Administration of Education

Educational administration and policy in Pakistan

The division of responsibilities between the provinces and the centre are defined by the Constitution of 1973. The Federal Ministry of Education has the overall responsibility for the development and coordination of national policies, plans and programmes in education including curriculum development, while implementation of the policies is the responsibility of the local administration.

Each province has its own Department of Education. Educational institutions located in the federal capital territory are administered directly by the Ministry of Education.

The Constitution of 1973 expresses the goals of the state education policy as being to promote the educational and economic interests of backward classes and areas, to remove illiteracy and provide free and compulsory education for a minimum period, to make technical and professional education generally available and higher education equally accessible to all on the basis of merit.

63% of the 11-13 age group (class VI-VIII) attend middle school (2004-05) and 44% of the 14-15 age group (class IX-X) attend secondary school.

Pakistan experienced difficulties in improving educational provision in the 1990s with, for instance, insufficient school buildings, lack of essential facilities, untrained or poorly trained teachers in remote areas, lack of classroom resources and unavailability of textbooks. The country is now trying to reverse the situation through a so-called bottom-up and top-down strategy, giving priority to both basic education and higher education.

The actual political basis is the National Education Policy (1998-2010) accompanied by Education Sector Reform strategic plans and the Education for All plans linked to the Government's Poverty Alleviation Strategy. The goals are ambitious, for example, to achieve universal primary education (UPE) by 2010, to reduce gender inequality by 10% annually, to raise the completion rate within primary education from 50 to 70%. In terms of quality, the plan is to improve the quality of learning processes through the introduction of learner centred pedagogy, including measurement of learner achievement level. Pakistan is also trying to enhance and develop the quality of higher education.

The gross domestic product (GDP) was 4.445 billion Rs in 2003-4 with 2.70% spent on allocation for education. The financing of education is assured in part by foreign donors.

Sources:

- Cohen, Philip: The idea of Pakistan, Washington D. C, Brookings, 2004
- Education Sector Reforms: Action Plan (2001/2-2005/6), Ministry of Education, Pakistan
- Pakistan, education: Report of the EC Rapid Reaction Mechanism Assessment Mission, 2002
- The State of Education in Pakistan 2003-4. Ministry of Education, Pakistan

School Education

Primary and secondary education is provided by public and private schools as well as by Islamic madrasahs (see chapter 5 for more information about Islamic madrasahs). School education is organised in a 5+3+2+2 model: Primary stage (5 years); middle stage (3 years); lower secondary stage (2 years); and upper secondary stage (2 years).

Education starts at the age of five. Pre-school classes known as Katchi were discontinued during the 1980s. They were reintroduced with the National Education Policy 1998-2010.

According to information from the Ministry of Education, Pakistan has passed a law on compulsory education (eight years of schooling). Some provinces also have laws regarding this. Implementation of the law is dependent on support from all the provinces, which has not been secured so far.

Schools normally close for ten weeks from the beginning of June until mid/late August. Winter holidays usually run from mid-December to early January.

School education is organised by the Ministry of Education. The Curriculum Wing within the ministry formulates the national framework curriculum through a wide stakeholder consultation. The present curriculum was revised and updated in the year 2000 and 2002 for science subjects and social science subjects respectively. A new revision of the national curriculum for sciences and social science subjects/humanities at the primary, secondary and higher secondary education levels is planned for the years 2005/2006 in order to make the curriculum more responsive to modern needs and comparable with international standards.

The Inter Board Committee of Chairmen (IBCC) controls the 26 boards of intermediate and secondary education. The boards, one federal and the remainder provincial, affiliate schools, implement, regulate and monitor schemes of studies and curricula, and hold Secondary School Certificate (SSC) and Higher Secondary School Certificate (HSSC) exams. Three technical boards are responsible for vocational and technical education. A list of the boards is published by IBCC on their website at <http://www.ibcc.edu.pk/default.asp>.

Four textbook boards develop and print books for schools. Pakistan has introduced textbook deregulation for Classes 9-12 and is prepared to expand the initiative to the primary sector to allow for more efficient and competitive printing and publishing of textbooks.

The boards are autonomous institutions financed by fees from the affiliated schools and from students allowed for examination. Urdu is generally the medium of instruction within the education system.

Enrolment in school

Pakistan had a total of around 155,000 primary schools in 2003-04 with an enrolment of around 19.8 million pupils and 432,000 teachers. Boys' schools comprise around 74,000 institutions, while girls' schools and mixed schools make up the remaining 81,000 institutions.

In government schools in urban areas 51% of the pupils are boys, while the rate in private schools is about 60% and 69% in rural areas.

Although the general enrolment of girls in education is progressing, nevertheless the ratio of girls to boys still favours boys, with 72% in primary education and 64% in secondary education. The current policy encourages the enrolment of girls by supplying them with scholarships and free textbooks.

Private education

Before 1972, private educational institutions constituted a substantial proportion of the total educational system of schools and colleges. In 1972 the Pakistan government nationalised all private educational institutions.

Because of a lack of funding for public education, private educational institutions were again permitted to operate from 1979. The government even encouraged private enterprises to open educational institutions in rural areas. Non-Governmental Organisations (NGO) could contractually take over government schools for a prescribed time-period.

Enrolment in private schools is now in the order of 42% of total enrolment and 37% at the middle school level. At the secondary and higher secondary level, the enrolment in private education is 30% and 64% respectively.

Permission to set up educational institutions is granted either by the Ministry of Education or the respective Provincial Education Department. Registered private schools have to follow a government-prescribed curriculum.

Enrolment in private schools is predominant among urban middle and upper income families. Private schools are considered in general to exhibit better performances than government and state schools, but the quality of education varies.

In some areas government schools are non-functioning or nonexistent and parents send their children to low-cost private schools with basic facilities or to local maktabas or madaris (religious schools).

Sources:

- Education Sector Reforms: Action Plan (2001/2- 2005/6), Ministry of Education, Pakistan
- Inter Board Committee of Chairmen <http://www.ibcc.edu.pk/default.as>
- Ministry of Education. Advertisement (new curriculum) <http://www.moe.gov.pk/Advertisement.doc>.
- Pakistan, World data on education. UNESCO
- Pakistan. International comparisons. UK NARIC
- Pakistan, education: Report of the EC Rapid Reaction Mechanism Assessment Mission, 2002
- The State of Education in Pakistan 2003-4. Ministry of Education, Pakistan

National Curricula

Primary education

Primary education comprises Grades I-V. The language of instruction is either Urdu or the regional language. The curriculum includes reading, writing, arithmetic, general science, social studies, Islamic education, and physical education.

Middle level education

Middle level education lasts from Grades VI-VIII. The curriculum includes the compulsory subjects of Urdu, English, mathematics, sciences, social studies, and Islamic studies. Non-Muslims are exempt from Islamiyat-Islamic Studies. Instead they are taught Moral Education.

Secondary Education

Secondary Education lasts from Grades IX through X. Students can specialise in science, humanities, or technical streams. Compulsory subjects for all are English, Urdu, Islamiyat, Pakistan studies and mathematics. In addition, students study the following subjects within the different streams:

- Science stream: Physics, chemistry and biology/computer science/technical subject
- Humanities stream: General science and two elective subjects/one elective subject and one technical subject
- Technical stream: General science and two technical subjects.

However, rural areas often offer a limited choice of subjects due to lack of staff and facilities, such as science labs in science streams. Only 35% out of 9,200 secondary and higher secondary schools in Pakistan meet the minimum requirements of an equipped laboratory according to official statistics published in the Education Sector Reforms: Action Plan for 2001/2002 to 2005/2006. The government plans to construct new science labs in about 3,000 schools during 2001-2011.

The technical education stream was introduced at the beginning of this century. The aim is for the technical stream to be available in 1,200 secondary schools, 10 in each district, preferably five male and five female schools. The technical education stream addresses itself to those pupils who enter the labour market after Grade X. 34 emerging technology streams are planned for introduction along with appropriate teaching materials.

Students passing the examination at the end of Grade X are awarded the Secondary School Certificate.

Higher secondary education

Higher secondary education, sometimes referred to as the "intermediate stage", lasts from Grades XI to XII. It often takes place at university colleges or similar. According to the UK NARIC, army public schools, divisional public schools, autonomous colleges and some private sector institutions are commonly recognised as being more prestigious than government schools. The earlier term faculty of arts/sciences for higher secondary education is still often used, e.g. in admission materials from higher education institutions.

