This is the second seminar report in the sixth cycle of the UNESCO-APEID (Asia-Pacific Program of Educational Innovation for Development) Program on Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region. The seminar focused on ensuring opportunities for the professional development of teachers. Experts from 10 Asian countries presented papers on the current situation in their countries: "Developments in Teacher Education in Asia and the Pacific: Issues and Prospects Towards the 21st Century" (Rupert Maclean); "Professional Development of Teachers in Bangladesh" (Rezina Sultana); "Ensuring Opportunities for the Professional Development of Teachers - Country Report - China" (Liao Shuli); "Ensuring Opportunities for the Professional Development of Teachers: Country Report - India" (Anil Kumar Gulati); "Ensuring Opportunities for the Professional Development of Teachers in Indonesia" (Rochman Natawijaya); "Country Report Japan" (Yoshinori Tabata); "Ensuring Opportunities for the Professional Development of Teachers: The Malaysian Experience" (Haji Ahmad Bin Mohamad Said); "Ensuring Opportunities for the Professional Development of Teachers in Nepal" (Keshaba Nanda Giri); "Education and Professional Development of Teachers in Pakistan" (Mohammad Ibrahim Khan); "The Striving and the Struggle for Teacher Development: The Contexts, Issues, Trends, and Opportunities in In-Service Teacher Training in the Philippines" (Allan B.I. Bernardo); "Ensuring Opportunities for the Professional Development of Teachers in Thailand" (Mayuree Charupan); "Key Approaches to the Development of Teachers Teams in Vietnam" (Dao Nhu Trang); and "General Comments" (Rupert Maclean). (SM)
1998

Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region:

Ensuring Opportunities for the Professional Development of Teachers

1998 Seminar Report

UNESCO-APEID Associated Centre
Hiroshima University, Japan
Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region:

Ensuring Opportunities for the Professional Development of Teachers

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Preface

This is the second seminar report in the Sixth Cycle of the UNESCO-APEID (Asia-Pacific Program of Educational Innovation for Development) programme on Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region. This year's seminar, held in September 1998, focused on ensuring opportunities for the professional development of teachers.

Eminent experts from 10 Asian countries presented papers on the current situation in their respective countries. This year, we were honored to receive a participant from Vietnam for the first time, a sign of the increasing importance attached to UNESCO-APEID activities.

The various presentations showed that there is a plethora of programs and ideas present in the Asia-Pacific to ensure opportunities for the professional development of teachers. However, looming large in the background were the economic setbacks that struck the region in 1998, and which meant a reorientation of many priorities, including those related to teacher education.

A number of the action-plans produced by the participants of the Seminar, already show signs of a new realism that has appeared in many parts of the region. New, cost-effective programs are more and more necessary, but still need to produce the largest possible results. Sustainability has become more and more part of policy-formulation in many of the participating countries. Teachers in many of the regions are required to take more responsibility for their own professional development, as administrations try to deal with shrinking budgets.

The 1998 Hiroshima UNESCO-APEID Seminar has once again shown the importance of international cooperation and the regular exchange of ideas and experiences. Readers of this report will see that many of the participating countries face similar problems with teacher development, and can learn from each other. The Hiroshima University UNESCO-APEID Associate Center hopes that this report will contribute to the dissemination of information on teacher education in the Asia-Pacific and provide policy-makers, researchers and students with valuable information on the current state of affairs concerning the professional development of teachers.

Higashi-Hiroshima, March 1999,

Yoshinori Tabata
Seminar Committee Chairperson

Lyckle Griek
Editor
Introduction

1. Objectives of the Seminar

The 1998 Hiroshima University UNESCO-APEID Seminar was, as in previous years, jointly organized by the Hiroshima University UNESCO-APEID Committee, the Japanese National Commission for UNESCO and the UNESCO Principal Regional Office for the Asia and the Pacific (PROAP) in Bangkok.

Within the Sixth Cycle (1997-2001) of the APEID Programme at Hiroshima, which focuses on innovation and reform in Teacher Education for the 21st Century in the Asia-Pacific Region, this year's seminar was the second. The focus of the 1998 seminar was on ensuring opportunities for the professional development of teachers.

Many countries in the Asia-Pacific Region have experienced rapid economic growth, as well as far-reaching changes in their societies. In order to, not only sustain this economic development and pursuance of a better quality of life, but also to solve problems such as poverty, conflict, and protection of the environment in the approaching 21st century, education needs to be improved continuously.

The quality of education, needless to say, depends to a large extent upon the quality of teachers. In many countries, however, negative trends are observed with regards to the conditions of teachers, which require thorough examination in order to secure effective education.

On the basis of this situation, the following objectives were formulated for the 1998 Seminar.

- Identification and exchange of key experiences concerning current problems and issues related to teachers' competencies, teacher needs and demands, and opportunities for the professional development (or in-service programs) of teachers in urban, rural, and remote areas,
- Exploration of innovative methods and approaches presently employed, to provide opportunities for the professional development of teachers, and
- Design and improvement of national and international cooperative frameworks and action plans to increase opportunities for professional development of teachers.

2. Rationale

UNESCO-APEID has recommended concrete action for upgrading and renewal of education through the enhancement of knowledge, skills, and attitudes of teachers. In particular, the quality of interaction between teachers and students is critical for the success in education.
To enable this, capable people need to be recruited into the teaching profession. Furthermore, high quality programs need to be provided to prospective teachers in preservice education and opportunities for in-service education and professional development must be ensured to enable teachers in field to constantly upgrade their knowledge and skills. In order to attract capable people into teaching the profession must have certain status, both socially and economically.

In many aspects, however, the situation seems to have been deteriorating. In recent years negative trends have been observed, causing many capable and qualified teachers to leave their profession. Trends such as these suggest that relevant problems and issues concerning teacher education programs need to be examined comprehensively in order to improve the quality of teachers effectively.

3. This Report

The report consists of three parts. In the first part, Dr. Rupert Maclean, Chief of the Asia-Pacific Centre of Educational Innovation and Development (ACEID) describes the current activities and aims of the Asia-Pacific Programme for Educational Innovation and Development (APEID) and the issues at hand with regards to Teacher Education.

The second part contains the country-reports submitted by 11 countries, Bangladesh, China, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines, Thailand and Vietnam presented at the 1998 Seminar. Furthermore, it includes general comments made by Dr. Maclean on the basis of the presentations.

The third and final part includes the "Action Plans" that each of the participant made during the seminar, on the basis of a number of excursions to Japanese educational facilities and discussion of the various Country Reports. The Action Plans are meant to provide an outline for development of teacher education in each of the participating countries, while drawing upon the experiences of the Asia-Pacific Region as a whole.
Developments in Teacher Education in Asia and the Pacific: Issues and Prospects towards the 21st Century

Rupert Maclean

Director a.i. UNESCO Bangkok, and Chief of the Asia-Centre of Educational Innovation for Development (ACEID), UNESCO Principal Regional Office for Asia and the Pacific, Bangkok

1. Introduction: The Asia-Pacific Region

Good morning, ladies and gentlemen. On behalf of UNESCO Bangkok, and also on my own behalf, I would like to congratulate Professor Tabata and the members of the APEID Organizing Committee at Hiroshima University for so efficiently making arrangements for this important and timely Regional Conference on Teachers and Teacher Education at Hiroshima University. I would also like to say that UNESCO's Asia-Pacific Centre of Educational Innovation for Development (ACEID) in Bangkok is delighted to be involved with this important meeting.

Ladies and Gentlemen,

It is, I believe, worth pondering for a moment the characteristics of the Asia-Pacific region in which most of us attending this International Conference on Teacher Education live and work, in order to establish an appropriate context for examining teachers and teacher development (See World Education Report, 1998c, Chapter 1).

The region of Asia and the Pacific, which is home to 63% of the world's population of almost 6 billion, is outstanding for the vast range of diversities which encompass almost all aspects of life, whether it be geographical, socio-economic, cultural, political or developmental.

There are in the region countries of vast landmasses (China, India, and Australia) and also island countries lying in vast ocean areas (the Maldives; and Pacific Islands). Countries with the largest populations (China - 1.2 billion; India - 973 million), and the most rapidly growing mega-cities, are to be found in the region, as are countries with relatively small populations (Bhutan 600,000; Niue 1,800).

From UNESCO's Bangkok's point of view the theme of this conference, "Teaching Effectiveness and Teacher Development in the New Century", is particularly appropriate and important at the current time. One of the reasons is that concerns about teacher recruitment,
professional development and teacher effectiveness have been identified by Education Ministers of the 43 countries in the Asia Pacific region that are members of UNESCO, and with whom we consult on a regular basis, as being ones that are of particular importance and concern at the current time.

The levels of economic development also vary widely, with some of the richest countries (such as Japan) and some of the poorest countries on earth (such as Bangladesh).

The region also faces some of the major problems facing mankind at the current time. For instance, there are estimated to be a total of 625 million illiterates in the Asia-Pacific region: 71% of the world's total, of whom 64% are women and girls.

By 2000 it is estimated that there will be 74 million out-of-school children in the 6-11 years age group in developing countries in Asia-Pacific region.

Some of the wide disparities that exist in Asia are particularly disturbing. For instance, in South Asia the literacy rate is 42% compared to 72% in East and South East Asia; while in South Asia, life expectancy is 10 years lower than for those living in East and South East Asia.

Ladies and Gentlemen,

This diversity in demography, economy, geography, ecology and culture within the Asia-Pacific region presents challenges for international aid agencies such as UNESCO. UNESCO's mission for the region encapsulates this development-disparity duality:

UNESCO is committed to consolidating the dynamism and economic growth the region has (until recently) experienced over the past three decades, but it recognizes its ethical mission to complement this growth by addressing the threats to the peace, security and equitable development of this region. There is a widening disparity of opportunity, wealth and empowerment, between and within nations leading to social injustice, discrimination and deprivation of human rights, and an alarming degradation in the quality of individual lives, of communities and societies and of natural environments in many areas of the region. (UNESCO, 1997, p.1)

This mission statement establishes the context within which the matter of teacher education and development in the Asia-Pacific region will be examined in this paper.

Despite such mammoth problems and such diversity there is a common thread in that all countries in our region believe that in order to achieve poverty eradication, sustainable human development, and equity in all respects, there is a need to make greater efforts to improve the quality, effectiveness and relevance of education and schooling.
2. Importance of Teachers

As the present century draws to a close, education has emerged at the forefront of the world's concerns over its own future. The challenges of the coming century to eliminate poverty, achieve equity and justice in all respects, and ensure sustainable development and lasting peace, will fall to today's young people, and so educating the young to meet these challenges has become a priority objective for every society. In this regard, the teacher is seen as being the cornerstone of education development. In the view of the International Commission on Education for the Twenty-First Century (Delors Report, Learning: The Treasure Within, 1996, p. 141): "much will be expected and much demanded, of teachers" in the coming century.

The teaching force

In terms of their sheer numbers, teachers are an important occupational group that warrants our attention. For example: there are currently 57 million teachers in the world's formal education systems, while 30 years ago there were 16 million and in a majority of countries, school teachers are the largest single category of public sector employees, and the largest group of people engaged in professional and technical occupations. (World Education Report, p. 22)

Indeed, some researchers argue that it is because of the large number of personnel involved that it is difficult to give teachers a status similar to smaller technical and professional groups such as doctors, lawyers and engineers. Thus in many of our countries, teachers have a semi-professional rather than a full professional status.

In terms of our region, one out of every two teachers in the world today lives in the Asia-Pacific, and of these teachers 64% are in less developed countries, 23% are in more developed countries while 13% are in countries in rapid transition, such as the five Central Asian Republics, Vietnam, and Mongolia. (World Education Report, 1998c, p.28)

In fact, a growing percentage of the world's teachers are employed in the world's less developed countries, as these countries pursue a policy of expanding the teaching service to achieve the goals of education for all, the universalization of primary education and universal literacy.

However, despite their importance worldwide, teachers are facing major problems that threaten the effectiveness and quality of education systems.

Professional importance into the future

Many variables, as we well know, influence the effectiveness of a nation's school system. Adequate school buildings and classrooms; a relevant curriculum; high quality and affordable
Ensuring Opportunities for the Professional Development of Teachers

teaching and learning materials such as textbooks, writing materials and laboratory equipment; and an accurate system for monitoring education outcomes are all important. However, there is clear evidence to show that the bottom line is that the quality of any education system ultimately depends on the knowledge, skills and understandings of teachers. In the words of the Delors Report, “Good schools require good teachers”, and so the matters of the status of teachers, teacher recruitment, pre-service teacher education, the professional career-long development of teachers, and the provision of suitable financial and other rewards to attract and keep suitable individuals in the occupation of teaching, are receiving great attention from policy-makers and policy implementers in countries throughout our region, and indeed throughout the world. It is therefore essential that the most capable and appropriate people are recruited into the occupation, and provided with career-long professional development to ensure they continuously update their capability to do the very best job possible in the school and classroom.

There is currently considerable world-wide apprehension about both the present and future situation regarding the place of teachers in a changing world. Even more will be expected of teachers in the future in providing pupils with ethical training, training for tolerance, citizenship, creative thinking and the ability to manage uncertainty. Yet, as the Delors Report (1996) suggests, at a time when the expectations for teachers have never been greater, in terms of the increasingly diverse nature of the teachers’ role, the economic and social status of teachers in many parts of the world, including the Asia-Pacific, is in severe decline.

Teachers have a major role to play in the process of educational reform and educational change. If the educational reforms initiated by governments to achieve “education for all” and to confront the challenges of the future, such as the effective use of new educational technologies, are to be effective, they must reach the school and classroom. Awareness of this fact means that the teacher plays the key role in the process of transforming education. It is not possible effectively to reform education systems without taking teachers into greater consideration. (Ordonez and Maclean, 1997)

Clearly, therefore, one of the major education challenges currently facing countries, is to attract, and then keep, the most able people in the teaching service: this requires great attention to finding ways to increase the status of teachers, improve their working conditions and provide appropriate salary levels. These should reflect the important role teachers play in social, economic, cultural and technological development. It is now widely recognized by most governments in our Asia-Pacific region that if our children are to have the high quality education, which they and our countries deserve, teachers must receive greater attention. (UNESCO, 1999)
3. Changing Status and Profile of Teachers: Some Common Issues and Concerns

Every two years, UNESCO publishes its World Education Report, each Report examining matters of particular interest and concern to countries throughout the world. The 1998 World Education Report is on "Teachers and Teaching in a Changing World".

In looking at the change in status and profile of teachers, the Report notes that only in a relatively small minority of countries, teachers have reasonably comfortable incomes and conditions of employment. In the majority of countries this is certainly not the case with teachers salaries and working conditions being inferior to those of employees with equivalent qualifications entering other occupations.

Informed observers believe that the status of teachers has in fact declined over the past 30 years, and continues to decline in every region and most countries.

Teacher attrition rates (that is the percentage of teachers who leave the profession each year, excluding retirees) continue to be high in all regions and most countries, when compared to those in occupations with comparable levels of qualifications. Attrition rates are largest in less developed countries, and lowest in the developed countries.

With regard to the characteristics of teachers, the percentage of teachers who are females continues to rise in all regions including Asia, while the percentage of teachers in Asia who have received, at least, a secondary education has consistently risen as well.

UNESCO has written a number of reports (e.g. Strengthening the Role of Teachers in a Changing World: An Asia-Pacific Perspective, UNESCO-ACEID Bangkok, 1996) and held several regional meetings (e.g. The Asia-Pacific Regional Meeting in Preparation for the International Conference on Education, Bangkok, 1996), at which countries in the Asia-Pacific region have reported upon current issues and concerns with regard to teacher recruitment and teacher education. In terms of the less developed countries in the region in particular, the following are the issues and concerns that have been most frequently identified as being of particular concern and importance:

Recruitment

Traditionally, in many less developed countries in the Asia-Pacific, teaching (especially at the post-primary school level) has been a high status occupation, which has attracted well-qualified and committed recruits. In Buddhist countries, for example, teachers have traditionally been revered along with the Monk and parents, for their vitally important work in educating the young to take their place in society. One of the unfortunate developments in many countries is that teaching no longer has the same high status, as was the case in the past, when the
Ensuring Opportunities for the Professional Development of Teachers

Occupation of teaching was one which would attract some of the best-qualified members of society. In virtually all countries in this region the status of teachers is on the decline.

Teaching is also a relatively low-status occupation, in that it does not attract the same financial rewards as do many other occupations, particularly those in the private sector. Partly as a result, it is now a second or third choice occupation for many potentially qualified candidates, and there are major problems in attracting well-qualified recruits into the occupation. Thus a vicious cycle develops, whereby, because many recruits to the occupation are not well qualified, this further lowers the status of the occupation and the bargaining power of teachers to obtain salary increases.

Pre-service education

In many countries, recruits to the occupation of teaching commence work with little or no pre-service teacher training. Partly as a result, recruits are socialised on the job by those already employed as teachers, and into what is often a conservative occupational culture which stresses 'chalk and talk', the dominance of rote learning as a teaching technique and a passive model of student learning. This makes it very difficult for the teachers involved to play a decisive and important role in the process of educational reform.

Teacher induction and career-long professional development

In many countries, whatever training new recruits to the occupation receive is their "one shot of training", there being few teacher induction programmes and very limited facilities to enable in-service training and the career-long professional development of teachers. Partly as a result, it is very difficult to change teacher behaviour over time, and to bring teachers up to date with latest developments as to how they can be most effective in their work.

Given that UNESCO statistics show that one-third of the 50 million teachers in the world have no formal educational qualifications and another one-third have received inadequate training; the critical importance of in-service teacher education becomes even more evident. (International Bureau of Education, Geneva, 1996)

Reward structures in the occupation of teaching

The matter of teachers' career and promotion patterns has received considerable attention from researchers. (e.g. Maclean, 1992). In many countries considerable difficulty is experienced in keeping well-qualified teachers in the occupation. Particularly in less developed countries that are going through rapid economic transition, such as Vietnam and the Central Asian Republics, employment opportunities available in such expanding economies in areas like tourism, the hospitality industry and the development of private sector firms, make it difficult to
recruit well-qualified candidates into teaching. The salaries of teachers in these countries are well below those offered for equivalently qualified employees in some other occupations, and so there is a 'brain drain' of potential (and existing) teachers into these more lucrative occupations.

In some countries, as already suggested, so much is expected of teachers and yet they are paid very low salaries. For example, teachers in Cambodia have recently been on strike in order to press for higher salaries, the current salary of a classroom teacher in that country being US$20 per month while that for a backbencher in parliament is US$1,000. It is interesting to note that the striking teachers have received substantial backing from students and their parents in their claim for a substantial salary increase.

In addition, in many countries teaching does not offer a sufficiently attractive reward structure in terms of opportunities for promotion; and when promotion is available, it is generally only available to those who are willing to leave the classroom to take on administrative-type positions. Many countries have not as yet successfully grappled with the matter of how to keep good and effective teachers in the classroom by offering them promotion and increasing their salaries, as teachers.

Because of the low level of salaries many teachers in the less developed countries are virtually forced into a situation where they have to 'moonlight' in order to earn enough to feed, clothe and house their families. It is not uncommon for teachers to have one or two other jobs, in addition to that of being a teacher. In some countries, teachers subcontract their work as teachers out to other, less qualified individuals, where the person to whom the work is subcontracted receives (say) 40 per cent of the full salary, while the qualified teacher receives the other 60 per cent of the salary, being at the same time able to engage in a second job.

Because of its concern with the declining status of teachers UNESCO inaugurated International Teachers' Day in 1993, which is celebrated on 5 October each year. Since 1996 UNESCO has teamed up with Education International (EI), the world's largest teachers' union to mark World Teachers' Day in close partnership with teachers themselves. World Teachers' Day is dedicated to correcting the adverse status situation faced by many teachers and to recognising the key role of these men and women.

While the issue of status has come to the fore, it is also important to remember that many teachers work under very difficult conditions in remote areas of the country where there are few creature comforts, such as electricity. Given the level of civil unrest that is occurring in many countries at the current time around the world, teachers are also often working under dangerous circumstances, such as in areas where there is armed conflict. In order to help publicise the work of such teachers, who are working in difficult circumstances, UNESCO has recently produced a book - Portraits in Courage (UNESCO, Paris, n.d.). The book portrays the courage of teachers who, day in day out, give children an education despite poverty, crisis and violence. It
is also a tribute to their integrity, dedication and commitment beyond the call of duty. The moving account of these teachers bring their situations to life: confronting violence in school, dealing with pupils who have serious physical, psychological and learning handicaps, or improvising in large classes in conditions of extreme deprivation without the basic tools for teaching and learning.

3. Teachers, Teacher Education and the New Information Technologies

For UNESCO and many countries in our region, the new information technologies deserve special mention with regard to their potential impact on teachers and teacher education, particularly as we peer into the next century. (e.g. Birch and Maclean, 1998)

The new technologies refer mainly to the computer and related communication equipment and software that enable one computer to "Network" with other computers. It also refers to innovative forms of TV satellite communications, such as interactive TV, indeed all interactive media. Emerging challenges for teachers, teaching, and teacher education are posed by the introduction into education of new information and communication technologies.