Regional Boards are granted some autonomy on the subjects and combinations they may offer.

The students are offered the following subjects and streams by, for example, the Federal Board of Secondary and Intermediate Education (FBISE):

- Compulsory subjects for all groups: English, Urdu, Islamic education and Pakistan studies
- Pre-engineering group: Mathematics, physics and chemistry
- Pre-medical group: Biology, physics and chemistry
- Science general group:
 - Mathematics, physics and statistics
 - Mathematics, economics and statistics
 - Mathematics, computer studies and physics
 - Mathematics, computer studies and statistics
 - Mathematics, computer studies and economics
- Humanities group: Three subjects out of 23 elective subjects
- Commerce group:
 - Part one: Principles of accounting, principles of economics, principles of commerce, business mathematics
 - Part two: Principles of accounting, commercial geography, statistics, computer studies/banking/typing
- Medical technology group
 - Part one: Elementary chemistry and chemical pathology, elementary anatomy and micro-techniques, micro-biology I
 - Part two: Haematology and blood banking, clinical pathology and serology, micro-biology II.

Girls are also offered the possibility of home-economics. Dars-i-Nizami Group (Koran reading) is introduced at secondary and higher secondary levels to bridge the gap between Madrasah education and the formal education system in Pakistan.

Differences between streams

One of the questions the delegation tried to verify through the Ministry of Education concerned the differences between streams within higher secondary education. The background for the interest was the fact that UK NARIC recognizes higher secondary examination certificates from the pre-engineer and the medical streams as comparable to GCE advanced subsidiary AS level. Certificates from the science stream and humanities stream are only accepted as comparable respectively to a standard between GCE AS and GCSE and to GCSE grades A-C.

According to the Ministry of Education, there are no differences in the curriculum demands and Pakistan itself does not make any distinction between the different streams. However students in general do better within the pre-engineer and medical streams and within the science stream compared with the results of students within the humanities stream. According to the Ministry of Education, this is due to the fact that students who do not possess the capability of joining the "hard core" streams more often join the humanities stream.

Sources:

- Curricula for the different classes can be found on the website of the Pakistan Ministry of Education <http://www.moe.gov.pk/>

- Education Sector Reforms: Action Plan (2001/2-2005/6), Ministry of Education, Pakistan
- Hand-outs, Federal Board of Secondary and Intermediate Education, 2005
- Pakistan/profile. World Education Services, Canada
- Pakistan, World data on education. UNESCO
- Pakistan. International Comparisons. UK NARIC

Assessment and Documentation

Assessment

Pakistan has introduced a continuous assessment and examination system. Pupils are assessed through course work, class participation, and examinations. However, promotion from one grade to another is automatic. Examination is conducted by the boards. It consists of question papers comprising different sections: objective questions, short answer questions and long answer questions.

The final mark is determined by the final set of examinations. Those who fail their national examinations at the first or "Annual" sitting by three subjects or less are able to retake the failed subjects, usually for a maximum of two "Supplementary" sittings. If no subjects are passed after the third and final supplementary, the entire set of examinations must be repeated, according to information from the UK NARIC.

Pass percentages vary according to the district, gender of the candidate as well as the stream chosen. Statistics from the different boards show that the highest pass percentages are found within the pre-medical and pre-engineering groups and within the science group.

Higher Secondary (School) Certificate / Intermediate (Examination) Certificate

Mark	Percentage result	Remarks
A1	100 - 80%	Outstanding/Distinction
A	79-70%	Excellent
B	69-60%	Very Good
C	59-50%	Good
D	49-40%	Satisfactory
E	39-33%	Pass
F	Under 33%	Failed

Source: UK NARIC/Pakistan

Documentation

The final qualification awarded is either the Intermediate Certificate or the Higher Secondary School Certificate. The student receives a certificate/diploma with the marks obtained issued by the relevant Board. The Inter Board Committee of Chairmen might attest the certificate.

Sources

- Pakistan. International Comparisons. UK NARIC
- Websites of the different Boards of Secondary and Intermediate Education

Chapter 2 Technical and Vocational Education

Vocational and technical education in Pakistan is a minor educational sector. The term technical education refers to post-secondary courses of study and practical training aimed at the preparation of technicians to work as supervisory staff. The term vocational training refers to the lower-level education and training for the preparation of skilled or semi-skilled workers in various trades.

The delegation did not have any opportunity to visit organisations within vocational education. The following is thus based entirely on written sources. The general impression is that vocational education is suffering as a sector and that Pakistan in general is more occupied with basic education and higher education. However, the country has established a new technological section within secondary education (Grades IX – X) and polytechnics have been modernised, but it is difficult to judge the resources allocated to the sector and the implementation of the reforms.

Direct enrolment in technical and vocational education comprises 105,000 pupils, corresponding to 1.5% of the 14-15 year old age group, with another 115,000 students engaged in tertiary level diploma and certificate programs. In comparison, 326,000 students are enrolled in BA/BSc/BSC programs while 250,000 students are enrolled at the Masters level and higher.

The training level is low in particular in non-technical activities in the services sector, which employs 44 percent of the employed labour force. This covers qualifications within office work, wholesale and retail trade, hospitality, tourism, agriculture and horticulture services. 7,042 teachers (19 percent women) work in 624 technical education and vocational training (TEVT) institutions with an enrolment of 105,000, of whom 13 percent are women (2003-04).

Administration

Technical and vocational training programs are administered by a number of federal, provincial and private agencies:

- Government Vocational Institutes (GVIs), administered by the Provincial Education Department.
- Technical Training Centres (TTCs), vocational training centres (VTCs), and Apprenticeship Training Centres (ATCs), administered by the Provincial Labour Departments.
- In-Plant training Programmers, i.e. apprenticeship training under the Apprenticeship Training Ordinance 1962, administered by the Provincial Directorates of Manpower and Training of Labour Departments in establishments employing 50 or more workers.
- Private technical training institutions.
- On-the-job training within industries and training by Small Industries, Departments/Corporations and private technical and vocational institutions.
- Commercial training institutes under the Ministry of Education, Provincial Education Departments and Technical and Vocational Training Authority (TEVTA) in Punjab.
- Polytechnic institutes and colleges of technology operating under the Federal Ministry of Education and Provincial Education/Labour/Manpower/Industries Departments.
- Private technical training institutions.

A technical stream exists within secondary education (Grades XI – XII) (see the previous chapter).

The framework for training is the National Training Ordinance 1980 with amendments and the Apprenticeship Training Ordinance from 1962 with amendments.

The National Institute of Science and Technical Education (NISTE) (The Ministry of Science and Technology) provides science and technical education including training of teachers. The institute has the responsibility for the curriculum at polytechnics and colleges of technology.

At the federal level, the [National Training Board](http://pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=30&cPath=349_566&ContentID=2262) works under the Ministry of Labour, Manpower and Overseas Pakistanis. The Board coordinates the work of the four provincial boards, one in each province, assesses training needs, and develops training syllabi and specifies national training standards and trade tests. Information can be found on http://pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=30&cPath=349_566&ContentID=2262.

A [Technical Education and Vocational Training Authority \(TEVTA\)](http://www.tevta.org/Home-page.htm) was established in the Punjab in 1999 and all departments dealing with technical and vocational training have been placed under it. It also covers post-secondary education conducted at polytechnics and colleges of technology. Similar programmes have also been started in the North Western Frontier Province (NWFP). Information can be found on <http://www.tevta.org/Home-page.htm>.

Pakistan is planning to create a new national body, National Technical Education and Vocational Training Authority (NTEVTA).

Sources:

- National Training Board
http://pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=30&cPath=349_566&ContentID=2262
- Pakistan School Statistics, 2004, cited by "Paper. The Planning and development division/Pakistan government", 2005
- Technical Education and Vocational Training Authority (TEVTA)
<http://www.tevta.org/Home-page.htm>

Vocational and technical education courses

Vocational Institutes offer courses between three months and two years in length, although the maximum is generally a year. Entry is based on Grade VIII. Courses for girls are often shorter than those for boys. A two-year course leads to a Grade 3 Skilled Worker Certificate.

Technical Training Centres offer two-year courses for graduates of Grades VIII and X. The institutes are affiliated to the technical training boards. Courses lead to Grade 2 Skilled Worker Certificate. The certificates are awarded by a Board of Technical Education or TEVTA. Grade 2 and 3 Skilled Workers Certificates are also available via competence testing in the workplace.

Post-secondary technical and vocational education takes place at polytechnics/colleges of technology. The three-year courses post-SSC (Secondary School Certificate) leads to a Diploma, in the engineering field known as the Diploma of Associate Engineer.

Courses at Commercial Institutes after the SSC (Secondary School Certificate) are completed with the Certificate in Commerce after one year and the Diploma in Commerce after two years, also called the Intermediate in Commerce.

Colleges of Technology offer the same diploma awards as Polytechnics, but they also award degree courses to holders of the Polytechnic Diploma.

Source:

- Pakistan, International Comparisons, UK NARIC

Chapter 3 Higher Education

General Characteristics

Responsibility for higher education in Pakistan is shared between the federal government and the provincial governments. The Higher Education Commission (HEC) is an actor of central importance to the development of higher education in Pakistan. HEC was established in 2002, replacing the University Grants Commission (UGC) which until then was responsible for higher education under the rule of the federal government. HEC is an autonomous organisation directly under the rule of the prime minister, and has been given a wide mandate in order to improve and promote higher education and research in the country. Among its many tasks, the Commission has responsibility for policy formulation and guiding principles for all higher education institutions. HEC submits budgets concerning public universities to the federal government and controls distribution of these funds. The Commission also functions as a link between higher education institutions and the surrounding society, making sure that the institutions work in the same direction as the industry and employment markets. Quality assurance of higher education in Pakistan is another very important task under the auspices of HEC. This includes accrediting the institutions of higher education and prescribing the conditions for the establishment of private institutions of higher education.

The tertiary enrolment rate for students aged 17 to 23 is 2.6 % (2005). HEC aims to increase this figure to 8% by the year 2020. Restricted access to higher education at the established institutions for higher education has led to an explosive increase in the numbers of private universities operating.

Institutional Structure

Higher education in Pakistan takes place in universities and colleges. Research is restricted to the universities, while both universities and colleges undertake teaching.

Universities and colleges that have been given a charter by the federal government or one of the provincial governments, are recognized and have the right to award degrees. HEC lists these institutions on their website: <http://www.hec.gov.pk/htmls/hei/collunilist.htm>

Universities with a charter from a province have a right to operate within that province. As soon as they go outside the territorial jurisdiction of the province, they are considered to be illegal and degrees awarded under such circumstances are not recognized; see below under Private universities.

Affiliated colleges and constituent colleges

Affiliated colleges are run by the Government or by private, religious or philanthropic organisations. They are affiliated to a university and are under their jurisdiction; the university determines the courses of study, prescribes the syllabus and conducts the examinations. The university is also responsible for awarding of degrees. The role of the affiliated colleges is to prepare the students for the examinations of the universities. Constituent colleges are part of the university, but may be located off the main campus. They are run as separate colleges under full financial, administrative and academic control of the university. A list over these institutions can be found from HECs website: <http://www.hec.gov.pk/htmls/hei/collunia.htm>.

Private universities

In 1947, after the partition from India, Pakistan had only one university, the University of the Punjab. Until the early 1970s when all educational institutions were nationalized, many private institutions of higher education were established in the country. From the beginning of the 1980s, private universities were again able to operate in Pakistan. Many private institutions were established in this period, but until 1991 only two private universities were recognized. These were the Aga Khan University, established in 1983; and Lahore University of Management Sciences, established in 1985.

By the end of the 1990s, the rising demand for higher education led to an explosive increase in the number of private universities. The ones that had been given a charter by a regional or by the federal government were all considered recognized. However, the speed at which these new universities were established made it difficult to ensure the quality of their work. In 2005 Pakistan had a total of 54 private degree-awarding institutions.

When HEC was established in 2002, there was a clear need for a national policy for quality assurance. One way of informing the public of the situation in the private universities has been the publication of a list that groups private universities into four different categories according to federal criteria. The criteria mainly concern academic, financial, and physical infrastructure. Those universities that have been categorized as "sub-standard" risk losing their charter on 26th February 2007 if they have not met the criteria by then. Those that lose their charter will become colleges affiliated to another university. For a complete list, see Appendix 1.

When meeting with HEC, the delegation mentioned problems with credentials from the private universities of "sub-standard" quality. On the one hand they may be officially recognized, but on the other hand they are clearly not very good. The HEC staff had no advice to give on how to act in such cases, except to carefully check the date the degree was awarded, since some of the universities on the list awarded degrees even before they were granted a charter.

In addition to the recognized private institutions of higher education, a large number of illegal private universities and colleges operate throughout the country. They are not chartered and therefore do not have the right to award degrees. HEC regularly informs the public of unlawfully operating universities and colleges. When such information is published, it quickly reaches the target groups, and employers in Pakistan are well aware of the situation.

According to HEC, the effect of such publications usually is that the unlawfully operating college or university is shut down. See the list called Public Alert on Substandard Private Universities which is a list containing local chartered universities operating unlawfully by having campuses/affiliated institutions beyond their territorial jurisdiction:

http://www.hec.gov.pk/htmls/hei/public_alert1.htm. The list contains over 100 institutions, and is followed with this statement:

"In addition to above, numerous unlawful universities/institutions are operating in the country, for which the Commission has requested the public sector universities to locate and inform such institutions in their areas of territorial jurisdiction and also its Regional Centres are being asked to make survey of unlawful universities/institutions, thus a nation wide survey is in offing to curtail operations of unlawful universities/institutions".

Admission Requirements

Admission to higher education (undergraduate courses) is based on the Intermediate/Higher Secondary School Examination or equivalent qualification, normally followed by an interview and admission test.

Degree Structure

Undergraduate degree - Bachelor

Traditionally, the Bachelor degrees in arts, science and commerce have been of 2 or 3 years duration following 10 years of schooling and 2 years of secondary study. This structure, referred to as 10+2+2 or 10+2+3, is the old Indian structure and goes back to the time when Pakistan and India were one nation sharing the same educational system.

The 2-year degree, referred to as Bachelor (Pass), consists of three major subjects studied to an equal extent. The 3-year degree is referred to as Bachelor (Honours). Three subjects are studied with one major subject chosen for the last year.

Three Bachelor degrees are based on a previous Bachelor degree (Pass or Honours). These are Bachelor of Law (2 years), Bachelor of Education (1 year) and Bachelor of Library Science (1 year).

The professional bachelor degrees in agriculture, engineering, pharmacy and veterinary medicine are obtained after 4 years of study. Architecture and medicine require 5 years. Among the professional programmes, engineering and technology are the most popular.

4-year bachelor degrees have also been introduced in other fields since private, often US-influenced, universities have established themselves in Pakistan. In addition, The International Islamic University has been offering 4-year bachelor degrees for many years, for example in the field of economics.

Post-graduate degree - Master

One subject in the fields of Arts, Science or Commerce is studied for 1 or 2 years. The duration of the programme depends on the previous degree (to make a total of 4 years). The eligibility requirement is a bachelor degree in a relevant field as specified by the university. The professional master degree is 2 years following a professional bachelor degree in the same field. A thesis is not always required in order to obtain a master degree. This depends on the regulations of the individual university or department.

Research degrees - Master of Philosophy (M Phil)

The Master of Philosophy is a 2-year research degree usually involving course work as well as a thesis. The eligibility requirement is a master degree.

Research degrees - PhD

A PhD is a 3-4 years research degree, usually requiring a master degree as entry level. Some universities, such as the research-oriented Quaid-e-Azam University, require an M Phil for admission. Students with an M Phil finish their PhD in 2 years.