What have these new information technologies to offer for those living and working in the large and diverse Asia-Pacific region? Are these technologies just as useful and appropriate for those living in the poorest countries in the region as they are for those living in the richest countries? And, what impact can and will these technologies have on helping to achieve greater equity in all respects, poverty eradication, and sustainable development in the region? There are some that say that one impact of these technologies is that they will contribute to a widening of the gap between and within countries, between rich and poor, the have and the have-nots, and between the empowered and those who are marginalised. And what is the potential impact of the new information technologies in helping to improve the quality, effectiveness and relevance of education and schooling, in poor and rich countries alike?

There are many possibilities of harnessing information and communication technologies for the achievement of "education for all" goals, and other aspects of education and schooling, and there are signs that these technologies could eventually have radical implications for conventional teaching and learning processes, and therefore for the work of teachers and teachers' education. However, according to the 1998 World Education Report (p. 78), the educational potential of these new information and communication technologies has, as yet, barely been tapped. What is clear is that, as is the case with other sectors of the wider economy and society, education (and in particular teachers) will need to come to terms with the new technologies, in both the less developed and more developed countries. Special attention and assistance in this regard is required for countries to ensure that the poorest countries do not fall
further behind, nor the rich-poor gap widen in developed and developing countries alike.

Some examples of the ways in which the new information technologies are being harnessed in less developed countries include the following:

- In Bangladesh: the UNICEF Resident Representative aims to put Internet into every school that has electricity since the schools think this is the most effective way of improving the quality and effectiveness of schooling, and in enhancing in-service teacher education programmes.
- In India: a pilot study is under way on expanding the use of computers and Internet in primary and secondary schools.
- In Bhutan, China, Viet Nam: There is widespread use of satellite communications for in-service teacher development courses.
- And, in remote parts of China, Cambodia, Pakistan, and India there is widespread development of literacy programmes at the village level using satellite TV with particular reference to adult literacy programmes.

Although much more needs to be learned about the educational potential of the new technologies, it is clear that they are likely to have major implications for teachers and teaching. For example, with regard to teaching and learning materials, available trends suggest that books will be increasingly complimented by multi-media software and there will be greater use of computers in classrooms. However, a major constraint remains cost; there is a problem with regard to the production of software both in terms of who should produce what software and the production of enough software to meet the demand for it; there is an issue of local development as against that which is imported (especially from the U.S.A.); and there is the problem of the access to new technologies of the poorer countries and poorer communities within countries.

With regard to teaching methods and approaches many existing school buildings and classrooms were never designed to accommodate the use of the new technologies which often require using available classroom space in a very different way. For example, it is often no longer appropriate to have a classroom design where the teacher is always out front, as occurs in conventional classrooms, given the ways in which the new technologies are being used so that the role of the teacher in the classroom changes to that of a “learning coach” or “facilitator”.

Over the years, there have been some who have believed that with the advent of increasingly sophisticated technology, machines can replace the teacher. Teaching machines were all the rage in some countries back in the 1960’s, the view being that students could most effectively be taught by machines rather than teachers, the teacher becoming a technician who programmes the machines. With the advent of computers and the Internet, and their
increasingly widespread use in classrooms, there has been further speculation that they may eventually replace the teacher.

Despite such speculation about the use of machines and other educational technologies in classrooms, evidence (e.g. *World Education Report*, 1998c; Birch and Maclean, 1998) suggests that while technology will have an increasingly important role to play in schooling, it is unlikely to replace the teacher. Rather, the teacher will draw upon a wider repertoire of technology when going about her or his work, but maintain a central role as facilitator and coordinator in the educational environment. Hence, teachers need to learn how to use the new information technologies, in order to utilize these technologies to improve the effectiveness of their own teaching. They should also assist their students in the use of these new technologies, where the latter have not already developed such competencies.

5. Some UNESCO Activities with Regard to Teachers and Teacher Development

I wish to use the opportunity of my address to you today to tell you something about the work of UNESCO that is directly relevant to the topic of this conference on teacher education and development.

In all of UNESCO's programme areas in the Asia-Pacific region a common theme which we emphasize is that of strengthening the role of teachers and teacher education in a changing world, particularly in less developed countries in the Asia-Pacific region.

For example, in the Delors Report (1996), *Learning: The Treasure Within*, the teacher is seen as the key to the education reform process with regard to implementing the four pillars of learning: learning to know; learning to be; learning to do; and learning to live together in peace and harmony. In this regard, the authors of the Report note that "much will be expected, and much demanded of teachers". They go on to say (p. 141-142):

> Our vision of the coming century is of one in which the pursuit of learning is valued by individuals and by authorities all over the world not only as a means to an end, but also as an end in itself. Each person will be encouraged and enabled to take up learning opportunities throughout life. Hence, much will be expected, and much demanded, of teachers, for it largely depends on them whether this vision can come true. Teachers have crucial roles to play in preparing young people not only to face the future with confidence but also to build it with purpose and responsibility. The new challenges facing education - to contribute to development, to help people understand and to some extent come to terms with the phenomenon of globalization, and to foster social cohesion - must be met from primary and secondary school onwards.
The importance of the role of the teacher as an agent of change, promoting understanding and tolerance, has never been more obvious than today. It is likely to become even more critical in the twenty-first century. The need for change, from narrow nationalism to universalism, from ethnic and cultural prejudice to tolerance, understanding and pluralism, from autocracy to democracy in its various manifestations, and from a technologically divided world where high technology is the privilege of the few to a technologically united world, places enormous responsibilities on teachers who participate in the moulding of the characters and minds of the new generation.

This interest by UNESCO in key concerns such as teacher recruitment, teacher education, teacher effectiveness and the crucially important role of teachers in educational development is not just of recent interest and concern. Indeed, 33 years ago, in 1966, UNESCO and ILO (the International Labour Organisation) developed the UNESCO/ILO Recommendation Concerning the Status of Teachers (UNESCO/ILO, 1988), which was adopted by a special intergovernmental conference convened by UNESCO and ILO and has been ratified by countries on a regular basis.

This UNESCO/ILO document, which is just as relevant today as when it was first written, provides guidelines for countries to follow in regard to the professional preparation, employment and conditions of service of teachers, the focus of the Report being on teachers in the formal school system. One of the important points made in the "Recommendations..." is that the status of teachers depends on the status of education, and vice versa. As the authors of the Report put it (paras. 13 to 17):

*If education does not command the respect and support of the entire community, teachers will not command that respect and support. Teachers are those who do the educating in the schools. Other institutions play co-ordinate roles: the family, the media, cultural institutions and others. Schools serve at the very core in the efforts to provide the common basis of learning skills, knowledge, culture, respect for constructive achievement and adherence to common codes of behaviour which are essential to economic, social and cultural progress in society.*

*When a society fails to recognize that this role must be played by organized education in the schools and under-values its educational system, the status accorded those responsible for the direct day-to-day performance of the educational function is necessarily reduced. It is, of course, teachers who occupy this position in the schools.*

*The converse is also evident: as teachers are regarded so are education and the schools. Respect for teachers engenders respect for the function they perform.*
When teaching as a profession is ill regarded in a society that ill-regard reflects itself on the entire system of organized education.

Although the UNESCO/ILO Recommendation Concerning the Status of Teachers sets out standards for their working conditions, salaries, training and career opportunities, the situation has steadily deteriorated in many developing countries.

Other, recent examples of the activities of UNESCO to increase awareness about teachers as an important occupational group in society, and to provide guidelines for policy makers in this area, are:

- the 45th Conference of the UNESCO International Bureau of Education in Geneva, which was held in 1996 and attended by over 2,000 participants, was on the topic of "Strengthening the Role of Teachers in a Changing World"; and
- in 1995 the Annual UNESCO-ACEID International Conference on Education, which had some 500 participants from 32 countries in the Asia-Pacific region, was on the topic of "Partnerships in Teacher Development for a New Asia".

UNESCO is also involved in providing support and assistance for teacher development in numerous other ways, such as through: the UNESCO Teacher Education Resource Pack, which includes a wide range of professional development materials particularly relevant for teachers working in the less developed countries; our publications on Research for Teachers which seek to put the best possible latest educational research into the hands of teacher educators and classroom teachers in an accessible form; and, through the activities of our 198 ACEID Associated Centres in the Asia-Pacific region, many of which are lighthouse institutions concerned with developing and implementing innovative approaches to improving various areas of education and schooling which impact on teacher education and teacher effectiveness.

Let me also draw your attention to two current projects in ACEID, one ongoing (in the area of environmental education) and the other which has just been launched (concerned with values education), which I believe are of particular interest, value and importance at the current time.

The Innovations in Teacher Education through Environmental Education and Education for Sustainable Development Project is a joint undertaking of UNESCO's Asia-Pacific Centre of Educational Innovation for Development (ACEID) and Griffith University, Brisbane, Australia. The project (which has been operating for over four years) has received resources of half a million dollars from the Australian government, the Japanese National Institute for Educational Research, and from UNESCO-ACEID itself. The project is now entering its third stage, which focuses on region-wide implementation.

The purpose of the project is to expand the range of innovative practices used in teacher education programmes in the Asia-Pacific region by introducing teachers and teachers in training...
to the curriculum planning skills and teaching methodologies of environmental education and education for a sustainable future. This is being done through the establishment of a professional development network for teacher educators. The network is a voluntary group of teacher educators who are sharing in the development of carefully researched and evaluated, and culturally sensitive, workshop modules for use in both pre-service and in-service teacher education programmes. In this way, the project is providing professional development opportunities for teacher educators by engaging them in a process of sharing, evaluating and further developing the innovative approaches and materials they are using to promote environmental education.

The nine teaching and learning modules, developed as part of the project, are now being widely used (generally in national languages) in teacher education institutions throughout the Asia-Pacific.

The Teacher Education for Peace Project is a joint project between the Flinders University Institute of International Education (Australia) and UNESCO’s Asia-Pacific Centre of Educational Innovation for Development. This project, which was launched in 1998, aims to promote teaching for peace through strengthening the cultural identity of teacher educators and teacher trainees; enhancing the cross cultural understanding and tolerance of teacher educators and teacher trainees; and enabling teacher trainees, on completion of their studies, to facilitate the development of cultural identity and of cross cultural understanding and tolerance, among the students they teach. This project is being funded by Japan, Australia and UNESCO-ACEID in Bangkok. Like the teacher education for environmental education project referred to earlier, after identifying a core curriculum that is acceptable to a range of countries in the region, teaching and learning modules will be commissioned, and after trailing in various countries in the region, these will be translated into national languages for use in teacher education institutions throughout the region.

6. Conclusion

In approaching the new century, it is important we do so positively in the belief that the future is there to be shaped, if we have the will to do so. The task will not be easy, as there are a number of tensions to be resolved. The Delors Report (pp. 16-18) categorised these as tensions between:

- the global and the local;
- the universal and the individual;
- tradition and modernity;
Ensuring Opportunities for the Professional Development of Teachers

- long-term and short-term considerations;
- competition and equal opportunity;
- the knowledge expansion and the capacity to assimilate it;
- the spiritual and the material
to which one could add 'conflict and peace'.

In our profiling of the future we need to identify what the citizen of the new age will look like and the competencies we, our children and their children are going to need to become citizens of the new age.

Next, we have to determine what should be taught best to provide these competencies. If the three "Rs" have been battered and buffeted by winds of change such that those who entered this century would barely recognise them now, what will the next century bring? How is the information explosion to be managed? And what of technological change? How is what is indigenous to be safeguarded? How is conflict to be resolved peacefully? These and other questions will need to be addressed in determining the curriculum for the future.

The bottom line will be the teachers and the pedagogy. Many have seen the role of the teacher change dramatically over the years. More major change is inevitable. What direction should such change take? What innovative changes can we take into the new century with confidence? How can teachers and teacher educators, and pre-service and in-service education adapt to promote effective teacher development suited to the future, its citizens and the "brave new world"?

We begin to answer these questions together at this Regional Meeting at Hiroshima University. I cordially invite you to join with me and UNESCO – in particular, ACEID - as we also grapple with these critical issues over the next few months. Ways and means of doing so will be distributed to you at this Conference. For we are of one mind that teachers and teacher educators are the key to effective education into the future.

References


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Professional Development of Teachers in Bangladesh

Rezina Sultana

Principal
Teachers’ Training College, Dhaka

Summary

The present government of Bangladesh is trying its best to offer quality education to the nation. A national policy on education has been formulated for the first time in Bangladesh. The aims and objectives of education are explained here.

The education system of the country needs a change. The country is looking forward to a future free from illiteracy and ignorance.

The teachers of the country are considered as a very important factor for national development. For the qualitative improvement of education, the need for the professional development of teachers has been greatly emphasized by the government. Teachers are supposed to work as agents of social change and economic development.

Corresponding to the education system of the country at present there are three types of teachers, viz. Primary, Secondary and Higher. The higher levels of teachers are connected with university education and do not need to undergo any teacher education program.

The Primary and Secondary level teachers are responsible for the majority of the student population of the country. It is widely believed that the teachers of Primary and Secondary level need better pedagogical training to handle the children of this particular age group.

The primary teachers of the country are of three categories, viz. the general primary teachers, (Bengali medium primary school), the kindergarten teachers (English medium primary school), and the Ebtedayee Madrasa (Religious primary school). Among these three categories, the general primary teachers are highest in number. All of them possess at least an SSC (Secondary School Certificate) plus a one-year certificate in education (Teacher Training). Recently, school based teacher training programs (CLUSTER TRAINING) in government primary schools have been introduced and have achieved some success. On the other hand, teacher training has not been made a compulsory condition for the non-government primary teachers of kindergarten and Ebtedayee Madrasa.

At the secondary level all the teachers require teacher training in order to serve in a secondary school. But due to heavy pressures, many teachers are appointed without being trained. The number of such untrained teachers is increasing day by day. Within the present structure of the Teacher Education Program, it is not possible to bring them all under a teacher training program, at present nor in the near future. The huge backlog of untrained teachers is hampering the professional development of the secondary teachers.

In support of the Teachers’ Training Colleges, Secondary Science Development Centers cater for in-service training of the secondary teachers. There are nine such centers in the country. The in-service teacher training is financially supported by the Secondary Education Development Project of the Asian Development Bank.

The higher secondary teachers have recently been incorporated in the teacher-training program. At present, the higher secondary stage is taught in colleges and considered as intermediate level. The college teachers who teach in class XI and class XII come under the higher secondary teacher-training program. The Higher Secondary Education Project (HSEP), funded by the Asian Development Bank, caters for the higher secondary teacher training. So far, this project has established five Higher Secondary Teachers’ Training Institutes (HSTTI) in the country and has introduced short courses of 8 weeks for higher secondary teachers.
Ensuring Opportunities for the Professional Development of Teachers

In addition to these programs, technical teacher training and vocational teacher training programs are there to take care of technical and vocational education. Teacher education of the country faces quite a number of problems, such as a shortage of teacher training institutes, shortage of sufficient teacher-educators, the absence of resource centers and the absence of follow-up programs.

At present, bright and outstanding students are not turning up to join the teaching profession in Bangladesh. The teachers have great task of building the nation and driving it to a prosperous future. Strong incentives must be offered to attract the right kind of people to the teaching profession.

1. Introduction

The teacher is often referred to as the backbone of the nation. Bangladesh is a young independent country, whose backbone needs to be strong and straight. The government of this country is well aware of this fact and has taken quite a number of steps to organize and coordinate the teacher community of the country on a strong platform. The government believes that through these steps, better professional development of teachers will be acquired and greater welfare of the nation will be achieved. Before discussing these steps, a brief description of the country is given below.

Bangladesh is a South Asian country of flat, fertile alluvial land. The country earned her independence in 1971. The total area of the land is 1,47,570 square kilometers. It is a densely populated country with a population of 124.3 million, population density is 842 persons per square kilometer. The rate of literacy is 44.8%. The national language is Bengali. 88% of total population is Muslim, 10.5 % Hindu and the rest are Buddhist, Christian etc.

The country has 64 districts and 490 thanas or sub-districts. As local government institutions there are 121 Municipalities, 4 Municipal corporations and 4437 Union parishads. Bangladesh is a democratic country. The people have strong feeling for democracy, because in the past they had to fight a lot and even sacrifice their lives to restore democracy in the country. If democracy is to work properly, smoothly and effectively, knowledge and consciousness must prevail among the people. Therefore “Education for All” is a very important issue. A huge number of teachers are needed in order to execute the scheme of Education for All. Hence, the teacher community has the difficult task of educating the nation. It requires training and special education. Teachers have to be trained in a manner that their professional development is achieved to the fullest, and that competencies are acquired along with knowledge and consciousness.

The country has a number of teacher education institutions, though insufficient to fulfill the needs of the country. But before discussing these teacher education institutions and their programs, the current education system of the country should be explained.

A National Education Policy has recently been formulated and will soon be approved by the parliament. The aims and objectives of education as set out by the National Education Policy are as follows.
2. Aims and Objectives of Education

1. Motivate learners to inculcate moral, humanitarian, religious, cultural and social values in their personal and national life.
2. Make learners conscious about the independence, sovereignty and integrity of the country.
3. Arouse Liberation War consciousness, patriotism, nationalism and good citizenship in the characters of learners.
4. Bring economic and social change through education by making it productive, creative and applicable. Also, develop a scientific outlook among learners and make them into dutiful and responsible manpower of the country.
5. Make learners aware of the dignity of physical labor and prepare them for self-employment through vocational education.
6. Initiate world brotherhood, cross-communal feelings, friendship, fellowship and respect for human rights.
7. Develop mutual tolerance with a positive, specific and life-oriented outlook to sustain democracy.
8. Knowledge, skills and outlook acquired in one stage of education must be strengthened and extended in the next stage and acquisition of new skills and knowledge need to be encouraged.
9. National history, cultural heritage and moral values are to be developed and transferred from generation to generation through education.
10. Free the country from illiteracy.
11. Create equal opportunities for education according to talent and aptitude to establish a society free from inequality.
12. Make education free from gender bias.
13. Reflect constitutional guarantee at all levels of education.
3. The Education System of Bangladesh

The education system of the country can be divided broadly into three stages.

**Primary Education**

In the primary stage the students of class one to class five are included. The age group is from 6+ to 10+. At present there are three types of schools for the primary level learners. They are as follows:

a. Bengali medium primary schools (Government and Non-government, for general education)

b. *Ebtedayee Madrasa* (Non-government, for religious education)

c. English medium kindergarten schools (Non-government and city based)

Among these institutions the Bengali medium primary schools are mostly government schools.

**Secondary Education**

The Secondary stage of education is further sub-divided into three sub stages, viz.

A. Junior Secondary : VI - VIII

B. Secondary : IX - X

C. Higher Secondary : XI - XII

Among these sub stages, the secondary level education is divided into three streams. These are:

i) General Education

ii) Vocational Education

iii) *Madrasa* Education (Religious education)

Among these three streams, General Education is again divided into three sub streams:

1. Social Science Education (Humanities)

2. Science Education (Pure Physical Science)

3. Business Education (Commerce Education)

For the above mentioned stages and sub-stages and different streams there are different types of schools in the country. Among the three different streams, the General Education stream is the most popular one in the secondary level. A chart is given below to give the detailed statistics of the different types of schools.
Table 1: Junior Schools

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Government</th>
<th>Non-Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>3,002</td>
<td>0</td>
<td>3,002</td>
</tr>
<tr>
<td>Teachers</td>
<td>19,309</td>
<td>17,203</td>
<td>2,106</td>
</tr>
<tr>
<td>Enrollment</td>
<td>632,211</td>
<td>291,229</td>
<td>340,982</td>
</tr>
</tbody>
</table>

Table 2: Secondary Schools

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Government</th>
<th>Non-Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Institutions</td>
<td>10,776</td>
<td>317</td>
<td>10,459</td>
</tr>
<tr>
<td>Teachers</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Government</td>
<td>7,741</td>
<td>4,953</td>
<td>2,788</td>
</tr>
<tr>
<td>Non-government</td>
<td>130,298</td>
<td>112,984</td>
<td>17,314</td>
</tr>
<tr>
<td>Total</td>
<td>138,039</td>
<td>117,937</td>
<td>20,102</td>
</tr>
<tr>
<td>Enrollment</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Government</td>
<td>251,051</td>
<td>129,940</td>
<td>121,111</td>
</tr>
<tr>
<td>Non-government</td>
<td>5,241,063</td>
<td>2,781,596</td>
<td>2,459,467</td>
</tr>
<tr>
<td>Total</td>
<td>5,492,114</td>
<td>2,911,536</td>
<td>2,580,578</td>
</tr>
</tbody>
</table>

Table 3: Madrasa School

<table>
<thead>
<tr>
<th>Number of Schools by school-type</th>
<th>Total</th>
<th>Government</th>
<th>Non-Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dakhil</td>
<td>0</td>
<td>4,795</td>
<td>4,795</td>
</tr>
<tr>
<td>Alim</td>
<td>0</td>
<td>969</td>
<td>969</td>
</tr>
<tr>
<td>Teachers by school-type</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Dakhil</td>
<td>58,360</td>
<td>57,103</td>
<td>1,257</td>
</tr>
<tr>
<td>Alim</td>
<td>17,230</td>
<td>16,958</td>
<td>272</td>
</tr>
<tr>
<td>Enrollment by school-type</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Dakhil</td>
<td>1,358,577</td>
<td>872,593</td>
<td>485,984</td>
</tr>
<tr>
<td>Alim</td>
<td>332,368</td>
<td>245,280</td>
<td>87,088</td>
</tr>
</tbody>
</table>

Higher Education

After completion of the secondary stage, the comparatively bright students get access to higher education. Higher education is mainly university based.

There are quite a number of higher education institutions in the country. Among these, the General Universities, Engineering University, Agricultural University, Medical University and affiliated colleges are noteworthy. A statistic of the number of universities of the country is given below:

Table 4: Universities

<table>
<thead>
<tr>
<th></th>
<th>Public Sector</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of institutions</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Number of Teachers</td>
<td>3,871</td>
<td>583</td>
</tr>
<tr>
<td>Enrollment</td>
<td>66,611</td>
<td>15,805</td>
</tr>
</tbody>
</table>
In addition to universities, the country has intermediate and degree colleges for providing higher education. Following is the statistic of those colleges.

Table 5: Intermediate Colleges

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Government</th>
<th>Non-Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Institutions</td>
<td>901</td>
<td>8</td>
<td>893</td>
</tr>
<tr>
<td>Teachers Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>118</td>
<td>102</td>
<td>16</td>
</tr>
<tr>
<td>Non-government</td>
<td>15,795</td>
<td>12,543</td>
<td>3,252</td>
</tr>
<tr>
<td>Total</td>
<td>15,913</td>
<td>12,645</td>
<td>3,268</td>
</tr>
</tbody>
</table>

Table 6: Degree Colleges

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Government</th>
<th>Non-Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Institutions</td>
<td>786</td>
<td>225</td>
<td>543</td>
</tr>
<tr>
<td>Teachers Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>9,571</td>
<td>7,599</td>
<td>1,972</td>
</tr>
<tr>
<td>Non-government</td>
<td>17,940</td>
<td>15,123</td>
<td>2,817</td>
</tr>
<tr>
<td>Total</td>
<td>27,511</td>
<td>22,722</td>
<td>4,789</td>
</tr>
</tbody>
</table>

For technical and vocational higher education institutes present in the country are given in Table 7.

4. Teachers of Bangladesh

The teachers of Bangladesh are classified into three sections. They are:
1. Primary Teachers
2. Secondary Teachers
3. Higher Education Teachers

Primary Teachers

The primary teachers are responsible for the primary level students. The minimum required qualification to become a teacher in a Bengali medium government or non-government primary school is that one must have a SSC (Secondary School Certificate) plus a one-year certificate in education (Teacher Training).
Table 7: Technical and Vocational Institutes

<table>
<thead>
<tr>
<th>Type</th>
<th>No.</th>
<th>Teachers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTI</td>
<td>51</td>
<td>550</td>
<td>5,805</td>
</tr>
<tr>
<td>PTI</td>
<td>54</td>
<td>737</td>
<td>6,276</td>
</tr>
<tr>
<td>Govt Commerce Institutes</td>
<td>16</td>
<td>108</td>
<td>4,062</td>
</tr>
<tr>
<td>Polytechnic Institutes</td>
<td>20</td>
<td>889</td>
<td>16,791</td>
</tr>
<tr>
<td>Govt Teachers' Training Colleges</td>
<td>10</td>
<td>227</td>
<td>6,549</td>
</tr>
<tr>
<td>Technical Teacher Training College</td>
<td>1</td>
<td>19</td>
<td>85</td>
</tr>
<tr>
<td>VTTI</td>
<td>1</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>College of Leather Technology</td>
<td>1</td>
<td>27</td>
<td>362</td>
</tr>
<tr>
<td>Bangladesh Institute of Technology</td>
<td>4</td>
<td>267</td>
<td>3,391</td>
</tr>
<tr>
<td>Agricultural College</td>
<td>4</td>
<td>171</td>
<td>1,645</td>
</tr>
<tr>
<td>Medical Colleges</td>
<td>22</td>
<td>1,401</td>
<td>10,852</td>
</tr>
<tr>
<td>Dental College</td>
<td>1</td>
<td>53</td>
<td>346</td>
</tr>
<tr>
<td>Homeopathic Colleges</td>
<td>21</td>
<td>303</td>
<td>11,107</td>
</tr>
<tr>
<td>Nursing College</td>
<td>1</td>
<td>14</td>
<td>113</td>
</tr>
<tr>
<td>Nursing training Institutes</td>
<td>44</td>
<td>270</td>
<td>3,576</td>
</tr>
<tr>
<td>Bangabandhu Medical University</td>
<td>1</td>
<td>230</td>
<td>298</td>
</tr>
<tr>
<td>College of Textile Technology</td>
<td>1</td>
<td>22</td>
<td>416</td>
</tr>
<tr>
<td>Unani College</td>
<td>9</td>
<td>75</td>
<td>532</td>
</tr>
<tr>
<td>Ayurvedic College</td>
<td>5</td>
<td>43</td>
<td>327</td>
</tr>
<tr>
<td>Government Unani College</td>
<td>2</td>
<td>23</td>
<td>285</td>
</tr>
<tr>
<td>Government Homeo College</td>
<td>1</td>
<td>23</td>
<td>487</td>
</tr>
<tr>
<td>IDHC</td>
<td>1</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>Rehabilitation Institute and Hospital for the Disabled (RIHD)</td>
<td>1</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Institute of Health and Technology</td>
<td>2</td>
<td>25</td>
<td>76</td>
</tr>
<tr>
<td>Law College</td>
<td>39</td>
<td>407</td>
<td>32,155</td>
</tr>
<tr>
<td>Coll. Of Physical Education</td>
<td>3</td>
<td>43</td>
<td>485</td>
</tr>
<tr>
<td>Cadet College</td>
<td>10</td>
<td>308</td>
<td>3,029</td>
</tr>
<tr>
<td>Sanskrit and Pali College</td>
<td>260</td>
<td>902</td>
<td>1,730</td>
</tr>
</tbody>
</table>

* Source: Tables 1-17: Bd. Educational Statistics (at a glance), 1998; BANBEIS, Ministry of Education, Bangladesh

Whereas a certificate in education or teacher training is essential for working in a Bengali medium primary school, the kindergarten teachers do not require teacher-training as an essential condition. Neither do the *Ebtedayee Madrasa* teachers need it. There is no established law regarding the qualifications of kindergarten teachers, but most of them possess a minimum of university graduation. In the *Ebtedayee Madrasa*, the *Madrasa*-qualified teachers are employed. Recently a program of teacher education for *Madrasa* teachers has been proposed.

**Secondary Teachers**

There are three ranks of teachers in secondary education, they are Junior Secondary Teacher, Secondary Teacher and Higher Secondary Teacher.

The Junior Secondary teachers are responsible for the students of class VI to class VIII. In the majority of schools, graduate teachers are found doing the job. Only in a very few schools
Ensuring Opportunities for the Professional Development of Teachers

Some Junior Secondary teachers possessing HSC (Higher Secondary Certificate) and a certificate in education are found doing the job. But many of the graduate teachers do not have teacher training of any sort.

The teachers who teach in the secondary level i.e. class IX and class X are called secondary teachers. The minimum qualification for a secondary teacher is university graduation and a one-year B.Ed. degree. Many schools appoint university graduates or even master's degree holders as secondary teachers without a B.Ed. But they need to undergo the B.Ed. training in service. The higher secondary teachers are those who teach in the higher secondary level i.e. class XI and class XII. At present, this level is taught in the colleges and therefore college teachers, who are either lecturer or professor, are responsible for them. But in the near future, the higher secondary level will be incorporated within the school's jurisdiction and the higher secondary teachers will be teaching them there. At present and also in future, the teachers of this level must possess a master's degree in a particular discipline. They also need to undergo a teacher education program. In recent years, the HSEP (Higher Secondary Education Project), has been providing a short course on teacher education for the higher secondary teachers.

5. Teacher Education Programs and Professional Development of Teachers

Teaching is a skill and like any other skill it requires training and practice. A person may acquire vast amounts of knowledge and information, but yet may be in dark about the techniques of transmitting it properly. Knowing something and letting it be known to others are not the same thing. Helping others to learn effectively is a performing art as well as a skill. Throughout the world a lot of research is done on this. New methods, techniques and innovations on teaching and learning are being discovered regularly. It is popularly believed that there is a positive correlation between the qualities and qualifications of the teacher and the achievements of the students. In order to enhance the qualities and qualifications of the teachers and also to make him/her more skillful in teaching, teacher education programs are offered. For the total development of teachers and for the best utilization by the learners, and also for the welfare of the nation, the teaching-learning situation in the classroom must be effective and far-reaching. Teaching is an important profession and the importance of teacher education is obvious. The government of Bangladesh firmly believes that there is no alternative to teacher education.

It is popularly believed that teachers of primary and secondary level need to know special methods and techniques of teaching, because they deal with learners of a particular age group. The learners in this age group are in the developing stage. The teacher must keep a careful eye on the well-balanced development of the learners. He or she must possess the knowledge of
guiding the children in a way that they can utilize their merits and intellect to the maximum. For these reasons, a teacher needs special education and training.

At present, there are three types of teacher education programs in the country corresponding to three types of institutions. They are:

1. Primary Teacher Education
2. Secondary Teacher Education
3. Higher Secondary Teacher Education

**Primary Teacher Education**

At present there are 54 government Primary Training Institutes (PTI) in the country. One non-government PTI is also offering primary teacher training service. The primary teachers receive one-year long training at the PTIs. A table showing the number of Primary Training Institutes, teachers and students during the period 1991-96 is given below.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Institutions</th>
<th>Teachers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>1991</td>
<td>54</td>
<td>598</td>
<td>115</td>
</tr>
<tr>
<td>1992</td>
<td>54</td>
<td>556</td>
<td>140</td>
</tr>
<tr>
<td>1993</td>
<td>54</td>
<td>576</td>
<td>144</td>
</tr>
<tr>
<td>1994</td>
<td>54</td>
<td>630</td>
<td>170</td>
</tr>
<tr>
<td>1995</td>
<td>54</td>
<td>633</td>
<td>167</td>
</tr>
<tr>
<td>1996</td>
<td>54</td>
<td>737</td>
<td>190</td>
</tr>
</tbody>
</table>

The curriculum of the PTI is described in short in the following table. The course is entitled Certificate in Education or C-in Ed. in short.

**Table 9: The Syllabus**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Marks</th>
<th>Marks</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Principles of Education</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Primary Education and Modern Concept</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Child Psychology, Teaching Method and Evaluation</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Bengali (Mother tongue)</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. English</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Arithmetic</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Environment Study (Sociology)</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Environment Study (Science)</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Religious Study</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Practice Teaching</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Physical Education</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Arts and Crafts</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Co-curricular activities</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: The PTI Syllabus*

It needs to be noted that the evaluation of the trainees at PTI is done 50% internally and 50% externally. This system of evaluation has got both its merits and demerits. The PTI instructors, who observe the trainees' activities day to day, do internal evaluation. The evaluation
can be very accurate and reliable only if the instructor is free from bias, which is nearly impossible. A lot of complaints about the internal evaluation system prevail among the primary teacher trainees.

In addition to PTI programs there are some other arrangements for the training of primary teachers. To enhance the capabilities of teachers, continuous efforts have been taken through different projects. Many innovative ideas have been experimented with, of which "cluster training" emerged as having much potential. From 1986, all the primary schools of the country were brought under a cluster training based system. The objective is to increase capabilities and enhance skills of the teachers through recurrent in-service training and to use the knowledge of the training in class.

At present, sub-cluster training is being held throughout the country. The training division of the Directorate of Primary Education is responsible for planning and implementing this sub-cluster-training program.

In sub-cluster training, teachers from four to five schools gather together for a daylong experience. The method they follow is participatory and activity based. Modules are developed on specific problems in the area of pedagogy, management, community participation and development of school. The five main parts of the training are as follows:

a. Demonstration lesson
b. Discussion and sharing of experiences
c. Training according to modules developed on specific problems identified by the teachers
d. Presentation of co-curricular activities
e. Open discussion session with the participation of guardians and member of management committee

The sub-cluster training is held once every two months, 6 days a year. The duration is one full day. All the schools in turn become the venue of the training.

The high degree of participation in a variety of activities has created enthusiasm among the teachers and enhanced their skills, furthermore the use of teaching aids increased and class became full of life. Parents started taking interest and Thana Education Officer became more active and accountable.

Primary teacher training is compulsory only for the Bengali medium government and non-government primary teachers. But kindergarten teachers and the Ebtidayee Madrasa teachers do not have such a requirement.

Secondary Teacher Education

At present, twelve government (of which two are under construction) and six non-government teachers' training colleges are offering teacher education to secondary level
teachers. Table 10 shows the number of government teachers' training colleges (TTC), teachers and students during the period 1990-96.

Table 10: Number of TTC, teachers and students, 1990-91 to 1995-96

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Colleges</th>
<th>No. of Teachers</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>1990-91</td>
<td>10</td>
<td>160</td>
<td>4,053</td>
</tr>
<tr>
<td>1991-92</td>
<td>10</td>
<td>160</td>
<td>4,472</td>
</tr>
<tr>
<td>1992-93</td>
<td>10</td>
<td>160</td>
<td>4,729</td>
</tr>
<tr>
<td>1993-94</td>
<td>11</td>
<td>197</td>
<td>4,938</td>
</tr>
<tr>
<td>1994-95</td>
<td>11</td>
<td>193</td>
<td>5,961</td>
</tr>
<tr>
<td>1995-96</td>
<td>12</td>
<td>220</td>
<td>6,549</td>
</tr>
</tbody>
</table>


All these colleges offer a ten-month long B.Ed program for university graduates. The Bangladesh Open University offers a two-year long B.Ed program through distance education. A private university named Darul Ihsan offers a B.Ed course.

In addition to this, the Dhaka Teachers' Training College offers a three-year B.Ed honors course since 1996. Four of the government TTCs offer a Master of Education course as well. The Institute of Education and Research (IER) of the University of Dhaka offers a one-year M.Ed. course for University graduates and a three-year B.Ed honors course for degree level students.

The B.Ed and M.Ed. courses are considered as pre-service training for the secondary teachers, though a lot of serving schoolteachers participate in the program.

But still there are a large number of untrained secondary teachers left out in the schools. Even by utilizing all the facilities available for teacher training, the total number of teachers cannot be provided with teacher training at the moment.

There are nine Secondary Science Development Centers, attached to nine government TTCs, which offer short course in-service training to secondary teachers. Science teachers are the target group for this short course training, but teachers of social science, Bengali and English are also included in the program. A lot of teachers are benefiting from these short courses. The expenses of these courses are borne by the Secondary Education Development Project, financed by the Asian Development Bank. In addition to this, very recently another project named ELTIP (English Language Teaching Improvement Project) has started working with British financial assistance.

Among all these programs of teacher education, the B.Ed course is considered to be the most important one. Recently, the B.Ed syllabus has been changed and a new syllabus is introduced in the TTCs. Following is the description of the present B.Ed syllabus.
The **B. Ed Syllabus**

A. Compulsory Subjects (All must be taken)
   1. Foundation of Education (Philosophical, Historical, Social, and Legal)
   2. Psychological Foundation of Education
   3. Secondary Education
   4. Education Administration and Management
   5. Measurement and Evaluation in Education

B. Elective Subjects (Any Two)
   1. Bengali
   2. English
   3. Mathematics
   4. Physics/Chemistry
   5. Biology
   6. Social Science/History
   7. Geography
   8. Business Education

C. Optional Subjects (Any Two)
   1. Islamiat
   2. Agricultural Education
   3. Home Economics
   4. Arts and Crafts
   5. Computer Education
   6. Educational Research
   7. Library Science

The evaluation system of the B.Ed. Course is somewhat similar with that of the Primary Teacher Training Course. In the B.Ed. Course only 40% of the assessment is done internally and the remaining 60% is done externally. Due to this system of internal evaluation, similar problems occur as in the PTIs. It is very difficult to get a bias-free judgement in the internal evaluation system.

In the area of teaching-practice, the desired outcome is difficult to achieve due to a shortage of schools willing to accept trainees. The programs of the Teachers' Training College are not well coordinated with that of the general education system of the country. For his reason, the practice teaching session often fall during public exams. Schools remain busy with their month-long public exams and cannot render support to the practice teaching program of the teachers' colleges. Therefore, a centrally coordinated policy is needed in this field.

Teachers Colleges usually suffer from a lack of teacher-educators, due to insufficient
availability of posts. The professional status of the Teachers Colleges has not been properly
established. Teachers of other subjects often occupy the available subject posts. Unfortunately,
the concerned ministry is quite unresponsive about this anomaly.

The teacher-educators do not get much chance to go abroad and enhance their
professional knowledge. Even within the country chances are limited for them to exchange their
views and ideas with other teacher’s colleges. Seminars or workshops incorporating teacher-
educators are seldom held. The qualities of teacher-educators must be looked upon with great
importance in order to achieve the aims and objectives of teacher education.

The teacher-educators need training for themselves. They should have access to the
modern world of teacher education, where changes in every direction are taking place. In order
to impart knowledge or skills one must have the chance to gather these continuously.

The teachers colleges also suffer from insufficiency of books, magazines, journals, and
modern technologies. Well-equipped resource centers could help change this situation positively.

Higher Secondary Teacher Training

The training needs for the higher secondary teachers have only recently been recognized. At present, there is a Higher Secondary Education Project in the country, which is responsible for training of higher secondary teachers. This project has established five Higher Secondary Teachers’ Training Institutes (HSTTI) in the country. These HSTTIs arrange 56-day short courses for the higher secondary teachers. The higher secondary teachers are actually a section of college teachers who take XI and XII classes of the college. All of them are highly qualified, possessing at least a Master’s degree in a relevant area. The higher secondary teacher training is still in the experimental stage and it is too early to evaluate its effectiveness.

Technical Teacher Training

The Technical Teachers’ Training College offers one year Diploma in Education-course for polytechnic teachers. The polytechnic teachers are the graduates from polytechnic institutes having a diploma in Engineering. After completion of Diploma in Technical education course they undergo another one year training in TTTC and get a B.Sc. in Technical Education.

Other Teacher Training Programs

In addition to the above mentioned teachers training program some piecemeal programs on teacher training are organized from time to time by the following institutes.

National Academy for Education and Management (NAEM): It caters for the training of college teachers and principals, its courses are usually of short duration.

National Curriculum and Textbook Board (NCTB): The main job of the institution is to
prepare curriculum and textbooks for primary and secondary level. In doing so, sometime they feel the necessity of initiating teacher training. Accordingly, they organize teacher-training programs for very short periods.

National University: The National University is responsible for administering university exams of all the affiliated colleges. From time to time this university organizes training courses for college teachers.

6. Problems of Teacher Education

The main problem of teacher education in Bangladesh lies in the huge number of untrained teachers left in different schools. Nearly 92,000 teachers neither have a B.Ed. nor an M. Ed. degree. Most of them work in the non-government schools and most are males. The bulk of the untrained teachers have a university degree (bachelor for the most part, but also master's). At present, the Teachers Training Colleges are being used almost to their full capacity and offer little scope for preparing more than their current yearly output.

The policy of recruiting untrained teachers and placing them in classrooms until they are able to qualify for their level (a one-year certificate in Education course for primary schools and a B.Ed. course for secondary schools) is anomalous. As a result, there is a considerable backlog of untrained in-service teachers that surpasses the current training capacity of teachers' training colleges.

The establishment of Secondary Science Development Centers at Teachers' Training Colleges has enabled the provision of subject matter courses of three weeks duration. But their capacity is limited and between 1991 and 1996 only 13,718 teachers were able to attend these courses, of which 90% were males. Practically no professional development opportunities exist at school level nor for clusters of schools within a district.

The second problem of teacher education program lies in the selection of the curriculum. The curriculum of the PTI is neither progressive nor up-to-date. There is little scope for the primary teachers to know about and gain understanding of modern methods and techniques of teaching. Similarly, the B.Ed. curriculum, though revised and renewed, still lacks modern and progressive concepts of teacher training. The new B.Ed. syllabus is quite large in size, compared to the time allotted for it (10 months only), but not very attractive in terms of content and concepts. There are five compulsory subjects, which cover the pedagogical aspects and two school subjects which enable the teachers to learn about subject methodology. In addition to this, there is teaching practice by means of which the teacher will acquire practical knowledge and skills of classroom teaching.

There is however an imbalance in the allocation of time and importance to pedagogy
contents (70% of time) versus the learning of subject methodology (30%).

As far as teaching practice is concerned, the effectiveness is not up to the mark due to the problem of availability of sufficient practice schools.