Content of degree programmes

Standard curriculum for Bachelor degree programmes in electrical engineering:

Course	Credits	Course	Credits
1st term		5th term	
Basic Electrical Engineering	4	AC Machines and Drives	4
Electrical Workshop	2	Power System Analysis	4
Applied Calculus	3	Integrated Circuits and Systems	4
Communication Skills	4	Elective 1	4
Islamic Studies	2	Numerical Analysis	3
Ethics	2		
Basic Mechanical Engineering	4		
2nd term		6th term	
Introduction to Computing	4	Power Electronics	4
Electrical Materials & Devices	4	Communication System	4
Basic Civil Engineering	4	Control Systems	4
Linear Algebra Differential Equations & Solid Geometry	3	Elective 2	4
Computer Aided Drawing	2	Elective 3	3
Pakistan Studies	2		
3rd term		7th term	
Network Analysis	4	Microprocessor Based Systems	4
Electromagnetic Field Theory	3	Elective 4	4
Applied Thermodynamics	4	Elective 5	4
DC Machines and Drives	4	Elective 6	4
Complex Variable and Transforms	3	Elective 7	3
4th term		8th term	
Instrumentation and Measurements	4	Elective 8	4
Electronic Devices & Circuits	4	Elective 9	4
Logic Design & Switching Theory	4	Elective 10	4
Probability and Stochastic Process	3	Electrical Engineering Project	4
Engineering Economics and Management	2		
		Total number of credits (May vary from 140 to 150)	147

The curriculum can be found on the HEC website:

http://www.hec.gov.pk/htmls/curriculum/Curriculms_pdf/ELECTRICAL_ENGINEERING.pdf

Standard curriculum for Bachelor degree programmes in computing, revised in 2004:

Area	Credits	
1. Computing Core Areas	37	
2. Supporting Sciences	12	
3. General Education	15	
Total	64/130	
1. Computing Core Areas		
Course	Credits	Proposed semester
Introduction to Computing	3	1
Programming Fundamentals	4	1
Object Oriented Paradigm	3	2
Discrete Structures	3	2

Data Structure and Algorithms	3	3
Digital Logic and Computer Architecture	3	3
Operating Systems	3	4
Database Systems	3	4
Introduction to Software Development	3	5
Computer Communications and Networks	3	6
Senior Design Project	6	7,8
Total	37	
2. Supporting Sciences		
Calculus and Analytical Geometry	3	1
Probability and Statistics	3	2
Linear Algebra	3	4
Physics (Electromagnetism)	3	3
Total	12	
3. General Education		
English Composition and Comprehension	3	1
Technical and Business Writing	3	2
Communication Skills	3	3
Islamic and Pakistan Studies	3	1
Professional Practises	3	8
Total	15	

Computing includes computer science, information technology and software engineering. The curriculum can be found on the HEC website.

http://www.hec.gov.pk/htmls/COMPUTER_SCIENCE_and_IT.pdf.

Several revised national standard curricula are published on the HEC website.

Changing degree structure

As a way of making Pakistani degrees more internationally competitive, HEC has decided that all Bachelor degrees (Pass) and (Honours) of 2 and 3 years' duration shall be phased out gradually, starting in 2003/04. They will be replaced by new Bachelor degrees of 4 years' duration. Professional Bachelor degrees in architecture and medicine, however, will remain at 5 years. All universities have been asked to implement the new structure, and a transition between the two systems is taking place all over the country.

The new structure will affect subsequent degrees. The new degree structure defines the Master degree as 1½ years. The PhD will be 3 years. The new 4-year Bachelor degree is considered to be equivalent to the old Bachelor (Pass) or (Honours) plus a Master, totalling 4 years in all. The duration of study in both cases amounts to 16 years, and this is considered more important than the level of the degree. For the same reason, a new Master is considered equal to an M Phil in the old system since both equal 18 years of study.

The new Bachelor degree will be the lowest degree giving eligibility to PhD studies. Thus, the entrance requirement for a number of newly introduced PhD scholarship programmes, financed by HEC, is a degree awarded after 16 years of study. Some universities, however, require higher qualifications than this.

Students with old 2- or 3-year Bachelor degrees seeking entrance to new Master degrees may be considered eligible after a bridging course/other supplementary assignments as decided by

the university. As an example, Bahria University explained that applicants with a 3-year Bachelor would be eligible after certain supplements.

HEC assists students, employers and universities by certifying equivalence between different degrees.

As indicated above in the section describing the different Bachelor degrees, the system has not been uniform for quite some time, and degrees of varying length have existed side-by-side. There were previous attempts at extending all 2-year Bachelor degrees, but protests from the students proved too strong. The current process of replacing all 2- and 3-year Bachelor degrees will probably take some time, just as it took over forty years for India to remove the 2-year Bachelor degrees from all states. During this time, the multiplicity of the system will remain. The situation may not evolve in the direction that is currently foreseen.

Annual system/credit system

Traditionally, higher education has been structured according to the annual system, with exams at the end of each year (or, at the Bachelor level, often at the end of years 2 and 3). The lack of a credit system has made it difficult for students to move between universities and be awarded transfer credits. Many Pakistani students have also found it difficult to gain admission to post-graduate studies abroad.

As 4-year Bachelor degrees are introduced, education is being restructured from yearly exams to continuous exams, and one final exam ending each term. Credits are awarded for each course. In this respect, the new Bachelor degrees are of the American type. The new degree structure, with the extended Bachelor degree and the introduction of a credit system, is an attempt to make Pakistani education internationally accepted.

The transition between the two systems is taking place all over the country. The annual system of examination and the credit system co-exist in many universities; one department may still be using the annual system while another has reorganized its education and is following the credit system.

HEC has prescribed the typical number of credits required for a 4-year Bachelor degree. This may vary between different programmes, and it is the university that decides the exact number of credits for each programme. In the curricula for Bachelor in Electrical Engineering, for instance, HEC states that the total number of credits may vary from 140 to 150. For a Bachelor in Computing, the typical number of credits is 130.

Exceptions

Examples of degrees with military connections finished in a shorter time than prescribed were discussed during the visits. Bahria University, for instance, offers a programme that leads to the Bachelor of Naval Science degree. The programme is completed in 3½ years. The university confirmed that the programme is equivalent to a 4-year degree. The programme, which is directed at personnel already working in the navy, includes no holidays. Graduates have full eligibility for Master level studies at all other universities.

On a few occasions, applications from students who have changed their field of study completely when moving from bachelor to master level have been seen. The usual case has been a student with a Bachelor of Science proceeding to a Master of Arts. From the different universities' admission criteria, it seems that it is sometimes possible to change in this direction.

Grading system

There is some variety in the grading scales for university examinations. The most typical are as follows:

Division I	60% or higher	or:	A Distinction	90% and above
Division II	45-59.9%		A	70-89%
Division III	33-44.9%		B	55-69%
Fail	below 33%		C	40-54%
			D	33-39%
			E Fail	below 33%

Where grades are given, the marks vary from university to university. According to NOOSR 1992 the variations are slight, though information gathered from six different universities gives another picture. The six universities are:

Quaid-I-Azam University Islamabad (performs teaching and research at M.Sc., M.Phil and Ph.D. levels)

International Islamic University Islamabad

Allama Iqbal Open University

Bahria University

Riphah International University

University of Agriculture Faisalabad

These universities do not use the Division system, but numbers on a point scale from five to eight. All universities use the percentage system and one university (Bahria University) also uses Grade Points.

As a percentage the best mark is 80 – 100% for all universities except Bahria University where 87 – 100% is the best mark. A Fail is below 40% for two universities (University of Agriculture Faisalabad and Allama Iqbal Open University), and below 50% for three universities (Quaid-I-Azam University Islamabad, International Islamic University Islamabad and Riphah International University). Bahria University has below 60% as a fail.

Distance Learning – Open Universities

Distance learning – Allama Iqbal Open University

Allama Iqbal Open University (AIU) was chartered in 1974 and is the only distance-learning university operating in Pakistan. Today students are educated in four faculties at all levels from Bachelor to PhD. The university also awards diplomas at lower levels as well as secondary and higher secondary school certificates. The university is funded by government grants and funds through enrolment fees etc (15%/85% respectively).

Education is given through distance studies and on-line, but the students also meet their teachers regularly in study centres all over the country. Lab work takes place in 35 different locations that the university manages. Most programmes are taught in Urdu, with the exception of post-graduate courses, which are taught in English.

The requirement for degree-level studies is a certificate proving that the applicant has finished his or her studies at the preceding level. Provided this requirement is met, there is open admission and no selection of students. However, at post-graduate level and above, admission is based on selection and merits.

Students who have received a Bachelor degree at AIOU are eligible to apply for post-graduate studies at any other university. Despite the open admissions procedure, graduates are eligible to universities all over the country. Master level programmes at AIOU include 1 year of coursework and 1 year of thesis work.

Chapter 4 Teacher Training

Teacher education in Pakistan is offered in the higher secondary education sector, in the tertiary/university sector and through in-service training for the higher education sector. Teacher education is conducted in institutions under the control of the Provincial Education Departments and Education Extension Centres. Teacher education programmes are offered in Government Colleges of Elementary Teachers, Government Colleges of Education, Institutes of Education and Research, and Departments of Education in universities.

In order to strengthen the quality of teacher education, in 2001 Pakistan implemented a teacher education reform. Under this reform, admission to primary school teachers' colleges (Grades I - VIII) will require either 10 or 12 years of schooling. The students with a matriculation background (10 years of schooling) are required to complete a 3-year teacher-training programme, while students who have passed Grade XII require 1½ years. Candidates obtain a Diploma in Education.

Previously, teachers for Grades I - V were required to complete a minimum of a one-year teacher-training programme. Admission was based on completion of Grade X at minimum. Candidates obtained a Primary Teaching Certificate (P.T.C.). Teachers for Grades VI - VIII had to have 12 years of schooling before being admitted to a one-year teacher-training programme after which they would obtain a Certificate in Teaching (C.T.).

Teachers for secondary education Grades IX - X are required to complete a one-year teacher-training programme for which the admission requirement is a 4-year Bachelor of Arts or Bachelor of Science. The credential awarded is a Bachelor of Education, B.Ed.

Teachers for Grades XI - XII are required to complete a two-year teacher-training programme leading to a Master of Education degree, M.Ed.

The Higher Education Commission (HEC) offers in-service training programmes for University and College teachers. The Federal Board of Intermediate and Secondary Education (FBISE) and HEC are entrusted by the government with all matters concerning teacher education, including quality, content and evaluation within their area of authority.

Competence levels obtained at institutions providing teacher training after 2001 reform.

Level of teachers	Class- level to teach	Final Degree/ Certificate awarded	Admission qualification	Duration	Institutions
Primary school teachers	Grades I - VIII	Diploma in Education Certificate	12 years of education	1½ years	Government colleges, Dep. of. Education at universities, etc.
			10 years of education	3 years	
Secondary school teachers	Grades IX – X	B.Ed., Bachelor of Education	B.A./B.BSc.	1 year	Postgraduate course at university

		degree			
Secondary school teachers	Grades XI – XII	M.Ed., Master of Education degree	B.Ed.	2 years	After B.Ed.: postgraduate course at university
Higher education teachers, in-service training	University and college	Not mentioned	Master's Degree	6 days to 3 months	HEC: Learning Innovation Service

Sources:

- Country Education Profiles : Pakistan, NOOSR, 1992, Canberra, Australia
- World Higher Education Database 2005/6, International Association of Universities, UNESCO House, Paris
- World Education Services, 2004, Toronto, Ontario, Canada

Chapter 5 Islamic Education

General Characteristics

The madrasah system or deeni madaris - religious education institutions focusing on religious law, teachings of the Prophet Muhammad, classical logic, literature and the Koran - operate in parallel with the formal education system.

Madrasah or deeni madaris have existed for centuries in the Islamic world, including in Pakistan. The assessment of the function of the madrasah schools varies. The report “Pakistan, education” by the EC Rapid Reaction Mechanism Assessment Mission, (2002) argued that the schools might open up and collaborate with the outside world. In March 2006, an article in *Le Monde Diplomatique* pointed out a few radical schools but stressed that the rest of schools primarily serve a religious and educational purpose.

At independence in 1947 there were about 245 madrasahs in Pakistan. The number of madrasahs has increased since the rule of General Zia ul-Haq (1977-1988). In April 2002, the Minister of Religious Affairs estimated the number of schools to be about 10,000, with 1.7 million students. This number however is contested; different sources name figures from 600,000 to 2 million students.

The madrasahs are controlled by their own organisations or boards. The boards define the curriculum, and collect registration and examination fees.

Central Boards of Madrasahs in Pakistan			
Name	Sub-sect	Place	Established
Wafq-ul-Madaris-al-Salafia	Ahl-i-Hadith	Faislabad	1955
Wafaq ul Madaris	Deobandi	Multan	1959
Wafaq ul Madaris (Shia) Pakistan	Shia	Lahore	1959
Tanzim ul Madaris	Barelvi	Lahore	1960
Rabta-tul-Madaris-al-Islamia	Jamat-i-Islami	Lahore	1983

Sources:

- *Le Monde Diplomatique*, March, 2006
- Pakistan, education: Report of the EC Rapid Reaction Mechanism Assessment Mission, 2002
- Rahman, Tariq: *The Madrassa and the State of Pakistan Religion, poverty and the potential for violence in Pakistan*. Islamabad Policy Research Institute, 2004

School Education

Madrasah primary schools, called maktab, are usually attached to mosques and provide basic Islamic education, e.g. reading and memorisation of the Koran. Secondary school madrasahs provide advanced instruction in Islamic education.

As for teaching modern subjects, the Ahl-i-Hadith madrasahs have been teaching Pakistan studies, English, mathematics and general science for a long time, according to Tariq Raman, 2004. The Jamat-i-Islami as well as the larger Deobandi, Barelvi and Shia madrasahs also teach secular subjects. Urdu and Arabic are the languages of instruction in the madrasahs.

Madrasahs have their own examination system and award certificates called sanads corresponding to the formal system:

- Hifz/Tajweed-wa-Quiraat/Ibtedayia = Primary School
- Mutawassita = Middle School
- Sanviya Aama = Secondary School Certificate
- Sanaviya Khassa and above = Higher Secondary School Certificate

Holders of the Sanaviya Khassa can either continue to higher education within the madrasah system or in the formal sector.

Madrasahs are mostly run on a charitable basis, the fees charged being small or non-existent. Some madrasahs provide free room and board as well. The Pakistan government gives financial assistance to madrasahs in order to modernise textbooks, including secular subjects in the curriculum such as English, mathematics and introducing computers.

In order to bring the madrasah schools into the mainstream, in 2002 General Pervez Musharraf's military government tried to impose reform on the schools in the form of prescription of foreign students, introduction of modern subjects and the creation of model madaris. Only about 4,350 schools (about one tenth) agreed to register.

The Pakistan government however continues the reform of the madaris and the introduction of formal education that started with the National Education Policy 1998-2010

At the end of 2005, the Pakistan government made it mandatory for madrasahs to be registered, and they have declared that all unregistered madrasahs will be closed, beginning in December 2005.

Sources:

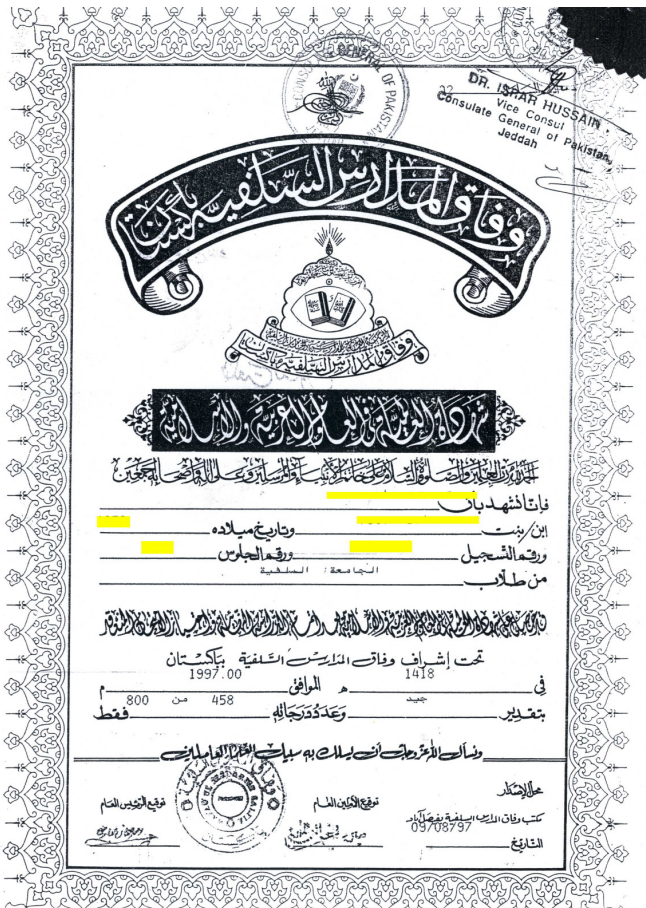
- Education Sector Reforms: Action Plan (2001/2- 2005/6), Ministry of Education, Pakistan
- Rahman, Tariq: The Madrassa and the State of Pakistan Religion, poverty and the potential for violence in Pakistan. Islamabad Policy Research Institute, 2004

Higher Education

As mentioned earlier, it is possible to continue to higher education within the madrasah system.