The duration of the B.Ed. course is only ten months. It is really difficult to cope with the comparatively large syllabus in such a short period of time.

One more problem that hampers the professional development of the teachers is the shortage of senior teacher-educators. Because of the lack of senior posts in the Teachers Training Colleges, the senior teacher-educators are transferred to general colleges whenever promotion is due. As a result, Teachers' Colleges suffer from lack of experienced senior teacher-educators.

The teacher education programs of Bangladesh lack in follow-up assessment studies of the teachers they have trained. It has been reported from many sources that many of the trained teachers do not follow the techniques learned in the Teacher Training Institutes in the schools they work. The reasons for non-applying these techniques have not been clarified yet. There is no system of evaluating the courses. Neither the Teachers College nor the school authority can make the teacher act properly. The parents or guardians are more interested in getting a good result for their children. Therefore they are prepared to pay a lot of money for private coaching. The students get ready notes from the private coaching centers and they cram it and regurgitate it in the exams. This whole system needs change.

Enhancing the qualifications and qualities of teachers is believed to contribute positively to student's performance. But how far this is positive, has to be worked out. Research should be conducted in this particular area in countries like Bangladesh. Because of limited resources, Bangladesh is trying to help her teacher population, that in future the coming generation can benefit from them. How far these resources are properly utilized ought to be a major concern for education planners.

The teacher education programs of the country do not inform the teacher of their new expanding role expected by the community at large. The 21st century teacher in a country like Bangladesh has various roles to play. He is expected to be a participant in community development, in curriculum development and also in human resource development. But within the given curriculum, there is little chance for the teacher to understand his or her role.

The country needs progressive modern, smart, and intelligent teachers to translate the objectives of the national education policy. The Teachers College do not get the right kind of enrollment through the selection process. Bright and talented candidates do not turn up to become teachers, because of the poor social and economic status of the schoolteachers.
7. **Recommendations**

In order to ensure opportunities for the professional development of the teachers the following recommendations are suggested:

1. The huge backlog of the untrained teachers must be minimized. The scheme of establishing Teachers Training Colleges in each district by the Secondary Education Development Project should be carried further.

2. Pre-service teacher education should aim at comprehensive development of the teacher. The teacher's outlook should be molded in such a way that he or she is ready to face the challenges of the present day. In other words, that he or she feels perfectly fit for the job of being a teacher and has a positive attitude towards the profession.

3. In designing curriculum, it should be remembered that less stress on pedagogical subjects is preferred, because a teacher needs more information about techniques and methods of dealing with a particular school subject rather than educational philosophy or psychology.

4. Modern information technology should be incorporated in the teacher education program. With the challenges of the times, the teacher increasingly requires knowledge about the technological advancements in different information media.

5. More emphasis should be placed on the importance of in-service teacher training. Periodical refreshment of knowledge is a basic necessity for a teacher. The teacher must keep pace with innovations in the teaching-learning processes of the developed world. Continuous in-service training is therefore essential for every teacher. For continuous in-service training, school based teacher education programs should be designed.

6. The selection process of the teachers ought to be changed. Motivated persons should be given priority to become teachers. In order to attract smart and talented persons to the teaching profession strong incentives must be offered. Rewards for good teaching should be introduced at all levels.

7. More time should be allotted for the teacher education programs for both primary and secondary level. The minimum of a two-year program is needed for the desired outcome of professional growth of teachers.

8. A well-coordinated system of follow-up assessment of the teacher education programs has to be initiated. A monitoring cell with an in-built evaluation system has to be set up, which will work through a network of supervision and feedback.

In short, reengineering of the whole system of teacher education is necessary to achieve the set goals of education at large of the country.
References


BANBEIS, Ministry of Education, Bangladesh Educational Statistics (At a Glance) 1998
Ensuring Opportunities for the Professional Development of Teachers - Country Report - China

Liao Shuli

Deputy Director
Advanced Teacher Training Division
Department of Teacher Training
Ministry of Education

1. General Background

As the world's largest developing country, China is marked both by a population of over 1.2 billion and by the socialist system established in 1949. These have shaped two of the most crucial characteristics of Chinese education, namely the world's largest education system and the government taking main responsibilities on running schools.

In terms of size, China currently is educating the world's largest school population, a total of 240.13 million students of whom some 139.95 million children are enrolled in 628,840 primary schools and 60.18 million teenagers in 78,642 general secondary schools. Teaching is by far the largest occupation of educated labor in China as well. There are a total of 11.4 million teachers, of whom nearly 9 million are employed in primary and secondary schools.

Table 1. Basic Statistics of Regular Schools in China by Level and Type

<table>
<thead>
<tr>
<th>Level</th>
<th>No. of Schools</th>
<th>No. of Graduates (000)</th>
<th>Entrants (000)</th>
<th>Enrollment (000)</th>
<th>Teachers (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>911,174</td>
<td>40,505.3</td>
<td>69,727.0</td>
<td>240,723.0</td>
<td>11,417.3</td>
</tr>
<tr>
<td>1. Graduate Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Institute of Higher Ed.</td>
<td>735</td>
<td>46.5</td>
<td>67.3</td>
<td>176.4</td>
<td></td>
</tr>
<tr>
<td>(2) Research Organizations</td>
<td>412</td>
<td>43.2</td>
<td>59.2</td>
<td>163.3</td>
<td></td>
</tr>
<tr>
<td>2. Undergraduate Education</td>
<td>323</td>
<td>33.3</td>
<td>4.5</td>
<td>13.1</td>
<td></td>
</tr>
<tr>
<td>Regular</td>
<td>1,020</td>
<td>829.1</td>
<td>1,000.4</td>
<td>3,173.8</td>
<td>404.5</td>
</tr>
<tr>
<td>3. Regular Secondary Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Skilled Worker Schools</td>
<td>4,143</td>
<td>1,157.1</td>
<td>1,621.1</td>
<td>4,654.1</td>
<td>276.4</td>
</tr>
<tr>
<td>(2) General Sec. Schools</td>
<td>4,395</td>
<td>699.4</td>
<td>734.0</td>
<td>1,931.0</td>
<td>115.7</td>
</tr>
<tr>
<td>Senior</td>
<td>13,880</td>
<td>2,216.6</td>
<td>3,226.1</td>
<td>8,500.7</td>
<td>605.1</td>
</tr>
<tr>
<td>Junior</td>
<td>64,762</td>
<td>14,423.8</td>
<td>18,055.9</td>
<td>51,672.9</td>
<td>2,981.6</td>
</tr>
<tr>
<td>(4) Vocational Secondary</td>
<td>10,047</td>
<td>1,501.0</td>
<td>2,112.2</td>
<td>5,118.9</td>
<td>322.4</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Correctional Work-study</td>
<td>81</td>
<td>2.4</td>
<td>3.4</td>
<td>6.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Primary Schools</td>
<td>628,840</td>
<td>19,601.4</td>
<td>24,620.4</td>
<td>139,953.7</td>
<td>5,793.6</td>
</tr>
<tr>
<td>5. Special Education Schools</td>
<td>1,440</td>
<td>20.8</td>
<td>46.1</td>
<td>340.6</td>
<td>28.5</td>
</tr>
<tr>
<td>6. Kindergartens</td>
<td>182,485</td>
<td>18,343.7</td>
<td>25,189.6</td>
<td>884.4</td>
<td></td>
</tr>
</tbody>
</table>
In terms of structure, Chinese educational system is divided into 4 categories, which are as follows:

- **Basic education**, consisting of pre-school education, primary education, general secondary education, and relevant special education. Primary schooling usually lasts 6 years; secondary education is divided into two stages: lower secondary and upper secondary, each usually lasts 3 years. All children of 6 years of age should start to receive 9-year compulsory education by law, which consists of primary and lower secondary schooling.

- **Secondary vocational and technical education** includes schooling and training provided by regular specialized secondary schools, skilled workers schools, and vocational schools, as well as short-term vocational and technical training courses of various descriptions before service.

- **Regular higher education** refers to tertiary level education provided by short-cycle courses or schools, undergraduate courses, and postgraduate programs, all offering training for formal academic qualifications. Short-cycle courses usually last 2 or 3 years, and normal undergraduate courses last mostly 4 years.

- **Adult education** includes both regular schooling equivalency of all types and levels catering to the needs of adults learning for the acquisition of formal qualifications, and non-formal programs including literacy education and vocational and technical training.

In terms of administration, China has introduced an educational system under which schools are primarily run by the government with the support of various sectors of society. The sources of education spending in 1996 are presented in Table 2. At present, responsibility for basic education has been devolved to the local governments, with primary schools being sponsored by villages, junior secondary schools by townships and senior secondary schools by counties. In addition, separate channels of community and privately-run schools have opened in recent years. In 1997, there were 1,806 private primary schools, 1,702 private middle schools and 689 private vocational schools in China.

The Ministry of Education, at the central government level, exercises macro-guidance over basic education, leaving its actual day-to-day management to the local governments at various levels with the appropriate Division of Education. Its responsibilities are as follows:

- Formulating laws, regulations, policies and overall planning.
- Deciding on the length of schooling, the curriculums and its criteria.
- Making rules on the number of teachers a school can recruit, qualifications for teachers and criteria for the salaries of teachers.
- Establishing special funds for teacher training in poor and minority areas.
- Supervising the work of the Education Departments under provincial and local governments.

Chart 1: Schooling System

<table>
<thead>
<tr>
<th>School year</th>
<th>Kindergartens</th>
<th>Primary Schools</th>
<th>Lower Secondary Schools</th>
<th>Upper Secondary Schools</th>
<th>Universities and Colleges</th>
<th>Graduate Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The central and provincial governments (including autonomous regions and municipalities directly under the central government) are responsible for running institutions of higher education.

Table 2: Source of Education of Education Spending in 1996 (Billions of yuan)

<table>
<thead>
<tr>
<th>Source of Education</th>
<th>Bill. yuan</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Budgetary Expenditure on Education</td>
<td>226.2</td>
<td>53.57</td>
</tr>
<tr>
<td>Taxes of Fees Collected by Government at Various levels</td>
<td>121.2</td>
<td>23.9</td>
</tr>
<tr>
<td>Education Spending by Enterprises</td>
<td>23.9</td>
<td>10.59</td>
</tr>
<tr>
<td>Education Funds Derived from School-run Industries, Work-study programs and Social Services</td>
<td>11.6</td>
<td>5.11</td>
</tr>
<tr>
<td>Education Funds from Social Groups and Individuals</td>
<td>8.7</td>
<td>3.85</td>
</tr>
<tr>
<td>Education Funds Raised Within Communities</td>
<td>2.6</td>
<td>1.16</td>
</tr>
<tr>
<td>Tuition and Miscellaneous Charges</td>
<td>18.8</td>
<td>8.33</td>
</tr>
<tr>
<td>Others</td>
<td>26.1</td>
<td>11.54</td>
</tr>
<tr>
<td></td>
<td>13.3</td>
<td>5.85</td>
</tr>
</tbody>
</table>
2. Profile of the Teacher Force

Number of Teachers

In recent years we have seen the high wave of teacher demand move from primary schools to secondary schools. The reason is that the number of primary school-age children has declined and primary education was almost universalized (the net enrollment rate of primary education was 99.2% in 1997). In the meantime, the number of secondary school students increased by 31.2% and the number of teachers increased by 18.7%. In 1997, 9.42 million people were employed as teachers, of whom some 5.8 million are primary teachers and 3.6 million are secondary teachers. From 1990 to 1997, the number of teachers in primary and secondary schools increased by 8.9%, while the number of students increased by 15.4%.

<table>
<thead>
<tr>
<th>Table 3: Number of Teachers and Enrollments (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>Teacher</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Primary School</td>
</tr>
<tr>
<td>Junior Secondary School</td>
</tr>
<tr>
<td>Senior Secondary School</td>
</tr>
</tbody>
</table>

Number of Teachers by Educational Attainment

The requirements for teachers' educational attainment, laid down in the "Teachers' Law of the People's Republic of China" and "Regulations on Qualification of Teachers", are that all primary school teachers have received at least secondary normal school education, and all secondary school teachers have received normal college education.

<table>
<thead>
<tr>
<th>Table 4: Number of Teachers by Educational Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of Normal Courses in HEIs</td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Primary Schools</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>Junior Sec. Schools</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>Senior Sec. Schools</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

Note: HEI: Higher Education Institutions
Generally, all junior secondary school teachers should receive at least short-cycle course training (2 or 3 years) in higher education institutions, and all senior secondary school teachers should receive at least normal course (4 years) training.

**Number of Teachers by Rank**

China has a system of ranks for the professional development of teachers. The ranks for either the primary school or secondary school teachers are senior teacher, first-grade teacher, second-grade teacher, and third-grade teacher. The senior teacher is a senior professional rank, the first-grade teacher is a middle professional rank, and the second-grade and the third-grade teacher is a junior profession rank.

| Table 5: Number of Teachers by Rank (000) |
|-----------------|---------------------|---------------------|---------------------|
|                | Senior             | First Grade         | Secondary Grade     | Third Grade         |
| Total           | 1,299              | 3472                | 2,574               | 2,050               |
| Primary Schools | 1,139              | 2,637               | 1,078               | 1,607               |
| Junior Sec. Schools | 68                | 639                 | 1,286               | 416                 |
| Senior Sec. Schools | 92                | 196                 | 210                 | 27                  |

**Amount of Primary and Secondary Teachers’ Work**

The local government is in charge of primary and secondary education under the supervision of the central government. The educational department at the provincial level decides the amount of teachers’ work. In general, primary teachers are supposed to teach 16 to 22 lessons a week, junior secondary teachers 12 to 16 lessons a week, and senior secondary teachers 10 to 14 lessons a week. In addition, teachers work in the large size classes. On average, primary school teachers teach classes of 34.1 students and secondary school teachers are in charge of 51.7 students per class.

| Table 6. Size of Classes in Primary and Secondary Schools |
|-----------------|------------------|
| Classes         | Enrollments      | Size of Class   |
| Total           | 5,228,292        | 200,132,243     | 38.3             |
| Primary Schools | 4,104,081        | 139,953,696     | 34.1             |
| Junior Sec. Schools | 962,828         | 51,677,868     | 53.7             |
| Senior Sec. Schools | 161,383       | 8,500,679       | 52.7             |

**Salary and Promotion of Teachers**

China carries out a system of salary grades that corresponds with the ranking-system of teachers in primary and secondary schools. The salary structure comprises of rank based salary and professional allowances. The former accounts for 70% of the total income. The promotion structure consists usually of four main levels from the third-grade teacher to the senior teacher.
The government at the provincial level strictly controls the number of promotion positions. A teacher, who applies for appointment to a particular rank, is subject to appraisal by a qualification committee. In general, consideration will be given to teaching commitment, length of service and educational attainment. If the applicant's qualifications are judged satisfactory for the position or rank, the school or departments of education at county level or above have the right to make the appointment within the number of available positions. Those primary and secondary teachers who have contributed substantially to education will enjoy special consideration with regard to their professional ranks, irrespective of their educational background or length of service.

Protection of Teaching Profession by Law

On the basis of "Teachers' Law of the People's Republic", primary and secondary teachers enjoy professional rights, which are as follows:

- The average salary of teachers should be as same as or higher than that of public servants.
- Teachers enjoy "teaching profession allowances" and other allowances.
- The government at various levels should give teachers preferential and priority in terms of construction, distribution, selling or renting of housing.
- Teachers enjoy the same treatment in terms of medical care as public servants do.
- Teachers enjoy retirement pension or other benefits when they retire, and government at county level or above must increase the retirement pension for those who have serviced in schooling system for long time.

Measures to Raise the Social Position of Teachers

The state protects the interests of teachers and has adopted several measures to raise their social status and living standards. In January 1985, the 9th Session of the Standing Committee of the 6th National People's Congress adopted a resolution to make the 10th of September Teachers' Day, with the purpose of arousing the public to have respect for teachers, to help the schools with their difficulties, and to commend those teachers who have contributed significantly to education. To encourage teachers to devote their lives to primary and secondary education, they are given government allowances based on the length of service. In November 1987, the government decided to give a "teacher profession allowance" to primary and secondary teachers, who would enjoy a 10% raise on top of their basic salaries. Teachers also enjoy free medical care. In addition to assistance from the local government, the central government has appropriated special funds for improving teachers' housing and living conditions.
3. New Tasks and Challenges

Since China adopted the policy of reform and opening to the outside world in 1978, education and science and technology are regarded both as priorities in the modernization process and as a key aspect of the national development strategy. To meet the needs of national economic development and people's basic learning, a number of important laws, regulations and decisions were issued between 1985 to 1995. These were:

- The Decision of the CPC Central Committee on the Reform of the Educational Structure (1985),
- Compulsory Education Law of the People's Republic of China (1986),
- Education Reform and Development Program of China (1993),

All of these combined are designed to support a number of interrelated goals, which should be achieved by the end of the century. They are as follows:

- Children of 7 to 12 years old should have access to and be able to complete primary education of good quality. Even in mountainous, scarcely populated and poverty-stricken areas, 3-4 years of primary education should be also universalized.
- 85% of children in the age group of 12-15 should have access to general junior middle schools or agricultural junior middle schools. The country shall by then universalize 9-year compulsory education with the population coverage of over 85%.
- Large cities and economically developed coastal areas should actively try to universalize senior secondary education.
- Enrollment in technical and vocational schools at the senior secondary level should be increased considerably, and the proportion of enrollment in schools should be above 60%.

Table 7: Development of Primary and Secondary Schools between 1949 and 1997

<table>
<thead>
<tr>
<th></th>
<th>1949</th>
<th>1978</th>
<th>1997</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school teachers (mills)</td>
<td>1.44</td>
<td>5.23</td>
<td>5.79</td>
<td>263%</td>
</tr>
<tr>
<td>Secondary schools teachers (mills)</td>
<td>0.13</td>
<td>3.28</td>
<td>3.58</td>
<td>2423%</td>
</tr>
<tr>
<td>Primary school enrollment (mills)</td>
<td>51.10</td>
<td>146.20</td>
<td>139.95</td>
<td>186%</td>
</tr>
<tr>
<td>Primary enrollment as percent of age cohort (%)</td>
<td>25.0%</td>
<td>94.0%</td>
<td>99.2%</td>
<td>276%</td>
</tr>
<tr>
<td>Secondary school enrollment (mills)</td>
<td>3.15</td>
<td>66.37</td>
<td>71.88</td>
<td>2007%</td>
</tr>
<tr>
<td>No. of primary schools</td>
<td>526,964</td>
<td>949,317</td>
<td>628,840</td>
<td>107%</td>
</tr>
<tr>
<td>No. of regular secondary Schools</td>
<td>4,298</td>
<td>10,078</td>
<td>76,642</td>
<td>3677%</td>
</tr>
</tbody>
</table>

In common with other countries, Chinese education is undergoing a new stage of reform and development. Great efforts have been given to basic improvement of the education system, including the strengthening of basic education, universalizing 9-year compulsory schooling,
increasing the emphasis on vocational and technical training, and improving the content and methods of teaching. By 1997, 9-year compulsory education was universalized in 1882 counties with a population coverage of 65% above. This achievement is presented in Table 7. In the meantime, Chinese schools are undergoing changes at a rapid rate, which is creating new tasks, challenges, issues and problems concerning teacher training and professional development. The more significant among them are:

- The tendency of governments to require all parts of the education system to contribute to the achievement of national objectives relating to economic development. This tendency shows itself in several ways: the development of great consistency in reform of curriculum framework; the encouragement of students to remain longer at school; and demands for the teaching of skills more relevant to the world of work. Teachers in primary and secondary schools who, in earlier times, dealt mainly with students proceeding to higher level education, are now increasingly required to raise their competence and teaching techniques for the whole, and more diverse, student population.

- The shifts in the balance of control of schooling. There are both centralizing and decentralizing trends. In response to the desire to make schools more responsive to the needs of society, the process of devolution of authority to regions and individual schools continues apace, with a consequential reduction in the day-to-day managerial responsibilities of central authorities. On the other hand, the increase of government interest in the schools as agents of national economic and social development results in recognition of the need for monitoring and evaluation of both teacher and student performance. The teachers face the task of positioning themselves with self-confidence within a set of personal inter-relationships which are quite diverse, and include parents and the community.

- Greater emphasis on developing senior education. The national net enrollment rate of primary school age children was 99.2% a, while the gross enrollment rate of junior secondary school age children only 87.1% in 1997. The key focus of universalization of 9-year compulsory education has moved to junior secondary education. In addition, the number of senior secondary school students has increased at a pace of more than 10% per year in the past several years. This has created the difficult task for teacher education to provide a sufficient number of secondary teachers and on the other hand to train more qualified teachers on the other hand.

- The movement away from the undifferentiated general senior secondary schools. We note a continuing trend of more schools catering only for post-compulsory students, more "selective" schools, and more schools concentrating on specialized areas such as technology, the fine and performing arts and others. Teachers are now required to
developing new courses and prepare themselves to meet new teaching tasks.