The document below is a degree certificate issued in Arabic by the Wafq-ul-Madaris-al-Salafiya University belonging to the Ahl-I-Hadith (or Wahabi) sub-sect.

The degree is considered as equivalent to a Master's degree in Arabic and Islam by the University Grants Commission as can be seen in the stamp on the verso of the document.



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The degree is considered as equivalent to a Master's degree in Arabic and Islam by the University Grants Commission as can be seen in the stamp on the verso of the document.

According to the Higher Education Commission, if a document bears their stamp, the degree holder can pursue further studies in the same fields at regular universities or find employment in the relevant fields.

Stamp on the verso of the document:

This Degree is Considered Equivalent to M.A. (Arabic) and M.A. (Islam) under Letter No. 8-418-ACAD - 123 Dated 17-11-82 issued by University Grants Commission Islamabad Pakistan.

Chapter 6 Quality Assurance of Education

Intermediate and Secondary Education

An overall quality assurance body within secondary and higher secondary education with the power to monitor the quality of secondary educational institutions and establish sanctions if the standard of quality is not adhered to does not exist in Pakistan.

The curriculum wing within the Ministry of Education is empowered to work out the central curriculum in co-operation with provincial bureaus of curriculum. The Inter Board Committee of Chairmen (IBCC), established in 1972 under a Resolution of the Ministry of Education, co-ordinates activities of the boards of secondary and higher secondary education and tries to standardise academic, evaluation and curricular standards as well as to implement federal curricular guidelines.

The authority of implementation of curriculum and quality assurance is within the provinces and the boards of secondary and higher secondary education. So the standard varies from province to province as well as from board to board. Additionally, since the boards derive their income from fees from the schools they are supposed to monitor, there may be an incentive for derogation built into the system of control.

The quality of secondary and higher secondary education depends on a lot of factors: economic resources, in-service teacher training facilities, text books, the means of conveying new curricula to all stakeholders, school facilities, teaching methods, teachers' education etc. Government reports, as well as reports prepared by the international community, show that Pakistan is deficient in these respects.

In general, reports about education in Pakistan stress the great differences in quality of secondary and higher secondary education closely linked to the type of school: semi-autonomous schools for the elite, rural and urban government schools, with rural schools in particular lacking equipment and trained teachers, private schools including those established by Non-Governmental Organisations (NGO), for-profit organisations (e.g. private English-language schools) as well as the religious communities.

Federal Board of Intermediate and Secondary Education

The Federal Board of Intermediate and Secondary Education (FBISE) Islamabad, established under the FBISE Act 1975, is an autonomous body of the Ministry of Education. The jurisdiction of FBISE includes Islamabad as well as the whole of Pakistan including federally administered northern areas and overseas. FBISE affiliates around 700 secondary and higher secondary educational institutions, of which some 50 are based in other Islamic countries.

It is empowered with administrative and financial authority to organise, regulate, develop and control intermediate and secondary education and conduct examinations in the institutions affiliated with it.

In addition to FBISE, there are 25 provincial boards affiliating schools across the country.

The criteria for affiliation of schools are based on prescriptions regarding facilities, staff qualifications and educational conditions. For example, the principal of a higher secondary school should hold a second class master's degree (MA/MSs), preferably MEd, while a teacher/lecturer should hold a second class master's degree or an equivalent qualification in the relevant subject.

Besides rules for affiliation, FBISE conducts inspection of the institutions. An affiliation can be withdrawn. The activities of FBISE are mostly financed by fees from the affiliated schools. FBISE is cooperating with the English organisation EDEXCEL in order to have qualifications recognised as UK qualifications.

During the visit to FBISE, the delegation was given a very fine presentation of the Board and its quality assurance system, but had very little opportunity to ask questions. We left the FBISE with a lot of questions: strength and weaknesses of a fee-based system of affiliation, the nature of the FBISE's inspections, the abilities of the affiliated institutions to ensure qualified teachers, quality differences between the different affiliated institutions and streams of education etc. We would have liked to have confronted FBISE with the knowledge we had obtained from written sources regarding lack of qualified teachers, lack of in-service training of teachers, lack of facilities and the ability of the FBISE and the FBISE institutions to overcome those serious difficulties.

Higher Education

Pakistani authorities are very concerned about the development of their higher education system and in particular about improving the quality of higher education. To help achieve their ambitions, as mentioned earlier, the Higher Education Commission (HEC) was set up in 2002.

HEC replaced the University Grants Commission which, until 2002, was the only body in the country with responsibility for ensuring quality in education. This was done mainly by setting standards for the curricula for different programmes at different levels in higher education and by having responsibility for the bulk of the provision of capital and equipment grants for the institutions.

HEC has been given a broad mandate to develop and improve higher education and research. Good quality in higher education is an essential part of this. Therefore the establishment of a quality assurance and accreditation system is one of the Commission's many important remits.

In addition to the establishment of a quality assurance system, many of the other tasks that HEC has implemented contribute to the development of quality in higher education in the country; for instance, the standardization of 4-year undergraduate programmes and programmes for curriculum development where HEC is responsible for overseeing curriculum revision work at all levels in higher education. Also noteworthy is the programme for faculty development, where substantial emphasis is placed on developing a strong base of faculty members holding PhDs. This involves development of scholarship programmes for students to attain PhD degrees both in Pakistan and abroad. Refresher courses mainly for young teachers have been initiated. These courses are of three months' duration and cover teaching and learning skills. Programmes for hiring foreign academics to teach and do research in the country are also of great importance for the development of quality in education.

Quality Assurance Programme

According to information from HEC's website, the mission of the Quality Assurance Programme is to provide an integrated quality and assurance management service for higher learning. The objectives are:

- To analyse the gaps in the context of quality of higher education in Pakistan
- To meet the challenges of global compatibility in higher education
- To improve the standards of higher learning in cross-cutting areas
- To develop a viable and sustainable mechanism of quality assurance in the higher education sector of the country

An advisor of Quality Assurance in HEC is responsible for launching the Quality Assurance Programme.

Quality Assurance Committee

Under the Quality Assurance Programme, a Quality Assurance Committee was established in 2003. The committee is composed of Vice Chancellors from different universities with the aim of having representation from smaller and medium universities and universities for women and to ensure geographical equality. The Committee has an extensive mandate to ensure the evaluation, improvement and promotion of higher education. The Committee formulates policies, guiding principles and priorities for higher education institutions, prepares plans for the development of the institutions (in cooperation with the institutions) and sets up national or regional evaluation councils to carry out accreditation of institutions. The mandate of the committee can be found at: <http://www.hec.gov.pk/quality/Mandate.htm>

One of the first tasks of the committee was to decide on the Ranking of Universities. The reason for this decision was to: “promote positive competition and foster improvement in standards of higher education programmes”; see ranking criteria, <http://www.hec.gov.pk/quality/University%20Ranking%20Criteria.htm>. New criteria for the award of PhDs have also been developed; see <http://www.hec.gov.pk/quality/Criteria%20for%20PhD%20Programme.htm>.

Quality Assurance Agency (QAA)

A Quality Assurance Agency has been established, with the following aims:

- QAA will organise capacity building training/seminars and workshops on a regular basis to enable the higher education institutions of Pakistan to meet the global challenges of Quality Assurance in higher learning.
- The Agency will develop policies and guidelines to assure that the quality of higher education is improving at the same level and pace within the country.
- Professionals from QAA will serve as master trainers to build capacity in professionals in the Quality Enhancement Cells (QECs).
- QAA will also be a monitoring and regulatory body to focus on quality and implementation of all desired measures and policies to improve the standards of higher education in Pakistan.

The Agency shall regulate and facilitate the work of the Quality Enhancement Cells (QECs) which will gradually be organized in all Pakistani universities. In the first phase, ten QECs will be established at ten different universities. The remaining universities will be catered for

in the next phases. The QEC will serve as a focal point for Quality Assurance in higher learning. The following universities were selected for the establishment of QECs:

1. University of Karachi, Karachi
2. Liaqat University of Medical & Health Sciences, Jamshoro, Sindh
3. The University of Azad Jammu & Kashmir
4. University of Agriculture, Faisalabad
5. University of the Punjab, Lahore
6. University of Engineering & Technology, Lahore
7. University of Peshawar, Peshawar
8. University of Baluchistan, Quetta
9. Quaid-e-Azam University, Islamabad
10. National University of Science & Technology, Rawalpindi

Accreditation councils

“According to the Powers and Functions of the Commission as stated in "Ordinance No. LIII of 2002, Para 10, Clause e" the Higher Education Commission may set up national or regional evaluation councils or authorize any existing council or similar body to carry out accreditation of Institutions including their departments, facilities and disciplines by giving them appropriate ratings. The Commission shall help build capacity of existing councils or bodies in order to enhance the reliability of the evaluation carried out by them.”

Accreditation councils have been established for computing and engineering, and councils are planned for agriculture, business and education.

National Computing Education Accreditation Council (NCEAC)

NCEAC shall ensure the quality of education students receive in subjects in applied sciences, computing, engineering and technology education in the universities and institutions of higher education in Pakistan.

The objectives of the council are to assure quality in computing degree programs in educational institutions by assuring that programmes meet certain defined standards or criteria. It shall be mandatory for all relevant academic programmes offered by public and private sector institutions to be accredited by NCEAC. It is also an objective to ensure transparency of comparable study programmes.

Sources

Handouts or prospectus from the universities visited:

Quaid-I-Azam University Islamabad

International Islamic University Islamabad

Allama Iqbal Open University

Bahria University

Riphah International University

Higher Education Commission (HEC) *Programme and Initiatives*, Higher Education Commission, Islamabad.

Higher Education Commission (HEC), *Quality Assurance Division*,
<http://www.hec.gov.pk/quality/Quality%20Provision.htm>.

Higher Education Commission (HEC), *Newsletter October 2005*, HEC, Islamabad.

Higher Education Commission (HEC), *Handouts Developing Knowledge Economy*, Prof. Dr. Mukhtar Ahmed HEC, Islamabad.

Higher Education Commission (HEC), *Public Alert on Substandard Private Universities*,
http://www.hec.gov.pk/htmls/hei/public_alert1.htm.

International Association of Universities (IAU), *Online Databases*,
<http://www.unesco.org/iau/onlinedatabases/index.html>.

Ministry of Education, *National Education Policy 1998 - 2010*, Policies and Plans,
<http://www.moe.gov.pk/>.

Ministry of Education, *Perspective Plan 2001 - 2015, Education Sector Reforms*, Policies and Plans <http://www.moe.gov.pk/et1.htm>.

National Computing Education Accreditation Council (NCEAC),
<http://www.nceac.org/>.

National Office of Overseas Skills Recognition (NOOSR1992) *Country Education Profiles – Pakistan*, Department of Employment, Education and Training, Australian Government Publishing Service, Canberra.

Website University of Agriculture Faisalabad
http://www.uaf.edu.pk/ad/s_dept/chemistry.htm.

World Education News and Reviews (WENR), *Cooperation in Quality Assurance: Developments in Asia and the Pacific*, Antony Stella PhD (October 2005), World Education Services (WES) New York.

World Education News and Reviews (WENR), *International Grade Conversion Guide for Higher Education*, World Education Services (WES) New York.

World Education News and Reviews (WENR), *Private Universities in Pakistan*, Robert Sedwick, editor WENR (January/February 2005), World Education Services (WES) New York.

Presentations

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Prof. Dr. Mukhtar Ahmed, Member Operations and Planning, Higher Education Commission, Islamabad.

Dr. Riaz Qureshi, Adviser Quality Assurance &LI, Higher Education Commission, Islamabad.

Prof. Dr. Altaf Ali G. Shaikh, Adviser, Higher Education Commission, Islamabad.

Cdre. Muhammad Sharif Shamshad, Chairman, Federal Board of Intermediate and Secondary Education (FBISE), Islamabad.

Prof. Dr. Khawaja Azam Ali, Vice-Chancellor, Quaid-i-Azam University Islamabad.

Prof. Dr. S. Altaf Hussain, Vice-Chancellor Allama Iqbal Open University, Islamabad.

Mr. Justice (Retd) Khalil-ur-Rehman Khan, Rector, International Islamic University, Islamabad.

Vice-Admiral Fayyaz-ur-Rahman, Rector, Bahria University, Islamabad.

Prof. Dr. Anis Ahmad, Vice-Chancellor, Riphah International University, Islamabad.

Web links/Official links

General information about education system in Pakistan

<http://www.moe.gov.pk> – Ministry of Education, Government of Pakistan

http://www.hec.gov.pk/htmls/second_n.asp - Website to Higher Education Commission (HEC)

<http://www.geocities.com/Athens/Parthenon/8107/univ.html> - List of Universities

http://www.hec.gov.pk/htmls/HEIRecg_main.htm - List of HEC Recognized Institutions/Colleges

<http://www.wes.org/ewenr/05jan/feature.htm#Pakistan> – Education System

<http://www.hec.gov.pk/htmls/NMnews.htm> - Newsletter from Higher Education Commission (HEC)

<http://www.hec.gov.pk/htmls/revcurrmain.htm> - Curriculum Review (HEC)

<http://www.tfhe.net/about/about.htm>

<http://www.tfhe.net/resources/pakistan.htm#taskforcehere>

Quality Assurance

<http://www.hec.gov.pk/quality/Mandate.htm>

<http://www.hec.gov.pk/quality/Quality%20Assurance%20Programme.htm>

<http://www.tfhe.net/resources/pakistan.htm> fra 2002.

Ranking

<http://www.hec.gov.pk/quality/University%20Ranking%20Criteria.htm>

Criteria for PhD program

<http://www.hec.gov.pk/quality/Criteria%20for%20PhD%20Programme.htm>

Appendix 1: Private Universities in Pakistan

Category (A) University/Institutions Meeting Major Requirements

Foundation University, Islamabad
National University of Computer & Emerging Sciences (FAST), Islamabad
Riphah International University, Islamabad
Lahore University of Management Sciences, Lahore
Lahore School of Economics, Lahore
Aga Khan University, Karachi
Hamdard University, Karachi
Institute of Business Management, Karachi
Ghulam Ishaq Khan Institute of Engineering & Technology, Topi

Category (B) University/Institutions with Minor Shortfalls, Expected to Meet the Cabinet Criteria by 2007

Institute of Management Sciences, Lahore
Institute of South Asia, Lahore
National College of Business Administration & Economics, Lahore
University of Central Punjab, Lahore
University of Lahore, Lahore
University of Management and Technology, Lahore
Baqai Medical University, Karachi
Indus Valley of Arts & Architecture, Karachi
Institute of Business & Technology, Karachi
Iqra University, Karachi
Isra University, Hyderabad
Sir Syed University of Engineering & Technology, Karachi
SZABIST, Karachi
Textile Institute of Pakistan, Karachi
Zia ud Din Medical University, Karachi
CECOS University of Information Technology & Emerging Sciences, Peshawar
Gandhara University, Peshawar

Category (C) University/Institutions Not Meeting the Requirements

Hajvery University, Lahore
Imperial College of Business Studies, Lahore
Superior College, Lahore
Gift University, Gujranwala
University of Faisalabad, Faisalabad
Greenwich University, Karachi
Jinnah University of Women, Karachi
Karachi Institute Economics & Technology, Karachi
Khadim Ali Shah Bukhari Institute of Technology, Karachi
Muhammad Ali Jinnah University, Karachi
Qurtaba University of Science & Information Technology, D.I.Khan

Category (D) University/Institutions Seriously Deficient

Dadabhoy Institute of Higher Education, Karachi

Preston University, Karachi

DHA Suffa University, Karachi

Nazir Hussain University, Karachi

Newport Institute of communication & Economics, Karachi

Preston Institute of Management & Technology, Karachi

Sarhad University of Science & Information Technology, Peshawar

Preston University, Kohat

City University of Science & Technology, Peshawar

Northern University, Nowshera

Iqra University, Quetta

Appendix 2: Recognition of Degrees from Pakistan in Denmark, Norway and Sweden

Norway

Pakistan	Norway
Completion of the first year of university education	Access to higher education
Bachelor Degree (2 years)	Recognized as equivalent to 60 ECTS credits at Bachelor degree level
Bachelor Degree (3 years)	Recognized as equivalent to 120 ECTS credits at Bachelor degree level
Bachelor Degree (4 years)	Recognized as equivalent to Bachelor Degree / 180 ECTS credits
Bachelor of Education (1 year) before 1993	Not recognized as higher education
Bachelor of Education (1 year) 1993-1998	Recognized as equivalent to 30 ECTS credits at Bachelor Degree level
Bachelor of Education (1 year) 1999-now	Recognized as equivalent to 60 ECTS credits at Bachelor Degree level
Bachelor Degree (2 years) + Master Degree (2 years)	Recognized as equivalent to Bachelor Degree / 180 ECTS credits
Bachelor Degree (3 years) + Master Degree (2 years)	Recognized as equivalent to Bachelor Degree plus 60 ECTS credits at Master Degree level
Bachelor Degree (4 years) + Master Degree (2 years)	Recognized as equivalent to Bachelor Degree /180 ECTS credits plus Master Degree /120 ECTS credits, in total 5 years higher education / 300 ECTS credits
Bachelor Degree (3 years) + Master Degree (2 years) + Ph.D. (3years)	Recognized as equivalent to Bachelor Degree /180 ECTS credits plus Master Degree /120 ECTS credits plus 120 ECTS credits at Doctoral Degree level