- The impact of technology. Many of the present teachers had their professional preparation in the pre-computer age, and they face the task to "catch up" with trends towards a technology based educational setting. The use of modern computer technology in schools raises fundamental questions about both the learning processes and school organization, which must be taken up both in pre-service teacher training and in in-service teacher training.

4. Pre-service and In-service Teacher Training

Teacher Training Institutions at Various Levels

China has the world largest teacher force. There are 9.42 million primary and secondary teachers in its schooling system. Teacher education in China consists of pre-service and in-service teacher training programs and institutions. It is supporting the largest basic educational system in the world. To meet the demands for teachers of primary and secondary schools, the state has set up 1124 teacher training institutions at various levels with 1,153,400 students and 2361 in-service teacher training schools and colleges with 1,097,100 trainees (1997).

The government at various levels is responsible for making training policies, drawing up training plans, providing financial support, supervising the teacher training programs and spreading advanced experience. In close cooperation with the institutions of educational research, the teacher training institutions are supposed to organize training activities in a planned way, provide guidance and management in terms of professional work, and do research on teacher training. The school, where the teachers work, is a main place for their training and also has the responsibility to provide time and necessary conditions for their training and enable systematization to ensure teacher training to be more efficient.

Qualifications of Primary and Secondary Teachers

Laid down in the "Teachers' Law of the People's Republic China" and "Regulations on Qualification of Teachers", the requirements of primary and secondary teachers are as follows:

- Citizenship Requirements: all teachers should be Chinese citizens. All Chinese citizens without discrimination of ethnicity, sex and profession, who fulfill the requirements of teachers, can obtain a teacher qualification.
- Commitment Requirements: all teachers should love the cause of socialist education, take good care of their students and devote themselves to their duties.
- Education Attainment Requirements: All primary school teachers have received at least
secondary normal school education. All junior secondary school teachers have received at least short-cycle course training (2 or 3 years) in higher education institutions. All senior secondary school teachers should have received at least normal course training (4 years).

- Education and Teaching Skills Requirements: all teachers should have received training on educational theories and teaching skills.

Pre-service Teacher Training

General Secondary Teacher Education in China aims mainly at the training of primary school teachers. In 1997, there were 892 such schools attended by 910,927 teachers. They enroll graduates from junior secondary schools, offering either 3-year or 4-year programs to train teachers for predominantly primary schools. The courses offered are made up of 4 parts: compulsory courses, optional courses, teaching practice and extracurricular activities. The compulsory courses offered are as follows: Ideology and Politics, Chinese language and literature, Mathematics, Physics, Chemistry, Biology, History, Geography, Psychology, Pedagogy for Primary Schools, Educational Technology, Fine Arts and Physical Education. The optional courses include subjects offered in accordance with the educational needs of the school service areas to broaden and deepen the students' knowledge and develop their interests and aptitude, and vocational and technical subjects for the local economic development.

General Higher Teacher Education in China aims mainly at the training of secondary school teachers. The organizations, which carry out this task, are general institutions of higher teacher education, and colleges, departments and classes of teacher education in other institutions of higher education. In 1997, there were 232 such colleges attended by 642,534 student-teachers in undergraduate programs and short-cycle programs. Of the 232 institutions, 76 were normal universities and teachers' colleges, the remaining 156 were short-cycle teachers training colleges. They offer 4-year programs primarily training teachers for secondary schools and 2-year or 3-year programs to mainly train teachers for junior secondary schools. The major subjects of study are: Pedagogy, preschool Education, Special Education, Educational Administration, Psychology, Educational Technology, Chinese language and literature, Languages and literature of minority nationalities, Ideological and Political Education, History, English, Russian, Japanese, Mathematics, Computer Science, Physics, Chemistry, Biology, Geography, Music, Fine Arts and Physical Education.

In-service Teacher Training

For the purpose of assuring the high quality of primary and secondary teachers, the government has prescribed specific scholastic requirements for teaching at a particular level. The government has also prescribed the standards for evaluation of a teacher who is to receive a
“professional certification”. Furthermore, it encourages teachers to take part in in-service training programs, recognizes the scholastic standing of those who pass the qualification examinations, and grants them adequate treatment. There are two types of teacher in-service training programs: full-time and part-time. During the in-service training the teacher receives full pay, and the government pays all expenses involved. In addition, the government and the schools for teachers’ in-service training also create proper conditions for participants.

For most of the period since 1978, the primary task of in-service teacher training has been academic education leading to a diploma or certificate. Various training institutions have formed a multi-channel and multi-level training network through division of work as well as cooperation.

The following are the 9 main forms of in-service training:

- Teachers’ in-service training colleges. In 1997, there were 229 such colleges attended by 228,359 teachers in the form of undergraduate programs and short-cycle programs.
- Teachers’ in-service training schools. In 1997, there were 2,142 such schools attended by 23,196 teachers who had received only lower secondary school diploma.
- College extension classes at undergraduate level or junior college level. In 1997, the enrollment in such classes came to 56,500.
- Part-time classes run by colleges and universities, teacher in-service training colleges, or schools.
- TV universities and TV teachers' colleges.
- Correspondence courses.
- Seminars on teaching materials and methods organized by teaching and research sections at various levels.
- Participation in teaching and research activities relating to particular subjects, carried out by groups within a school or in other schools. In such activities experienced teachers give guidance to others.
- Self-study. Those who study on their own may participate in a national higher education self-study qualification examination.

Achievements

Millions of qualified teachers have been trained for primary and secondary schools. From 1980 to 1995, 5,6176,000 students graduated from teachers education institutions at various levels. 5,103,000 primary and secondary school teachers received diploma-granting education. On top of this, a large number of primary and secondary school teachers received non-diploma training. 630,000 headmasters of primary and secondary schools attended in-service training. Thus an immense contribution has been made to the development of basic education, especially to the 9-year compulsory education system.
The quality of education has been improved in every respect. To meet the needs of socialist modernization, construction and the reform and development of basic education, multilevel teacher education institutions have been changing their concepts of education and reforming teaching contents, methodologies and media, the designs of subjects, specialties, curriculums and textbooks. Also the strengthening of teachers abilities to teach students scientific thinking, methodology, their devotion to their specialties, on the professional morality as well as on the training of teaching skills has taken place. All-round improvements have been achieved in teacher training.

Great advancements have been made in scientific research, especially in educational research. A number of research institutes and bases for educational reform experiments have been set up in teacher education institutions, to develop a profession based upon scientific research, guided by supervisors of doctoral and master's candidates, funded by the State Educational Science Programs, the Natural Sciences Fund Programs and the State Philosophical and Social Sciences Fund Programs, resulting in plenty of achievements in scientific research.

The teaching force has been continuously strengthened, and the teachers' professional morality and competence has improved remarkably. In 1995, the total number of teachers in teacher education institutions in the whole country reached 199,000, the proportion of teachers with professional titles in institutions of higher teacher education, educational colleges and teacher training schools being 29.7%, 28.1% and 12.7% respectively. A large number of young and middle-aged teachers are maturing, and have taken up leading roles in research and teaching.

5. Strategies and Mechanisms

Teacher Training is an Important Responsibility of the Government

The government at various levels should put teacher training and professional development of teachers on the top of their agendas, and regard it as a strategic mechanism in the process of national development and reform of education. The provincial governments should, on the basis of the demands of primary and secondary educational development, formulate plans and programs of teacher training development and reform systematically. The governments at various levels should actively create conditions for the development of teacher training, encourage functional governmental organs, non-governmental organizations and the public to participate and provide support.
Promoting the Strength of the Teaching Force by Legal Means

The "Teachers' Law of the People's Republic of China" and the "Regulations of Qualification for Teachers" are effective instruments in promoting and ensuring the professional development of teachers. The rule of laws and regulations must be brought into full play. Efforts should be made to increase the awareness and consciousness of government officials and teachers about the rule of law through learning and activities. The principle of putting teacher education and professional development under the rule of law must be upheld, inspection and monitoring work in the enforcement of these laws must be strengthened. Local governments should, in accordance with law and regulations, adopt their own rules and regulations to further improve and promote the construction of the teaching force.

Developing Teacher Training Plans Consistent with the Actual Situation

In China, the development of economy and culture is very uneven between regions, there are gaps between rural and urban areas, between the Eastern developed regions and the Western underdeveloped regions, and between different ethnic groups. Therefore, in accordance with the principle of "planning by region and providing guidance by category", distinction should be made between different categories in the quantity and quality of teachers supply, in the size and structure of teacher training programs and in the requirements of teacher training development.

Increasing the Financial Input for Teacher Training

Since teacher training is designed to provide qualified primary and secondary teachers, governments at all levels have responsibility for providing financial support to teacher training, and eventually should play a main role in managing the teacher training expenditures with the support of all sectors of society and individuals. Governments at all levels should make sure that:

- The increased rate of allocations for teacher training from both the central and local governments is higher than that of regular financial income,
- The average increase in teacher training expenses on a per trainee basis is gradually raised,
- The trainers' salaries and public expenditures per trainee increase every year,
- The special funds should be set up to support teacher training,

From 1985 to 1995, the central government has allocated 2.1 billion RMB to subsidize teachers' training development. Also foreign loans and aid worth about 270 million US dollars were used to strengthen teachers' training institutions.
Ensuring Opportunities for the Professional Development of Teachers

Increasing Teachers' Salaries

In recent years, measures have been taken to raise the salaries of teachers in primary and secondary schools. However, since the policy of reform has endowed the enterprises, with new operational mechanism and more autonomy, the employees' salaries in the private sector grow at a faster pace. In contrast, the salaries of teachers linger behind. This has affected the stability and quality improvement of teaching force. In recent years, measures have been taken to raise the salaries of teachers of primary and secondary schools, including:

- Establishment of a new salary system and a mechanism for regular salary increases, which is suited to the characteristics of education, and to guarantee that the salary level of teachers will rise with the gradual growth of the GNP.
- Giving higher pay to those who make extraordinary contributions or exhibit excellent teaching performance.
- Decreasing direct, central government control on the salary system. Local governments, departments of education and schools have more freedom to decide on salary matters under the macro-control of states.
- Giving schools the right to change the salary structure, increase salaries and distribute school funds as they see fit.

The treatment of teachers has been improved mainly through the increase of the state appropriations and the reform of the salary system of teachers. The average salary of teachers exceeded that of employees working in local state-owned enterprises, and reached the middle to high ranks of 12 sectors of the national economy.

Making the Teaching Force More Efficient

To meet the needs of the 21st century, a contingent of teachers who are capable and qualified, and receive good pay and other material benefits is essential. Rational standards for the size of school staff should be set and the staff must be closely examined to reduce the total size of staff and increase the proportion of teachers to students. Departments of personnel, labor and education, as well as schools themselves, should work closely to help redundant staff find jobs through various channels according to their professional competence and abilities under the state plan.

Supporting Underdeveloped Areas

The priority of teacher training is placed in rural areas, in particular the mountainous, remote and poor areas. In the last ten years from 1985, a number of measures have been taken by the State Council and the Ministry of Education:

- Providing 2.1 billion yuan for teacher training, of which 80% went to rural areas, and also of
US$270 million in foreign loans and aid from the World Bank and UNICEF.

- Organizing urban areas and developed provinces to support underdeveloped areas. The assistance includes both the dispatch of teachers, equipment support and exchange study-visits, both in pre-service and in-service teacher training.

- Setting up the China TV Teacher Training College to offer teacher training course nationwide.

- Carry out a system of precondition enrollment in teachers' pre-service training colleges and schools.

**Improving Teachers' Quality through Further Reform**

The objective of teacher training is to improve the overall qualities of education by producing more and better teachers through both pre-service and in-service programs. "Education must serve the socialist modernization drive, must be combined with production so as to train constructors and successors who are intellectually, physically and morally developed". This educational principle must be upheld. Educational ideas of teachers should be changed, training contents and methods reformed and the tendency of separating education from the requirements of economic construction and social development ought to be avoided. The training of teachers in terms of their knowledge and skills should be emphasized further, as well as the abilities of teachers in computer based educational technology.
Ensuring Opportunities for the Professional Development of Teachers: Country Report – India

Anil Kumar Gulati

Director
Teacher Education
Ministry of Human Resource Development
Department of Education

Summary

Education is an important instrument of economic and social development and teachers and teacher-educators are expected to provide vital inputs towards realisation of educational goals. In India about 4.3 million teachers are working in different levels of schools. The National Policy on Education, realising the important role training can play in professional development of schools teachers, envisages the creation of a viable infrastructure for educational training and research.

Over the years, a multi-tier infrastructure for teacher's education has been developed in the country. At its apex, the National Council of Educational Research and Training (NCERT) leads the country in designing exemplar instructional material on teacher education and provides training through innovative programmes. The National Council for Teacher Education (NCTE) has been set up in 1995 as a statutory body under an Act of Parliament to look after the quality aspect of teacher education. State Councils of Educational Research and Training (SCERTs) are replicas of NCERT at the state level and serve as lead institutions in the States for educational research and training. Under the Centrally Sponsored Scheme of Restructuring and Reorganisation of Teacher Education 444 District Institutes of Education and Training (DIETs) have been set up to strengthen the district-level training infrastructure for elementary school teachers. To cater for the requirements of secondary school teachers 76 Colleges of Teacher Education (CTEs) and 34 Institutes of Advanced Studies in Education (IASEs) have been set up in the states under this scheme. In all, about 1800 teacher training institutions are operating in the country today, both in the public and private sector, to provide pre-service and in-service training to schoolteachers.

India, being a vast country with geographically diverse regions, requires a different approach for recruitment and training of teachers in remote and difficult areas. A number of innovative schemes have been launched by State Governments to tackle the problems of teacher absenteeism and child labour. The successes of these innovative schemes have considerably enhanced the possibilities of achieving universalization of elementary education (UEE) in a time-bound manner.

Interactive distance education offers new opportunities to cover large numbers with improved quality of training. India has significant experience, expertise and capability in distance education. Based on this, a National Action Plan has been formulated for in-service training of school teachers in distance mode using interactive video technologies. Although the ultimate focus of NAP is universalization of education, training of teachers and capacity building are seen as important means to that end.
1. Background

There has been a phenomenal growth of the teaching profession in India since Independence. During 1994-95, about 4.3 million teachers were working in different levels of education. Of these, 2.7 million (66%) were engaged in primary and upper primary schools. Between the period 1990 to 1995, the total strength of teachers at different levels of school education increased from 4.0 million to nearly 4.3 million, marking an increase of 7.5%. If this trend continues, the number of teachers, particularly primary and upper primary teachers will grow significantly over the next decade. A sex-wise analysis of the teacher force indicates that there are more male teachers than female teachers at all levels of school education. Although the number of female teachers has increased, their share in the total teaching force is yet small, particularly in rural, remote and educationally backward areas. The percentage of women teachers in schools increased from 29.40% in 1987-88 to 32.08% in 1993-94.

A fully qualified primary school teacher, as recommended by the National Policy on Education 1986, is expected to have twelve years of school education followed by two years of primary teacher training. However, the practice differs from state to state. There are teachers with ten years of general education and one year of primary teacher training. A large number of teachers recruited before 1986 have had ten years of general education. There are teachers, usually very senior, who have eight years or less of general education. While data on teachers' pre-qualification are not adequately available, it is estimated that there are about 240,000 teachers who are not fully qualified.

The National Policy on Education 1986, and its revision in 1992, places significant emphasis on pre-induction training as well as in-service continuing education of primary school teachers. Over the years, India has developed a multi-tier infrastructure for teacher education. At the national level, the National Council of Education Research and Training (NCERT), set up in 1961, leads the country in designing exemplar instructional material on teacher education and provides training through innovative programmes. The National Council for Teacher Education (NCTE) was set up in August 1995 under an Act of Parliament for the planned and coordinated development of teacher education. The Indira Gandhi National Open University (IGNOU), through its School of Education, offers teacher education programmes in the distance mode. State Councils of Educational Research and Training (SCERTs) were set up in 20 states and State Institutes of Education (SIEs) in nine other states as the state counterpart of the NCERT to provide direction and leadership to reforms in school education including teacher education. Below the state level there are elementary teacher training institutions which are continuously being upgraded since 1987 under a Centrally Sponsored Scheme (CSS).
2. **Restructuring and Reorganization of Teacher Education**

As envisaged in the National Policy on Education, the Centrally Sponsored Scheme of Restructuring and Reorganisation of Teacher Education was taken up in 1987 to create a viable institutional infrastructure, and academic and technical resource base for orientation, training and continuous upgrading of knowledge, competence and pedagogical skills of elementary school teachers in the country. The scheme has the following five components:

- Setting up of District Institutes of Education and Training (DIETs) to organise pre-service and in-service courses for elementary school teachers and for personnel working in non-formal and adult education.
- Strengthening of Colleges of Teacher Education (CTEs) and development of about 50 of them as Institutes of Advanced Study in Education (IASEs)
- Revitalization of State Councils of Education Research and Training (SCERTs)
- Mass orientation of schoolteachers under a planned programme to be implemented under the supervision of NCERT.
- Establishment and strengthening of Departments of Education in the universities through the Universities Grants Commission (UGC).

The establishment of DIETs under the Centrally Sponsored Scheme of Teacher Education is a major intervention, as facilities for continuous teacher education at district level were non-existent before the launch of this Scheme. It has been envisaged that DIETs would provide the training and resource support to elementary education (both formal and non-formal) and adult education systems at the grass-root level. A DIET has three main functions:

- Training both at the induction level as well as in-service,
- Resource support, extension/guidance, development of materials, teaching aids, evaluation tools etc.,
- Action research.

All programmes of pre-service and in-service teacher education are designed to train the teacher/instructor in transacting the curriculum, keeping the learner at the centre of the teaching-learning process.

DIETs have been established throughout the country either by upgrading of the existing Primary Teachers Training Institutions (PTTIs) or by establishment of a completely new district level institution. In both cases, central assistance is provided for either upgrading the existing physical infrastructure of a PTTI, or for setting up of a new building with adequate facilities such
as class rooms, hostels, an administrative block and staff quarters. As per the norms approved for the VIII Plan, non-recurring assistance up to Rs. 5.8 million could be sanctioned for additional civil work of an upgraded DIET and up to Rs 10 million for a completely new building. Besides this, an amount up to Rs 1.7 million could be sanctioned for the procurement of necessary equipment and other teaching aids. As far as recurring assistance is concerned, the central government undertakes reimbursement of the full expenditure on pay and allowances of faculty (31) and administrative staff (17) sanctioned for various DIETs along with the expenditures incurred by training programmes and contingencies. By the end of last financial year (31st March 1998) 444 DIETs were established and/or upgraded, out of which 378 are operational and organise training programmes.

The secondary stage is a vital one in the educational system. It is the final stage of school education, which prepares students either for higher education, or for going into a vocation of their choice. With the introduction of the 10+2 system throughout the country and the objective of introducing vocational courses at the +2 stage, the secondary stage of the school system has acquired an even greater significance, and as a result the education of secondary school teachers as well. With the establishment of District Institutes of Education and Training for elementary school teachers, it also became necessary to produce good quality elementary teacher-educators. Thus selected secondary teacher education institutions combined twin functions of education of secondary school teachers as well as of elementary teacher-educators.

The system of secondary teacher education, therefore performs the following broad functions:

- Imparting of quality pre-service and in-service education to the secondary school teachers;
- Preparation of personnel for the faculties of elementary teacher education institutions, and their continuing education;
- Provision of general resource support to secondary schools and elementary teacher education institutions; and
- Research, innovation and extension work in the field of secondary education and elementary teacher education.

To facilitate the training of secondary level teachers and teacher-educators of DIETs, 76 Colleges of Teacher Education (CTEs) and 34 Institutes of Advanced Studies in Education (IASEs) have been established throughout the country under the Teacher Education Scheme. In all, about 1800 teacher training institutions are functioning both in the government and the private sector, which provide pre-service and in-service training to teachers and teacher-educators.

The strengthening of the State Councils of Educational Research and Training (SCERTs) is an important component of the Teacher Education Scheme. These councils are expected to
perform multifarious roles and responsibilities relating to research, development, training, extension, documentation and consultancy. Though the majority of States have established these councils, the status of most of them requires upgrading in terms of better infrastructure and faculty to enable them to reach the level of being vibrant state level organisations, capable of playing an effective role as lead institutions. Efforts are made to make the state level institutions autonomous and independent with overall responsibilities to supervise and guide the functioning of DIETs, CTEs and other teacher education institutions within the state.

The National Council for Teacher Education (NCTE) has been established as a national level statutory body by the Government of India in August, 1995 with the objectives of achieving planned and coordinated development of teacher education system, regulation and proper maintenance of norms and standards of teacher education and other related matters. Some of its major functions are: laying down norms for various teacher education courses, recognition of teacher education institutions, laying down guidelines with respect to minimum qualifications for the appointment of teachers, surveys and studies, research and innovations and prevention of commercialisation of teacher education. On the basis of the provisions of the NCTE Act, four Regional Committees for the Northern, Southern, Eastern and Western regions have been established in Jaipur, Bangalore, Bhubneshwar and Bhopal respectively. These Regional Committees consider the applications of institutions of teacher education for recognition/permission in accordance with the provisions of the NCTE Act. The Council has laid down norms and standards for pre-primary, elementary and secondary level teacher education institutions and for B.Ed. courses through correspondence/distance education modes. Besides producing a number of useful publications on the subject of teacher education, a new curriculum Framework on Teacher Education has recently been formulated by the Council.