Bachelor Degree (4 years) + Master Degree (2 years) + Ph.D. (3years)	Recognized as equivalent to Bachelor Degree /180 ECTS credits plus Master Degree /120 ECTS credits plus Ph.D. / 180 ECTS credits
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Denmark

Pakistan	Denmark
Higher senior certificate (12 years of schooling) before 2005 + 2 years of higher education	Access to higher education
Higher senior certificate (12 years of schooling) from 2005 + 1 years of higher education	Access to higher education
Bachelor Degree (2 years)	Upper secondary examination – from 2007 upper secondary examination or 1 year of a Danish Bachelor Degree
Bachelor Degree (3 years)	1 year of a Danish Bachelor Degree – from 2008, 1 or 2 years of a Danish Bachelor Degree
Bachelor Degree (4 years)	2 years of a Danish Bachelor Degree, eventually a Danish Bachelor Degree or Professional Bachelor Degree (new qualifications)
Bachelor Degree (2 or 3 years) + Master Degree (1 or 2 years) – in total 4 years of higher education	2 years of a Danish Bachelor Degree, eventually a Danish Bachelor Degree or Professional Bachelor Degree (new qualifications)
Bachelor Degree (2 or 3 years) + Master Degree (1 or 2 years)	4 years of a Danish Candidatus Degree, eventually a Danish Candidatus Degree in case of a written thesis and 6 years of studies
Master of Philosophy (1 or 2 years)	Individual assessment
Ph.D. (3 or 4 years)	Individual assessment

Sweden

Pakistan	Sweden
Bachelor Degree (2 years)	Not considered as comparable to a Swedish degree
Bachelor Degree (3 years)	Högskoleexamen
Bachelor Degree (4 years)	Kandidatexamen
Bachelor of Engineering Degree (4 years)	Högskoleingenjörsexamen
Bachelor Degree (2 years) + Master Degree (2 years)	Kandidatexamen
Bachelor Degree (3 years) + Master Degree (1 years)	Kandidatexamen
Master of Philosophy	No natural counterpart
Doctor Degree	Doktorexamen
<p>One of the problems that arise when evaluating Pakistani degrees in the Swedish context is the different structures of the two systems. A Pakistani degree might cover many different subjects whereas a Swedish degree requires a certain depth.</p> <p>In cases where applicants have a second bachelor degree, such as the Bachelor of Education, this does not necessarily make any difference in the evaluation statement since the extra year does not add enough depth in one subject. When the first degree is compared to a högskoleexamen, an extra year does not add enough depth in one subject to make it possible to change to comparison to a kandidatexamen.</p>	

Appendix 3: Participants

Danish ENIC/NARIC

Danish Centre for International Cooperation in Mobility and Training (CIRIUS)

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E-mail: vh@CiriusMail.dk

Norwegian ENIC/NARIC

Norwegian Agency for Quality Assurance in Education (NOKUT)

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Swedish ENIC/NARIC

Swedish National Agency for Higher Education (Högskoleverket)

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Experts from Norwegian educational institutions

Ingebjørg Birkeland, Policy adviser

Center for International Cooperation in Higher Education – SIU

Rita Kumar, Adviser

The Norwegian University of Science and Technology – NTNU

Appendix 4: Study Tour Programme

Programs of NORRIC's Study Visit to Pakistan and India September 24 – October 5 2005

Islamabad 26 – 27 September

Monday 26 September

9.30 - 11.30. - Visit to Higher Education Commission (HEC)

Introduction of HEC Programs by Prof. Dr. Mukhtar Ahmad, Member (O&P), HEC

11.45 - 12.30 Federal Board of Intermediate & Secondary Education (FBISE) Cdre. (R) Muhammad Sharif Shamsad, Chairman

13.30 - 14.00 Meeting with Secretary of Federal Education Minister

Tuesday 27 September

9.00 - 11.30 - Visit to Higher Education Commission (HEC)

1. Presentation by Head of Norwegian Delegation

2. Presentation by Dr. Khawaja Azam Ali, vice-Chancellor, Quaid-i-Azam University (QAU)

3. Presentation by Prof. Dr. S. Altaf Hussain, vice-Chancellor, Allama Iqbal Open University (AIOU)

4. Presentation by Mr. Justice (Retd) Khalil-ur-Rehman, rector, International Islamic University (IIU)

5. Presentation by Vice-Admiral Fayyaz-ur-Rahman, rector, Bahria University (BU)

6. Presentation by Dr. Anees Ahmad, vice-Chancellor, Riphah International University (RIU)

11.45 – 18.30 Visit to higher education institutions

1. Meeting with Prof. Dr. Khawaja Azam Ali, vice-Chancellor + visit of different Departments at QAU

2. Meeting with Prof. Dr. S. Altaf Hussain, vice-Chancellor + visit of different Departments at AIOU

3. Group I: Meeting with Mr. Justice (Retd) Khalil-ur-Rehman + visit of different Departments at IIU

4. Group-II: Meeting with vice-Admiral Fayyaz-ur-Rahman, Rector + visit of different Departments at BU

5. Meeting with Dr. Anees Ahmad, vice-Chancellor + visit of different Departments at RIU

New Delhi 28 September – 3 October

Thursday 29 September

1. 10.00 – 11.30 Presentation by Shri Ashok Ganguli, director, Central Board of Secondary Education

2. 11.30 – 13.00 Presentation by Prof. A.K.Dubey, registrar, University of Delhi

3. 13.00 - 13.30 Presentation by Dr. Kavita A. Sharma, principal + visit to different departments at Hindu College (an affiliated college to University of Delhi)
4. 15.30 – 17.30 Presentation by Prof. Damodar Acharya, chairman & Prof. R.A. Yadav, vice-chairman, All India Council of Technical Education

Friday 30 September

- 10.00 – 10.30 Meeting with HRD Mrs. Anupama Bhatnagar, Deputy secretary, Department of Education, Government of India
- 10.30 – 11.30 Meeting with Royal Norwegian Embassy, Inge Tveite, Counsellor
- 12.00 – 15.30 Presentation by Dr. S. Chandrasekaran, coordinator for evaluation + visit to different departments at Jawaharlal Nehru University
- 15.30 – 17.30 Presentation by Dr. Shardindu, Chairperson, National Council for Teacher Education

Saturday 1 October

- 10.30 – 12.00 Presentation by Prof. M.A. Beg, registrar + visit to the hospital of the university at Jamia Hamdard University

Monday 3 October

1. Presentation by Pro Vice Chancellor and Prof. A.S. Narang, registrar + visit to departments, laboratory and television studio at Indira Gandhi National Open University
2. Presentation by Prof. Ved Prakash, secretary general at University Grants Commission
3. Presentation by Prof. Dayanand Dongaonkar, secretary general at Association of Indian Universities

Bangalore 4 – 5 October

Tuesday 4 October

- 9.00 – 12.00 Presentation by Prof. V.S. Prasad, director, + visit to the library and offices at National Assessment and Accreditation Council (NAAC)
- 13.00 – 16.00 Presentation by Prof. Rahul Pandit, director (International relations Cell), Indian Institute of Science

Wednesday 5 October

- Group 1: 9.00 – 12.00 Presentation by Vice-Chancellor + visit to different departments at Bangalore University
- Group 2: 9.00 – 10.30 Presentation by Prof. N. Sundararajan, principal + visit to different departments at Sri Bhagavan Mahavir Jain College
- 10.30 – 12.00 Presentation by Samt. Sobha Nambisan IAS of Department of Education, principal secretary, Government of Karnataka State