3. Innovative Interventions in Teacher Education

**Shiksha Karmi Project**

The Shiksha Karmi Project (SKP) is being implemented in Rajasthan since 1987 with assistance from the Swedish International Development Co-operation Agency (SIDA). The project aims at the universalization and the qualitative improvement of primary education in remote and socio-economically backward villages in Rajasthan with primary attention to girls. The project has identified teacher absenteeism as a major obstacle in achieving the goal of Universalisation of Elementary Education (UEE). It became clear that a primary school in remote villages, with the teacher not residing there, often tended to become dysfunctional, and parents as well as children failed to relate to such an institution, leading to high dropout rates. Under SKP, regular teachers are replaced by local teachers who are less qualified but specially trained. The
Shiksha Karmi (SK) is a local person with minimum educational qualification of Class VIII for men and Class V for women. To overcome this basic lack in qualifications, Shiksha Karmis are given intensive training through an induction programme as well as periodic refresher courses.

Major achievements under Shiksha Karmi Project are as follows:

- A six fold increase in enrolment of children in the age group of 6-14 years in Shiksha Karmi Schools and Prehar pathshalas (School of convenient timings).
- Enrolment of children in the age group 6-14 years in primary education in SKP villages has improved significantly from 37% to 83% at present.
- Enrolment of boys has gone up from 50% to 93% and the enrolment of girls has increased from 21% to 76%.
- Monthly attendance of children in SK schools has improved from 58% to 84%.
- Retention of children in schools which have been with the project for more than five years has improved considerably.
- 1979 disabled children have been integrated in SK schools.
- 55% of the children in SK schools belong to the Scheduled Castes and Scheduled Tribes and 19% to Other Backward Classes (OBC).
- One of the outstanding achievements of SKP is 100% enrolment of children in the age group of 6-14 years in 576 villages, i.e. more than one-fourth of project villages.
- The SKP has constituted 2600 Village Education Committees (VECs) in villages to promote community involvement in primary education and encourage village level planning, supervision and management in improving effectiveness of schools.
- A number of strategies have been tried out and implemented in the SKP for the promotion of girl education.
- Prehar pathshalas have enabled out of school children, especially girls in the remote areas, to avail of opportunities for primary schooling at their own pace and with sufficient flexibility. At present 22,138 girls who constitute 68% of learners in Prehar pathshalas are benefiting from this facility.
- Angan pathshalas (Courtyard Schools or APS) for small children, particularly girls who cannot travel long distances to attend schools, have been started. At present, 97 APS centers are in operation with 4023 children.
- In order to facilitate and increase the enrolment of girls in villages where literate women are not available to work as SKs, 14 Mahila Prakashishan Kendras (Women Training Centres) have been set up in interior rural areas in which 334 women are being trained.
MV Foundation Programme

The MV Foundation programme is being run in the Ranga Reddy district of Andhra Pradesh for Universalisation of Elementary Education. It was started neither as a low-cost alternative to regular government teachers in schools, nor in response to teacher absenteeism. It has its origin in the organisation's concern for eradication of child labour. The MVF strategy is to release children from labour and put them into the regular government schools. The role of the para-teacher, a local youth, is:

- To campaign against child labour,
- To mobilise children, parents and the community in favour of schooling,
- To run bridging courses for children released from labour to give them basic literacy and numeracy skills and getting them used to the school life, and
- To assist the government teachers in teaching, and to retain the new entrants recently released from labour and put in to school after an intense campaign.

These para-teachers have also helped in sensitising the government teachers to take a stand against child labour, and towards larger educational reforms, which is the MVF agenda. More than 1600 para-teachers are active in Ranga Reddy district at present. The programme, which started in 1991, has grown rapidly. It has already succeeded in putting 50,000 children back into schools.

Volunteer Teacher Scheme: The Himachal Pradesh Volunteer Teacher Scheme (HPVTS) was introduced by the state government of Himachal Pradesh in 1984. The HPVTS was formulated to provide an additional volunteer teacher to single teacher primary schools. This was needed because there was an increase in the enrolment in government schools. Furthermore, the scheme was started to provide work to educated unemployed youth for a short period of time. After completion of 10 years service VTS are regularised as Junior Basic Teacher. The teachers appointed under this scheme must live within a radius of 5 Km. of the single teacher primary school. He or she receives points in the selection process for being local and his/her educational qualifications can range from matriculation to B.A./B.Ed. The candidates also undergo a personal interview and are awarded points based on their performance.

4. Action Plan to Increase Opportunities for Professional Development of Teachers - Introduction of Distance Mode in Teacher Training

Electronic media has a time-tested, large and definite role to play in the field of Distance Education. In fact, the latest innovations in the arena of teachers' training through distance
Ensuring Opportunities for the Professional Development of Teachers

Education are based on electronic media. Educational Television is more than 35 years old in India and Educational Radio is even older. In terms of response of students, Educational Television, is favoured as it broadcasts both image and sound. Teachers and students have graduated from pure audio to the image and voice learning media. Next logical step is two way interaction - and expectations are towards interaction with both image and voice - preferably two-way video - otherwise at least one way video and two way audio.

Indira Gandhi National Open University (IGNOU), with a national jurisdiction, state-of-the-art media production facilities, fairly well-established student support services and expertise in teacher education has been making attempts to provide teacher education/training packages for teachers in the institutions of higher education and primary education through distance education. With the aim to cater to the training needs of the primary sector, the School of Education and IGNOU went into collaboration with National Council of Educational Research and Training (NCERT) in 1993. It is offering a Certificate Programme in Guidance for primary school teachers and parents and is in the process of developing a comprehensive programme titled "Diploma in Primary Education (DPE)". It follows a modular approach, for training untrained primary school teachers in the North-Eastern States of India. There is also a plan to extend this programme to other states in subsequent years. The University makes use of self-study print materials, audio and video programmes, theoretical and activity-oriented assignments, tutorials and academic counseling, contact sessions and internships, Radio and TV broadcasts and teleconferencing for its professional programmes.

At the central level, the Government of India has funded a successful experiment to introduce the distance education mode in delivering training packages to the primary teachers under the existing "Special Orientation Programme for Primary School Teachers" - a training programme based on a cascade model. This distance education mode has made use of interactive video technology. Two pilot projects have been taken up by the implementing agency - the National Council of Educational Research and Training (NCERT). The first pilot project was taken up during January, 1996 in the state of Karnataka. 850 primary school teachers, who had been assembled in 20 centers, were trained. The learning centers were almost at a distance of 2500 km from the Teaching Centre. The seven day programme had 14 sessions, each of which was on various topics such as Minimum Levels of Learning, Teaching Aids, Multi-Grade Teaching and strategies for teaching Mathematics, Environmental studies and Languages. Each of the sessions was of about 210 minutes (120 minutes of live interaction and 90 minutes of individual and group activities). Each session comprised of self-study, presentations and demonstrations (live and pre-recorded) by experts, panel discussions, teachers interacting with panelists through telephone and fax and group activities. NCERT's Central Institute of Technology (CIET) had also conducted a Classroom 2000+ experiment in May 1993 which
demonstrated the potential of Interactive Video Technology in direct teaching of Physics and Mathematics concepts to groups of students spread at various distant locations in the country. It made use of a television set, a telephone and computer keypads for trainees to give responses. The similar mode had now been tried for teacher training.

Keeping these developments in mind, India’s National Action Plan (NAP) for In-service Education of Primary Teachers through Distance Education - a perspective plan to integrate all the ongoing programmes in this direction, has been prepared. The vision laid out this plan is that only by pressing into service the distance education mode, equipped with modern training technology, it will be possible to provide in-service training to all primary teachers every year and their trainers and supervisors every second year. Thus, the technology aspect has to play a big role in implementing this plan. Therefore, it has been also felt necessary to test-run yet another pilot project to train teachers through distance mode using interactive technology. With the collaboration from UNESCO and the International Telecommunication Union (ITU), the Government of India has taken up a pilot programme on In-service Primary Teacher Training (IPTT) through application of interactive television in distance education.

The project will aim at designing and pilot testing a program for continuing in-service education of primary teachers and teacher-educators (DIET Staff). It will simultaneously validate and standardise technology specifications for interactive television system for application in distance education in the developing countries. The major objectives of the project are:

- to design and implement an interactive distance education programme for primary teachers and DIET staff throughout a wide geographical area in selected states,
- develop print, audio and video software according to the requirements of the proposed distance education programme,
- to use interactive television (ITV) to improve the quality of interactivity in distance education programmes and standardise technology specifications for ITV for application in distance education,
- to gain insight into the organisational, managerial and technical constraints and problems to interactive distance education for in-service training of primary teachers, and consider the trade-off between large numbers of learners and the level/quality of interaction.

Some of the major outputs of this project will be a standardization of ITV technology for application in distance education, training of at least 8,000 teachers and teacher-trainers; accumulation of experience and insight during the implementation, learning centers would get equipped with reception facilities in addition to the existing educational technology aids and equipment. Strategically, this project will be built upon available programmes, experience and infrastructure. It does not propose training set up *de novo*.

Another component of the strategy is to involve the State Governments and State level
institutions in administrative and academic decision making in the project. This is important, because, the training of primary teachers has to be dealt with by the State governments and State agencies.

During the implementation phase, five one-week programmes each in two different Indian Languages (Gujarati and Hindi) will be held for teacher-educators and teachers. These programmes will be carefully alternated so that each programme or group of programmes is followed by intensive review and programme modifications. The five programmes in each language will be spread over 24 weeks of implementation allowing on average a four-week interim period for review and modifications - both from the angle of pedagogy as well as technological application. The ultimate beneficiaries of the project are the primary school students and hence, the country as a whole. Direct beneficiaries are the professional staff in the DIETs and the primary teachers. Interactivity will be the main feature of the programme delivery.

Several levels of interactivity have been proposed. They are:

a. Face to face interaction;
b. Satellite based interactive learning;
c. Inter-centre information exchange; and
d. Computer assisted interactive learning.

A special feature of the project will be experimentation with alternative interactive modes at different locations. The learning Centres will comprise of urban, semi-urban and rural sectors. Although self-study and face-to-face interaction will remain the same in different learning centres, the return path of the ITV component will vary. Five Centres each will have satellite based talk-back facilities, voice-mail, STD/FAX and a data network. Subject to availability, a few Centres will use ISDN facility/video telephone. This will provide 3x4 i.e. 12 different modalities within the project for experimentation of effectiveness and cost-efficiency of different approaches.
Ensuring Opportunities for the Professional Development of Teachers in Indonesia

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Summary

Issues Related to Teachers' Professional Capability

1. **Quality of School Teaching.** Learning achievements of school students have not reached the expected levels, and this has been partly attributed to teachers' lack of quality teaching.

2. **Expectations towards teacher's capabilities.** Expectations towards teachers' capabilities have been changing over the past 10 to 15 years. They are a consequence of developments such as new teaching strategies and teaching material development, but also due to the progress of science and technology.

3. **Improvement of pre-service teacher training curricula.** In the primary school teacher-training programme, the curriculum was constructed under a tight time schedule and it is now undergoing revision, incorporating the newly developed primary school curriculum.

4. **Inadequacy of available resources to support teacher training programme implementation.** The quality of teaching at a training institute is usually related to adequate availability and use of supporting resources and facilities. However, they are lacking in most of the teacher training institutions.

5. **Staffing for teacher training programmes.** There are significant constraints on the conditions of teaching staff for the teacher training programme implementation. These include qualifications and experience of teaching staff, an unbalanced supply of teaching and inappropriate in-service training programmes.

6. **Research and Development.** A number of research studies in education have been conducted, however, very few have focused on problems in school teaching, and their findings and recommendations have not led to improved classroom practices.

7. **Primary school teacher demand, supply, and distribution.** It has often been said that there is a shortage of primary school teachers, but this is largely due to the misleading methods used to calculate the supply of teachers. It seems that there is no consensus yet with regard to the method how to determine teacher demand.

8. **Management of teacher training programmes.** Managerial coordination between DGHE and other units, such as Bureau of Civil Service and DGPSE is needed.

Ensuring Primary School Teacher Professional Development

1. **Development of primary school teacher education staff.** This is aimed at preparing and improving the capabilities of managers, teaching staff, research workers and technicians responsible for implementation of the primary school teacher training programme.

2. **Development and improvement of primary school teacher education programmes.** To develop and improve PSTE programmes by reviewing and revising the existing PSTE pre- and in-service curricula, and providing appropriate and supporting equipment and facilities for the revised PSTE curricula.

3. **Development of a coordinated system for primary school teacher supply and distribution.** To develop and implement a sound coordinated system of primary teacher demand, supply and deployment system, which are actually the task,
Ensuring Opportunities for the Professional Development of Teachers

4. Research and development in primary education and primary school teacher education. To generate policy inputs on primary education and primary school teacher education, enhance the capabilities of the D-II PSTE academic staff to carry out research and to utilise research findings to improve the delivery of the PSTE programme. Furthermore, it is intended to enhance the capabilities of the PSTE academic staff, in collaboration with elementary school teachers, to identify and solve practical instructional problems in the elementary school.

5. Management of primary school teacher education. To organise and strengthen primary school teacher education management in the LPTK and the programme implementation of unit levels in relation to the management systems of the DGHE.

6. Introduction of student active learning strategy, called student active learning. This is intended to improve the student learning process and outcomes by enhancing student centered activities, creativity, and initiative.

7. Pioneering programme for professional support using the student active learning strategy. To aim at a model of professional support to teachers based on school clustering, teacher's workshops and head-teachers' workshops.

8. Upgrading for small, rural, and isolated primary school teachers. To provide professional development of in-service teachers in small, rural and isolated schools.

9. D-II PSTE qualification programme for in-service primary school teachers. To provide qualification training programmes to under-qualified in-service primary school teachers.

10. Primary education quality improvement programme, which includes substantial components for in-service training and professional development of teachers, head-teachers, in-service training tutors, school supervisors and primary education managers.

Ensuring Secondary School Teacher Professional Development

1. Wider mandate for secondary school teacher training institutions. To make use of the excessive capacity of teacher training institutions in providing more educational opportunities for secondary school graduates, and strengthening the capabilities of these institutions in conducting teacher education programmes.

2. Development of institutional partnerships. To strengthen the institutional capabilities through cooperative efforts in staff development programmes, sharing institutions' teaching facilities, teaching staff and student exchange programmes, and research activities.

3. Curriculum improvement. To improve the curricula of certain subjects, especially those of science and mathematics education, social studies education, English teaching, and the pedagogical content of mathematics, science, social studies, and language subjects.

4. Teaching staff development. To provide a more qualified and professionally skillful teaching staff to secondary school teacher training programmes.

5. Internal program evaluation, intended to evaluate the existing and on-going teacher training programmes for the purpose of improvement and further development of the programmes.

6. Development of systematic teaching practices for prospective teachers. In order to provide prospective teachers with teaching practice experience.

7. Development of student selection system. In order to obtain prospective students for the teacher training programmes who meet the academic, professional, social, and personal requirements.

8. Student support services and career development planning. In order to help students to attain their maximum achievements as successful prospective teachers. To produce teachers, who are capable to perform their professional and academic functions, and are capable to make their own appropriate career development.

9. Upgrading of the basic qualifications of middle school teachers. To require middle school teachers to upgrade their qualifications from D-III to full graduate level.

10. Qualification training for under-qualified in-service teachers. To bring middle school
teachers up to par with the new required qualification i.e. full graduate qualification.

1. Background

Schooling System

The Indonesia's schooling system consists of a number of types and levels of education programmes. In terms of type specification, the programmes are classified into general education, vocational education, special education for handicapped and gifted children, specific occupation-oriented education, religious education, academic education and professional education. In terms of level of education, the programmes are categorised into basic education, secondary education, and higher education. Beyond these three levels, there is also a pre-school education level, including kindergarten, nursery school, and play group activities. This pre-school education level is not a prerequisite for entering basic education programmes, in other words, basic education is not the continuation of the pre-school education level. Beside these two categories, it also recognises units of education, which refer to certain types and levels of education, such as primary school, middle school, high school, college, university, and institute. Basic education consists of primary school and middle school. Secondary education consists of general and vocational high schools, while higher education comprises of junior and senior colleges, institutes and universities.

The schooling age starts at 7 years of age at primary school. The length of schooling is as follows: 6 years for primary school, 3 years for middle school, 3 years for high school, 3 years for junior college, 4 years for senior college, 4 years for under-graduate programmes of institute and university, 2 years for graduate/master's programme at institutes and universities, and 3 years for doctor programme at institutes and universities.

As indicated in the Law No. 2 1989, the implementation of education is the responsibility of the government, society and the students' parents. This means that the government is supposed to provide the opportunity to all citizens to obtain education or schooling. The private sector is allowed to conduct education programmes as long as they are consistent to the government's main policies on education, the national philosophy and the state ideology. Parents are also required to support the implementation of government's education programmes as much as they are capable, both in terms of financial and non-financial support. There are hundreds of private foundations that organize private schooling services, right from the pre-school up to higher education levels. In fact, almost all of the pre-school education institutions are owned by private foundations, while only very few of them are organised by the government. The number of private middle and high schools is much larger than public schools, and in the higher education level as well, where a significant number of colleges, institutes and universities is privately run.

The Government has adopted three main targets for the development and implementation
Ensuring Opportunities for the Professional Development of Teachers

Educational programmes, i.e. equity in educational access for all Indonesians, quality education programmes, and efficiency in educational management. For the purpose of increasing the attainment of equity of educational access for school-age children, since 1994, the Government has extended compulsory education to 9-years, which previously was only 6 years. The compulsory education includes 6 years at primary school plus 3 years at middle school. The government plans to complete the 9-year compulsory education programme within 10 years, so that by 2004 all school age children shall be able to attend at least 9 years of schooling.

Projected Numbers of Schools, Teachers and Students

In relation to the preparation of the 9-year compulsory education and for further development of the whole education programme, the following tables will show the statistics of teachers and students' profiles and projections up to 2001. Table 1 shows the projected number of primary school students and number of classes in public and private primary schools. Table 2 summarizes the estimated demand for primary school teachers in the fifth and sixth five-year development plans. Table 3 shows projected numbers of students and classes of public and private middle schools. Table 4 summarises projected number of middle school teachers. Table 5 tells us about estimated number of high school students, while Table 6 gives an estimation of demand and appointment of high school teachers.

Table 1: Projected Number of Primary School Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Primary School</th>
<th>Private Primary School</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number of Students</td>
<td>Number of Classes</td>
</tr>
<tr>
<td>1990</td>
<td>23,917,666</td>
<td>790,035</td>
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<td>1991</td>
<td>24,100,266</td>
<td>803,342</td>
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<td>24,656,308</td>
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<td>1995</td>
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<td>1996</td>
<td>25,029,137</td>
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<tr>
<td>1997</td>
<td>25,216,926</td>
<td>840,564</td>
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<tr>
<td>1998</td>
<td>25,391,891</td>
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<td>1999</td>
<td>25,547,619</td>
<td>851,587</td>
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<tr>
<td>2000</td>
<td>25,679,529</td>
<td>855,984</td>
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</table>

Source: Raka Joni, 1995
Table 2: Projection of Primary School Teacher Demand in BEPELITA V and VI

<table>
<thead>
<tr>
<th>Academic/Fiscal Year</th>
<th>School age population (x 1000)</th>
<th>Participation rate (%)</th>
<th>Primary school students (x 1000)</th>
<th>Primary school and MI students (x 1000)</th>
<th>Student/teacher ratio</th>
<th>Primary school teachers (x 1000)</th>
<th>Teacher wastage (1.4% per year)</th>
<th>Demand for new teachers (x 1000)</th>
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<tr>
<td>89/90</td>
<td>28684</td>
<td>115.50</td>
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<td>28684</td>
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<td>1141</td>
<td>5</td>
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<td>28910</td>
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<td>6</td>
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<td>114.35</td>
<td>29136</td>
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<td>1121</td>
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<td>1111</td>
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<td>30718</td>
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<td>1051</td>
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<td>24.48</td>
<td>1041</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>99/01</td>
<td>31170</td>
<td>109.40</td>
<td>31170</td>
<td>31170</td>
<td>24.53</td>
<td>1031</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>00/01</td>
<td>31396</td>
<td>108.85</td>
<td>31396</td>
<td>31396</td>
<td>24.58</td>
<td>1021</td>
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<td>16</td>
</tr>
<tr>
<td>01/02</td>
<td>31622</td>
<td>108.30</td>
<td>31622</td>
<td>31622</td>
<td>24.63</td>
<td>1011</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>02/03</td>
<td>31848</td>
<td>107.75</td>
<td>31848</td>
<td>31848</td>
<td>24.68</td>
<td>1001</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>03/04</td>
<td>32074</td>
<td>107.20</td>
<td>32074</td>
<td>32074</td>
<td>24.73</td>
<td>991</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>04/05</td>
<td>32299</td>
<td>106.65</td>
<td>32299</td>
<td>32299</td>
<td>24.78</td>
<td>981</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>05/06</td>
<td>32525</td>
<td>106.10</td>
<td>32525</td>
<td>32525</td>
<td>24.83</td>
<td>971</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>06/07</td>
<td>32750</td>
<td>105.55</td>
<td>32750</td>
<td>32750</td>
<td>24.88</td>
<td>961</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>07/08</td>
<td>32976</td>
<td>105.00</td>
<td>32976</td>
<td>32976</td>
<td>24.93</td>
<td>951</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

Ensuring Opportunities for the Professional Development of Teachers

Table 3: Projected Number of Middle School Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of students</th>
<th>Public Middle Schools</th>
<th>Private Middle Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of conventional school classes</td>
<td>Number of small school classes</td>
<td>Number of students</td>
</tr>
<tr>
<td>1985</td>
<td>3,116,285</td>
<td>72,636</td>
<td>2,458,484</td>
</tr>
<tr>
<td>1986</td>
<td>3,364,199</td>
<td>78,669</td>
<td>2,661,236</td>
</tr>
<tr>
<td>1987</td>
<td>3,566,841</td>
<td>81,979</td>
<td>2,745,392</td>
</tr>
<tr>
<td>1988</td>
<td>3,588,407</td>
<td>86,456</td>
<td>2,757,653</td>
</tr>
<tr>
<td>1989</td>
<td>3,425,096</td>
<td>82,709</td>
<td>2,324,314</td>
</tr>
<tr>
<td>1990</td>
<td>3,433,072</td>
<td>82,924</td>
<td>2,351,419</td>
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<tr>
<td>1991</td>
<td>3,433,181</td>
<td>84,377</td>
<td>2,351,494</td>
</tr>
<tr>
<td>1992</td>
<td>3,457,866</td>
<td>80,130</td>
<td>2,368,260</td>
</tr>
<tr>
<td>1993</td>
<td>3,566,841</td>
<td>81,979</td>
<td>2,422,002</td>
</tr>
<tr>
<td>1994</td>
<td>3,561,335</td>
<td>89,666</td>
<td>2,492,298</td>
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<tr>
<td>1995</td>
<td>3,625,713</td>
<td>92,067</td>
<td>2,563,474</td>
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<td>1996</td>
<td>3,690,829</td>
<td>94,882</td>
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<tr>
<td>1997</td>
<td>3,755,688</td>
<td>97,528</td>
<td>2,708,499</td>
</tr>
<tr>
<td>1998</td>
<td>3,823,299</td>
<td>101,204</td>
<td>2,836,923</td>
</tr>
<tr>
<td>1999</td>
<td>3,890,669</td>
<td>105,797</td>
<td>2,967,041</td>
</tr>
<tr>
<td>2000</td>
<td>3,958,829</td>
<td>110,703</td>
<td>3,098,869</td>
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<tr>
<td>2001</td>
<td>4,027,716</td>
<td>115,546</td>
<td>3,232,427</td>
</tr>
<tr>
<td>2002</td>
<td>4,097,407</td>
<td>120,453</td>
<td>3,367,732</td>
</tr>
</tbody>
</table>

Participation rate: 45.3% - 60%
Growth rate: 0.71% - 1.80%
Addition of small middle school is half of addition of conventional middle school.


Table 4: Projected Number of Middle School Teachers

<table>
<thead>
<tr>
<th>Year</th>
<th>Conventional Middle School Teachers</th>
<th>Small Middle School Teachers</th>
<th>Teacher Wastage</th>
<th>Teacher Appointment</th>
<th>Number of Teachers</th>
<th>Teacher Wastage</th>
<th>Teacher Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>126,537</td>
<td></td>
<td></td>
<td></td>
<td>221,132</td>
<td>4,423</td>
<td>12,170</td>
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<tr>
<td>1986</td>
<td>141,316</td>
<td></td>
<td></td>
<td></td>
<td>228,879</td>
<td>4,578</td>
<td>6,210</td>
</tr>
<tr>
<td>1987</td>
<td>152,466</td>
<td></td>
<td></td>
<td></td>
<td>230,511</td>
<td>4,610</td>
<td>9,841</td>
</tr>
<tr>
<td>1988</td>
<td>164,729</td>
<td></td>
<td></td>
<td></td>
<td>235,742</td>
<td>4,715</td>
<td>11,557</td>
</tr>
<tr>
<td>1989</td>
<td>182,037</td>
<td></td>
<td></td>
<td></td>
<td>242,584</td>
<td>4,852</td>
<td>11,779</td>
</tr>
<tr>
<td>1990</td>
<td>184,425</td>
<td></td>
<td></td>
<td></td>
<td>249,511</td>
<td>4,990</td>
<td>12,050</td>
</tr>
<tr>
<td>1992</td>
<td>185,091</td>
<td>458</td>
<td>3,711</td>
<td>7,487</td>
<td>263,627</td>
<td>5,273</td>
<td>17,773</td>
</tr>
<tr>
<td>1993</td>
<td>187,853</td>
<td>1,472</td>
<td>3,787</td>
<td>9,104</td>
<td>276,127</td>
<td>5,523</td>
<td>18,188</td>
</tr>
<tr>
<td>1994</td>
<td>193,717</td>
<td>1,925</td>
<td>3,893</td>
<td>9,335</td>
<td>288,792</td>
<td>5,776</td>
<td>18,607</td>
</tr>
<tr>
<td>1995</td>
<td>197,834</td>
<td>2,250</td>
<td>4,002</td>
<td>9,694</td>
<td>301,623</td>
<td>6,032</td>
<td>19,032</td>
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<tr>
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<td>203,803</td>
<td>1,973</td>
<td>4,166</td>
<td>9,907</td>
<td>314,623</td>
<td>6,292</td>
<td>19,462</td>
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<tr>
<td>1997</td>
<td>209,569</td>
<td>1,998</td>
<td>4,231</td>
<td>13,647</td>
<td>327,793</td>
<td>6,570</td>
<td>19,892</td>
</tr>
<tr>
<td>1998</td>
<td>217,467</td>
<td>3,516</td>
<td>4,420</td>
<td>14,524</td>
<td>340,623</td>
<td>6,907</td>
<td>20,322</td>
</tr>
<tr>
<td>1999</td>
<td>227,337</td>
<td>3,750</td>
<td>4,652</td>
<td>15,023</td>
<td>353,623</td>
<td>7,266</td>
<td>20,752</td>
</tr>
<tr>
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<td>237,879</td>
<td>3,609</td>
<td>4,830</td>
<td>15,284</td>
<td>367,623</td>
<td>7,626</td>
<td>21,182</td>
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<tr>
<td>2001</td>
<td>248,285</td>
<td>3,657</td>
<td>5,039</td>
<td>15,632</td>
<td>381,623</td>
<td>8,002</td>
<td>21,612</td>
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<td>3,704</td>
<td></td>
<td></td>
<td>396,623</td>
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</table>

Teacher wastage: 2% per year (Source: Raka Joni 1995.)
Table 5: Projected Number of High School Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Public High School</th>
<th>Private High School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of students</td>
<td>Class size</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>1,162,984</td>
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</tr>
<tr>
<td>1991</td>
<td>1,226,555</td>
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</tr>
<tr>
<td>1992</td>
<td>1,280,293</td>
<td>44</td>
</tr>
<tr>
<td>1993</td>
<td>1,336,241</td>
<td>43</td>
</tr>
<tr>
<td>1994</td>
<td>1,394,530</td>
<td>42</td>
</tr>
<tr>
<td>1995</td>
<td>1,455,567</td>
<td>41</td>
</tr>
<tr>
<td>1996</td>
<td>1,519,164</td>
<td>40</td>
</tr>
<tr>
<td>1997</td>
<td>1,585,534</td>
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<td>40</td>
</tr>
<tr>
<td>1999</td>
<td>1,727,089</td>
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<td>2000</td>
<td>1,802,531</td>
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</tr>
<tr>
<td>2001</td>
<td>1,881,266</td>
<td>40</td>
</tr>
<tr>
<td>2002</td>
<td>1,963,436</td>
<td>40</td>
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</tbody>
</table>

Source: Rochman Natawidjaja, 1996b.

Table 6: Projection of High School Teacher Demand and Appointment

<table>
<thead>
<tr>
<th>Year</th>
<th>Public High School</th>
<th>Private High School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher Demand</td>
<td>Teacher Appointments</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>69,380</td>
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</tr>
<tr>
<td>1991</td>
<td>73,173</td>
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<tr>
<td>1992</td>
<td>77,594</td>
<td>6,826</td>
</tr>
<tr>
<td>1993</td>
<td>82,868</td>
<td>7,338</td>
</tr>
<tr>
<td>1994</td>
<td>88,548</td>
<td>7,894</td>
</tr>
<tr>
<td>1995</td>
<td>94,671</td>
<td>8,500</td>
</tr>
<tr>
<td>1996</td>
<td>101,278</td>
<td>8,450</td>
</tr>
<tr>
<td>1997</td>
<td>105,702</td>
<td>6,732</td>
</tr>
<tr>
<td>1998</td>
<td>110,320</td>
<td>7,026</td>
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<tr>
<td>1999</td>
<td>115,139</td>
<td>7,332</td>
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<td>2000</td>
<td>120,169</td>
<td>7,652</td>
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<td>2001</td>
<td>125,418</td>
<td>7,986</td>
</tr>
<tr>
<td>2002</td>
<td>130,896</td>
<td></td>
</tr>
</tbody>
</table>

Source: Rochman Natawidjaja, 1996b.

Teachers for pre-school up to high school education are provided by three kinds of teacher training institutions, i.e. (1) the Institutes of Teacher Training and Educational Sciences (IKIP); (2) Colleges of Teacher Training and Educational Sciences (STKIP); and (3) Faculties of Teacher Training and Educational Sciences (FKIP). The institutes and colleges are both independent institutions, while the faculties are a part of a university. The teachers who graduate from one of these institutions have the same qualifications and rights of employment in the public and private schools. The qualification for middle and high school teacher is an under-graduate certificate. This is a four-years post-secondary education training programme, while for primary school Diploma II is required, which is a two- or two-and-a-half-years post-secondary education training programme. The three types of teacher training institutions have adopted a concurrent
system of training, where students are trained as prospective teachers right from the beginning with an integrated curriculum, offering both content related subject matter and pedagogy. At the end of the training programme the students are required to have teaching practice through a direct field experience programme.

The curricula of teacher training programmes consist of three components, i.e. general education, subject matter education, and pedagogy, including practice teaching. The whole programme aims at preparing teachers with the adequate professional, personal and social competencies. This comprises of a competency in teaching performance supported by competencies in subject mastery, mastery of teaching programme development and implementation, application of appropriate procedures of teaching and evaluation, adjustment to the classroom and school situations, and competency for personality development.

The student active learning strategy is adopted at all levels, up to the higher education level. The strategy is applied with the intention to develop not only the academic capabilities of students but also other personal capabilities, including student creativity, pro-activity, and cooperation.

Norm and criterion reference evaluation approaches are applied in the evaluation of student achievements. The evaluation is conducted at, at least, four stages, i.e. at the subject stage intended for both formative and summative evaluation, the semester stage, the grade stage, and at the end of the whole programme as the last summative assessment.

2. Current Status of Primary School System

In maintaining and increasing quality education, basic education becomes an important component. Success in imparting quality education is mostly dependent upon the quality of basic education, particularly at the primary school level. The primary school system in Indonesia today is underpinned by a vast administrative sub-system, covering over 26 million pupils and over 1.2 million teachers in 142,000 schools, under the supervision of 1,800 school supervisors. Primary school teachers are civil servants, appointed, promoted and transferred by the Ministry of Home Affairs (MOHA) as managers of primary schools. The Ministry of Education and Culture (MOEC) provides teaching texts and materials, supervision and in-service training for curriculum implementation. MOEC is also responsible for the pre-service and in-service training of primary school teachers. Government concerns to raise the quality of primary schools have produced a number of activities within last 10 years. These activities are aimed at providing better support for teachers in the classroom, to introduce new approaches for teaching and learning processes, They concentrate on the development of inquiry and problem-solving strategies in children, to train teachers especially for small, rural schools and to provide materials for multi-grade teaching.
The Primary School Teaching Force

Large-scale primary school teacher training programmes were established in the seventies and eighties to meet the needs of the rapidly expanding primary school system. Between 1987 and 1990 more than 25,000 students graduated from the Teachers Training High Schools (SPG) and Sports Teacher Training High Schools (SGO), which led to a surplus of teachers. Since 1990, the Government adopts a higher level of primary school teacher qualification, i.e. two-year post secondary pre-service training (Diploma II certificate). This new pre-service training programme also absorbs the unemployed SPG/SGO graduates. Also, the Government has launched an in-service training programme for equalizing the qualifications of currently employed teachers with the D-II qualification. The mean age of the teaching force is only 35 years and the median age is only 33 years. This means that more than half of the present teaching force will be in service for the next 25 years or longer. Over 50% of primary school teachers are women.

Primary School Teacher Supply

The provision of teachers to primary schools is relatively generous with a national pupil-teacher ratio of 23. However, there is considerable unevenness in the distribution of teachers amongst schools ranging from 14 in the best served province to 28 in the least served province; and at the sub-district level pupil-teacher ratios have been found to range from 9 to 79.

The ratios of primary school teachers in terms of their qualifications are: about 5% are junior secondary graduates, 35% are SPG/SGO graduates, 0.5% are graduates of non-teacher senior secondary schools, 55% PSTE D-II graduates, and 4.5% are graduates of higher educational levels. Still, a substantial number of teachers are not yet appropriately qualified.

Pre-service Training of Primary School Teachers

Until recently, the pre-service training programme of primary school teachers was conducted in teacher SPGs and SGOs. They are three-year programmes at the senior high school level for graduates of the junior secondary schools (SMP). In 1989, the SPG and SGO were phased out and replaced by a new programme of teacher training starting in 1990. This new diploma in primary school teacher education is a two-year pre-service programme at post secondary level (D-II PSTE). The programme is conducted at Institutions for Educational Personnel Training (LPTK). The programme was introduced in the 1990/1991 academic year with an initial intake of 7,000 prospective primary school classroom teachers.
Career Paths for Primary School Teachers

Career incentives linked to promotion and financial rewards have been introduced through a credit point system based on teachers participation in a number of educational activities including attendance of in-service training, writing teaching and learning materials, peer tutoring at workshops and taking leadership roles. This is not yet fully operational, but a system of accrediting in-service training programmes and awarding points based on attendance has been established at district and provincial offices.

New Policy on Basic Education

The basic cycle of education for Indonesian children has now been raised from 6 to 9 years and new curricula were introduced in 1994. The new curricula reflect newly articulated educational goals for the primary grades 1-6, the lower secondary grades 7-9 and upper secondary grades 10-12. Primary schools are still managed separately from junior high schools, and teacher training for primary school teachers is still conducted in a different pattern than training of secondary teachers for both lower and upper secondary schools. Revisions to the current initial primary teacher education programmes is under review and will continue to be developed towards a more systemic and overall programme of primary school teacher education.

3. Issues Related to Teacher Professional Capability

While the Government launched initial efforts to improve and ensure the teachers professional capabilities, there are various issues that need to be addressed in present school teaching. These include: (a) poor quality of school teaching, (b) changing expectations towards teacher capabilities, (c) lack of accepted teacher performance standards, (d) need to improve teacher training curricula, (e) inadequate resources to support teacher training programmes, (f) inappropriate qualifications and/or experiences of staff of teacher training programmes, (g) lack of research in teacher education and poor dissemination of findings in classroom research, and (h) a poor teacher supply system which has resulted in regional oversupply and poor recruitment and distribution of teachers.

Quality of School Teaching

Learning achievements of school students have not reached the expected levels, and this has been partly attributed to teachers' lack of quality in teaching. A study of primary school science teaching conducted by the Office of Education and Culture Research and Development (Balitbang Dikbud) in the mid-1980s revealed that, on average, teachers had mastered only 45%
of the subject-content they were supposed to teach. Furthermore, only 40% of the teachers had scores better than 50% on a test of understanding of appropriate science teaching methods. It also showed that primary school teachers encounter considerable difficulties in teaching primary school subjects, particularly mathematics. The Basic Education Study, supported by the World Bank, revealed that

i. primary school teachers have inadequate mastery of basic concepts in mathematics and science,

ii. they are deficient in their educational knowledge, particularly that knowledge which would assist them with solving the problems they encounter in applying student active learning strategies; and

iii. there is a need for more subject-specific teaching skills, particularly in teaching mathematics and science.

These findings and other similar evidence have led to the development and implementation of two primary school teachers education programmes at the post secondary level: the preservice and the upgrading programme for in-service teachers.

Expectations towards teacher's capabilities

Expectations towards teacher's capabilities have been changing over the past 10 to 15 years, due to developments such as new teaching strategies and teaching material development as results of further development of science and technology. Evaluation of the innovations in school teaching has shown that teacher's knowledge levels have been an impediment to the implementation of inquiry approaches and problem-solving strategies and to a more active involvement of students in their own learning. The expected teacher behaviors and capabilities have exceeded the capacity of the system to support the implementation of these innovations. Raising of the entry level to teacher education demands a higher educational base and the provision of opportunities for practicing teachers to upgrade their qualifications to an equivalent level. It implies both a greater depth of understanding of subject matter and the ability to use this increased understanding to improve teaching and learning in the classroom.

By the early 1980s, Indonesia had already adopted three main teacher abilities i.e. personal, professional and social competencies. These professional abilities were elaborated into 10 competencies. Further elaboration to meet primary school teacher training needs, however, has not yet been accomplished. Consequently, the list of 10 teacher competencies has had no clear operational meaning so far. It is necessary, therefore, to develop a more detailed and more useful classification. Results from a study conducted by Rochman Natawidjaja et al. (1989) may serve as a starting point for this effort. It would include knowledge of the subject and how to teach it to children, knowledge of children and how they learn, and pedagogical skills to involve
children in the learning process. Moreover, it would include professionalization involving increased accountability for children’s learning, teachers having responsibility for their own professional growth, for collegiality at school and between schools for improvement in teaching and school performance.

**Improvement of pre-service teacher training curricula**

In the primary school teacher-training programme, the D-II PSTE curriculum was constructed under severe time constraints and it is currently undergoing revision. The revision includes the incorporation of the newly developed 1994 primary school curriculum. The D-II PSTE pre-service programme has been in operation for many years. During this period of operation many problems have been encountered in the implementation of the programme, some of which were recognized from the beginning. These problems relate to the expected teacher capabilities, curriculum content, D-II PSTE teaching staff abilities, facilities and equipment, and the absence of research findings on primary school education. Key issues to be dealt with in the effort of improving D-II PSTE programme should include programme design, and course objectives and content.

A good programme design for pre-service primary school teacher education needs to place great emphasis on the link between a variety of school experiences, work with children and the academic components of the programme. The curriculum developers of the D-II teachers training programme have taken into account three general types of abilities, i.e.: subject mastery, educational knowledge, and mastery of subject-specific pedagogical techniques. Subject mastery and mastery of subject-specific pedagogical techniques, including teaching-learning processes, are incorporated in the subject matter mastery course and the teaching-learning process courses, while educational knowledge is incorporated in the basic pedagogical courses. About 30% of the time allocated for subjects is devoted for mastery of subject-specific pedagogical techniques.

Course objectives and content should be well-defined to meet the expected competencies of graduates for classroom teaching. For this purpose, a careful study of expected abilities of primary school teachers should be conducted. This should be one that includes teaching and learning, collegiality, and school and community contacts as well as the best of current practices in Indonesia and overseas. In the case of the D-II PSTE programme, due to time constraints on its development, that kind of study was neglected. The formulation of educational objectives was based on very limited findings from a few existing studies on teacher education and professional judgement of some experts in teacher education.
Available resources to support teacher training programme implementation.

The quality of teaching of a school is usually related to adequate availability and use of supporting resources and facilities. It means that prospective teachers should be familiar with those resources and facilities and should use them. However, in most of the LPTKs such facilities are not adequately available. Inadequate resources include:

1. basic texts, references and other teaching and learning material, particularly for primary teacher education;
2. physical facilities for conducting well-balanced educational programmes, especially the balance between professional attitudes and skills which could be well-developed through well-planned experiential learning;
3. equipment such as reprographic, science and mathematical equipment, radio, cassettes and video;
4. practice teaching facilities which are needed to develop teaching skills.

Staffing for teacher training programmes

There are significant constraints on the conditions of teaching staff for the teacher training programme implementation. These include:

1. the qualifications and experiences of the majority of members of IKIP/FKIP staff are not appropriate for the needs of staffing of contemporary quality teacher education programmes;
2. the supply of staff to LPTK is not well-balanced, there is a considerable under-utilization of teaching staff in some of the LPTK;
3. staff development and experience of primary schools cannot be adequately met by emergency short term activities conducted earlier.

Research and Development

A number of research studies in education have been conducted by Beeby (1979), Mangindaan (1979), Moegiadi (1986), Suryadi et al. (1989), Nasution (1980), Suryabrata et al. (1985), Rochman Natawidjaja et al. (1989), the Consortium of Educational Science (1991), and Nielsen and Somerset (1991). However, very few have focused on problems in school teaching, particularly on primary school issues, and virtually none on the problems in primary school teacher education. Also, have their findings and recommendations have not led to improved classroom practices.

Primary school teacher demand, supply, and distribution

The view has often been held that there is a shortage of primary school teachers, but this is largely due to the misleading methods used to calculate the supply of teachers. It seems that
there is no consensus yet with regard to the way to determine teacher demand. The Consortium of Educational Science study revealed that there is a relatively generous overall provision of primary teachers, but these teachers are not well distributed, especially at the sub-district and school levels.

**Management of teacher-training programmes**

The integration of 62 SPG/SGOs into IKIP/FKIPs, the simultaneous operation of D-II PSTE pre- and in-service programmes, and the involvement of some private IKIPs and FKIPs in the implementation of the D-II teachers training programmes have brought about major management and administrative burdens. Managerial coordination between DGHE and other units, such as Bureau of Civil Service and DGPSE, is needed. It needs not only horizontal coordination at national level by the central government, but also horizontal coordination at the regional and local administration levels, as well as vertical coordination, down to the provincial level, and even to district and sub-district levels.

**Identified needs for teacher training programme improvement**

From the analysis so far it is clear that to run a good teacher training programme, a complex and varied set of needs must be met. Five essential needs are identified, i.e.:

1. need for developing of the professional abilities of teacher-educators;
2. need to strengthen the teacher training programmes, including appropriate curricula and adequate supporting facilities;
3. need to establish a coordinated system for a better teacher supply system;
4. need for building research capacity in teacher education;
5. need to strengthen the management of teacher education.

4. **Increasing Teacher Professional Capabilities**

**Primary School Teacher Pre- and In-service Education Programme**

To meet the previously mentioned needs, the Government has been conducting a more systemic, overall and comprehensive programme of primary school teacher education programme development since 1992. It aims at improving the professional capabilities of primary school teachers and providing quality teaching in primary schools. The programme consists of five major components, corresponding to the needs listed above.

**Development of primary school teacher education staff**

This component is aimed at preparing and improving the capability of managers, teaching
staff, research workers and technicians responsible for implementation of the D-II PSTE programme. The most important activities of this component include:

1. An initial one month overseas study programme for selected senior primary school teacher education developers, intended to provide opportunities for key staff to learn about the structure and management of primary school teacher education programmes;

2. An initial one month overseas study programme for primary school teacher education managers, intended to provide opportunities for PSTE managers to learn, through direct experience, about approaches to primary school teacher education in a range of selected countries;

3. An initial three-month overseas training for LPTK senior professional teaching staff members, intended to provide teacher-educators with preliminary exposure to best practices in primary school teacher education in selected countries;

4. A two-year overseas Master's programme in primary school teacher education/primary education, particularly those programmes which are related to primary school subjects, including mathematics, natural science, social studies, language, and integrated lower primary subjects;

5. A three-year overseas doctorate programme in primary school teacher education/primary education;

6. An in-country master's programmes in primary school subject areas, i.e.: Mathematics, Natural Science, Social Studies, Language teaching, and Integrated Lower Primary Subjects;

7. A six-week in-country teacher-educator training programme making use of the most successful participants from the initial short term overseas training programme as trainers, intended to improve and reorient participants' competencies in teaching primary school subjects (i.e. Mathematics, Natural Science, Social Studies, Language, Civics/PMP, Physical Education, Arts, and Integrated Lower Primary Subjects), Distance Learning, and Primary Education/Teaching in Special Education;

8. A professional retraining (second S1) programme for LPTK staff members whose training background is in general pedagogical subjects, intended to retrain these faculty members at S1 level in primary school subjects;

9. A management training for D-II PSTE programme implementation programme managers, intended to increase participants' capabilities in managing the units;

10. A short-term in-country training programme for student practice teaching supervisors (guru pamong), intended to improve and develop participants' capabilities in guiding and supervising PSTE students in comprehensive practice teaching;

11. A two-year in-country training for library technicians, intended to develop professional and
technical skills in librarianship to manage the unit library.

Development and improvement of primary school teacher education programme.

This component is intended to develop and improve PSTE programmes by reviewing and revising the existing PSTE pre- and in-service curricula, and providing appropriate and supporting equipment and facilities in line with the revised PSTE curricula. This component is divided into two sub-components:

1. programme development and improvement aimed at strengthening the existing D-II PSTE curricula (pre- and in-service programmes);
2. provision of equipment and facilities, aimed at providing supporting equipment and facilities needed for the PSTE programme implementation, including science laboratory equipment and student dormitories.

Development of a coordinated system for primary school teacher supply and distribution

This component is intended to develop and implement a viable coordinated system of primary teacher demand, supply and deployment. This is actually the function, authority and responsibility of various offices and agencies within and beyond the jurisdiction of MOEC. The activities related to this component are being implemented on the basis of the existing Education and Culture Ministerial Decree on National and Regional Coordination Forum for Teacher Supply and Deployment. The main activities of this component are the coordination of related offices and agencies' efforts, and programmes in operational linkages between the pre-service teacher trainees recruitment system and their post-training placement. Related activities include the conceptual development by organizing task forces, seminars and workshops at related forums, which are intended to:

a. improve mechanisms of horizontal and vertical coordination between related units within MOEC, including the operational coordination between DGHE/LPTK and regional offices of MOEC (Kanwil) in the management of primary teacher trainees recruitment;
b. develop operational linkages between related agencies to promote agreement about a common basic formula to determine the demand for primary teachers as a basis for teacher trainees recruitment;
c. organize targeted recruitment of primary teacher trainees and special incentives;
d. strengthen the Management Information Systems (MIS) on primary teacher demand, supply and deployment, especially in remote areas; and
e. foster agreement on general policies and strategies on a coordinated system of primary teacher demand, supply and deployment, including teachers' appointment and placement.
Research and development in primary education and primary school teacher education

This component is intended to achieve:

a. the generation of policy inputs on primary education and primary school teacher education,

b. enhancement of the capabilities of the D-II PSTE academic staff to carry out research and to utilize research results to improve the delivery of the D-II PSTE programme, and

c. enhancement of the capabilities of the D-II PSTE academic staff, in collaboration with elementary school teachers, to identify and solve practical instructional problems in the elementary school.

The following activities are carried out:

a. establishment and development of the Centre for Research in Primary Education;

b. research personnel development through formal advanced programmes and experiential learning research activities;

c. commissioning research to LPTK and LPTK-staff;

d. conducting seminars and workshops on research in primary education;

e. conducting seminars and workshops on the dissemination of research findings; and

f. providing bibliographic and abstracting services, and publishing research reports.

To implement these activities properly, some strategic measures were defined, i.e. the emphasis of research activities is on problem-solving or reflective research rather than on formal-academic research. Moreover, a substantial portion of the research activities is policy-oriented, research topics are identified and selected from among topics around recruitment to primary school teacher education, pre-service teacher training, induction to teaching, and teacher career development.

The research programme has thus far resulted in the establishment of a Centre for Research in Primary Education, the publication of two research journals on primary education and primary school teacher education, and final reports and dissemination of the findings of seven large scale policy studies, 20 small grant policy studies, 12 action research studies, and 178 small scale action research studies.

Management of primary school teacher education

This component is intended to organize and strengthen primary school teacher education management in the LPTK and programme implementation unit levels in relation to the management systems of the DGHE. Four sequential activities were conducted:

a. establishment of a PSTE Management Task Force;

b. policy study of PSTE management;

c. workshop of PSTE management reform; and
d. implementation of training programmes for PSTE programme managers.

Beside the efforts to upgrade the pre-service training level from SPG/SGO to the Diploma II level, the Government has launched a number of programmes to upgrade the professional qualifications and capability of in-service primary school teachers. The programmes include the following:

Introduction of student active learning strategy

Realizing that conventional strategies of learning in primary schools tended to produce graduates with a minimum of initiative to develop their potential abilities themselves, the Government in 1978 started to develop a more effective learning strategy based on the enhancement of student self-initiated activities, creativity, and initiative. The strategy is called student active learning (CBSA). This learning strategy is more concentrated on the learning process of students rather than on the process of teaching. The assessment of student achievement is not merely on the immediate output of learning, but also on the learning process and more comprehensive outcome of student learning.

Pioneering programme for professional support, using student active learning strategy

Over the past ten years, MOEC has been developing a model of professional support to teachers based on school clustering, teachers' workshops and head-teachers' workshops. A variety of in-service training seminars and workshops for teachers, professional leaders and primary education managers is conducted regularly.

Upgrading of teachers' qualities in small, rural, and isolated primary schools.

Recently, the Government has tried to address the issue of small, rural and isolated schools, and over the past three years appointed 3,200 additional primary school teachers for remote and under-served schools in eight border provinces. They were given a special two-month training programme and were provided with other incentives to serve in these areas. This is a joint operation of MOHA, MOEC, and the Ministries of Social Welfare (MOSW). Teaching and learning materials were modified from earlier modular learning programmes and distributed to these schools to assist with small group learning and multiple class teaching situations.

D-II PSTE qualification programme for in-service primary school teachers.

This equivalent diploma programme uses a distance learning system coordinated by the Open University (UT) in cooperation with the Directorate General of Primary and Secondary Education.
Primary education quality improvement programme.

In mid 1992, the Government started a quality project to improve primary school teacher professional capabilities. The project was called Primary Education Quality Improvement Project (PEQIP). It included a substantial component for in-service training and the professional development of teachers, head-teachers, in-service training tutors, school supervisors and primary education managers. The project was implemented in one district each in six provinces, i.e.: Aceh, Sumatera Barat, Yogyakarta, Bali, NTT and Sulawesi Utara, and was supported by a number of other quality improvement measures, such as better provision of teaching-learning materials and improved school management. It included the implementation of the school cluster model of teacher professional support for student active learning in order to improve teaching and raise student achievement.

Secondary School Teacher Pre- and In-service Education Programme

Faced with similar problems and difficulties in conducting the secondary and the primary school teacher education programme, the Government has launched similar efforts and activities in increasing and ensuring professional development of secondary school teachers. There are however a number of more specific issues to secondary school teacher development that need to be addressed. These include the excessive capacity of the secondary school teacher training institutions for training most of the subject teachers, while on the other hand there is shortage in capacity in training certain subject teachers, especially for science and mathematics teachers.

Significant activities have been implemented in an effort to increase and ensure secondary school teacher professional development, both through pre-service education programmes and in-service training as well as including the improvement and strengthening of the quality, relevance and efficiency of programme management, curricula, teaching and administrative staff, student capabilities and student support services, teaching-learning facilities, and evaluation system. The following programmes are currently being implemented.

Wider mandate for secondary school teacher training institutions.

Previously, a teacher educational institution offered only teacher training programmes based on concurrent system. But later, it came to light that for certain subjects, the institutions had a degree of excessive capacity, both in terms of physical and human resources. Also, there is a tendency of an increasing number of secondary school graduates who apply for non-teacher higher education. It means that the Government should open more public universities. An alternative effort, which could be applied, is to give a wider mandate to the teacher training institutions, i.e. to offer non-teacher education programmes. Beside the use of excessive
facilities for the purpose of non-teacher education programmes, the wider mandate may also strengthen the capability of the institutions in conducting their original mandate: - teacher education -.

**Development of institutional partnerships**

This programme is intended to strengthen the institutional capabilities through cooperative efforts in staff development programmes, sharing of institutions' teaching facilities, teaching staff and student exchange programmes, and research activities. The programme may be conducted both in terms of domestic institutional and international university partnerships.

**Curriculum improvement**

This programme is intended to improve the curricula of certain subjects, especially those of science and mathematics education, social study education, English teaching, and the pedagogical content of mathematics, science, social study, and language subject.

**Teaching staff development.**

This programme is intended to provide a more qualified and professionally skilful teaching staff. It includes amongst others, upgrading of the basic qualifications of new staff, in-service degree programmes, long-term and short-term professional skill in-service training. Furthermore, it includes the familiarization of teaching staff with the school system through collaborative action research and special deployment of teaching staff to the school system, as well as improving research capability and increasing teaching capabilities through classroom action research.

**Self-assessment and programme evaluation**

This programme is intended to evaluate the existing and on-going teacher training programmes for the purpose of improvement and further development of the programmes. The self-assessment programme is geared towards a continuous quality enhancement on the basis of criteria such as institutional and programme management autonomy, accountability towards implementation, performance and outcomes of the programme, and programme and institutional accreditation, which means the acceptability of the programme by the users. This evaluation becomes the basic criterion for further planning and decision making.

**Development of a systematic teaching practice programme for prospective teachers.**

The quality of teaching performance of teacher training programme graduates is a synergetic outcome that is an indication of the quality of the programme. High teaching performance can only be achieved through a systematic and systemic programme of
comprehensive teaching practice. For this purpose, the Government is developing a systematic
and comprehensive teaching practice system.

Development of a student selection system

This programme is intended to obtain the appropriate students for the teacher training
programme, who meet the academic, professional, social, and personal requirements.

Student support services and career development planning.

This programme is developed to help students attain the highest possible achievements,
and become successful prospective teachers, who are capable to perform their professional and
academic functions, and are capable to steer their own career development.

Upgrading of basic qualifications for middle school teachers.

Previously, the basic qualification for a middle school teacher was a three-year post-
secondary training programme (Diploma III). It was found that this basic qualification was no
longer sufficient, due to increasing expectations towards their capabilities, both in terms of
subject mastery, as well as pedagogical process mastery. The new required basic qualification is
a four-year post secondary training programme (full graduate programme).

Qualification training for under-qualified in-service teachers

The new requirements for middle school teacher basic qualification imply a need of
adjusting the in-service middle teacher qualification programmes. The Government has launched
in-service qualification training programmes to offer the teachers the opportunity to meet the new
requirement i.e. full graduate qualification.

All of these programmes are currently in the implementation phase, some of them are still in
the very initial stages, some of them are being implemented with significant progress, and others
have achieved certain successes. It is expected that by the end of 2003, these programmes will
have a comprehensive, integrated, and synergetic impact on the efforts to ensure the
professional development of teachers and on the increase in quality of education in Indonesia.

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Country Report Japan

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1. Introduction

In Japan, modern education system was created about 125 years ago, shortly after the Meiji Restoration. Elementary education to provide basic education to all people and higher education to train its leaders, were developed first to modernize the Japanese society and strengthen the national power quickly. Education system developed quickly and the enrollment rate in the compulsory education exceeded 90% by the beginning of 20th century.

After World War II, the education system was drastically changed and the new system of 6-3-3-4 was introduced in 1947, making 6 years of elementary education and 3 years of the lower secondary education compulsory. In this year, enrollment rates were already 99.79% in elementary education and 99.57% in lower secondary education. As the economy developed rapidly in the postwar Japan, upper secondary education and higher education also took great strides forward. In 1995, advancement rates of the same age population to upper secondary schools increased to 96.7% and to the colleges/universities including junior colleges to 45%.

Although the pursuance of the efficiency in education in Japan to catch up with the industrialized countries created many problems, education has traditionally been perceived by the Japanese people to be important and teachers have been respected in Japanese society, perhaps due to the influence of Confucianism. Laying aside the issue whether teachers are born or made, there will be no objection to the idea that enabling the professional growth of teachers is indispensable for the quality education at all levels and it can not be made without incessant training and efforts made by teachers themselves. For the purpose to help those who want to develop themselves, opportunities for the professional development should be provided.

2. Profiles of Teachers in Japan

Characteristics of Japanese Teachers

Before explaining how in-service training is currently provided to teachers in Japan, a brief outline of the characteristics of Japanese teachers, their preparation and certification, and their
work load and economic status will be helpful to understand the situation in Japan. The majority of elementary school teachers, lower and upper secondary school teachers, and special school teachers are working at local public schools. The majority of kindergarten teachers, junior college teachers are employed at private institutions.

Regarding the proportion of female teachers, the percentage decreases sharply as the level of school increases. The ratio of female teachers is 93.9% at the pre-school level, and declines subsequently to 61.2% at the elementary level, 39.2% at the lower secondary level, and 23.2% at the upper secondary level.

**Preparation and Certification of Teachers**

Elementary and secondary school teachers are prepared at the universities or junior colleges approved by the Ministry of Education, Science, Sports and Culture. Most of the elementary school teachers are prepared at 4-year elementary teacher education programs at national universities, while secondary school teachers are prepared at national, public, and private universities and colleges.

Teachers at kindergarten, elementary schools and secondary schools, and special education schools are required to have relevant certificates that are issued by the prefectural boards of education as provided for by the Education Personnel Certification Law. Teacher certificates are classified into three types: regular, special, and temporary. Regular certificates are classified into three classes: "advanced" based on master's degrees, "first" based on bachelor's degrees, and "second" based on associate degrees, which are obtained at two-year junior colleges. These regular certificates issued by the prefectural board of education are valid throughout the country and are also valid for life.

Special certificates are issued to those who have specialized knowledge or skills and are valid not more than 10 years only in that prefecture. Temporary certificates are issued for assistant teachers only in the case that teachers with regular certificate are difficult to recruit and are valid for 3 years only.

Junior colleges have been opposing plans to discontinue the second class certification, despite of the fact that the number of teachers holding those certificates has been decreasing. Teachers holding such certificates are required to make efforts to obtain a first class certificate by taking in-service courses at universities.

**Work Load of Teachers**

The majority of kindergarten and elementary school teachers are assigned to a single class and responsible to teach basically all subjects. However, in elementary schools, there are a small number of teachers in specializing subjects such as music, arts, physical education, home
economics which require special competencies. At the secondary school level, the majority of teachers teaches one subject or subject area.

The maximum number of pupils or students per class for elementary and secondary schools is 40 and is defined by law. It is also required by law that the number of teachers assigned to the school should be more than the number of classes in the school. In 1995, average number of pupils per class was 28.4 for elementary schools, and 33.3 for lower secondary schools. Pupil-teacher ratio was 19.4 for elementary schools, 16.9 for lower secondary schools, and 16.8 for upper secondary schools.

**Economic Status of Teachers**

The salary scales and kinds and amounts of allowances for national school teachers are laid down by laws. The scales for public school teachers are determined by each prefecture, but are based on the national scale. The salary of teachers was improved in the 1970's when the Law concerning Special Measures for Securing Competent Educational Personnel in Compulsory Education Schools with the Aim of Maintaining and Improving the Level of School Education was enacted in 1974 to attract competent people to the teaching profession. There are four salary scales for teachers: (1) for teachers of kindergartens, elementary schools and lower secondary schools, (2) for teachers of upper secondary schools, (3) for teachers of colleges of technology, and (4) for teachers of universities/colleges and junior colleges.

**Table 1. Number of Institutions, Students, Teachers and Other Personnel by Type of Institution (As of May 1995)**

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Number of Institution</th>
<th>Number of Students</th>
<th>Number of Teachers</th>
<th>Female Teachers (%)</th>
<th>Other Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>14,856</td>
<td>1,808,432</td>
<td>102,992</td>
<td>93.9</td>
<td>21,518</td>
</tr>
<tr>
<td>Elementary S.</td>
<td>24,548</td>
<td>8,370,246</td>
<td>430,958</td>
<td>61.2</td>
<td>104,724</td>
</tr>
<tr>
<td>Lower Secondary S.</td>
<td>11,274</td>
<td>4,570,390</td>
<td>271,020</td>
<td>39.2</td>
<td>41,007</td>
</tr>
<tr>
<td>Upper Secondary S.</td>
<td>5,501</td>
<td>4,724,945</td>
<td>281,117</td>
<td>23.2</td>
<td>63,642</td>
</tr>
<tr>
<td>Technical Colleges</td>
<td>62</td>
<td>56,234</td>
<td>4,306</td>
<td>3.0</td>
<td>3,246</td>
</tr>
<tr>
<td>Junior Colleges</td>
<td>596</td>
<td>498,516</td>
<td>20,702</td>
<td>39.8</td>
<td>13,103</td>
</tr>
<tr>
<td>Universities</td>
<td>565</td>
<td>2,546,649</td>
<td>137,464</td>
<td>10.7</td>
<td>107,972</td>
</tr>
<tr>
<td>Special Schools for</td>
<td>967</td>
<td>86,834</td>
<td>51,913</td>
<td>55.7</td>
<td>15,948</td>
</tr>
<tr>
<td>Handicapped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Training Schools</td>
<td>3,476</td>
<td>813,347</td>
<td>36,433</td>
<td>49.1</td>
<td>17,137</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2,821</td>
<td>321,105</td>
<td>16,304</td>
<td>37.9</td>
<td>7,201</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>64,666</strong></td>
<td><strong>23,796,698</strong></td>
<td><strong>1,353,209</strong></td>
<td><strong>44.9</strong></td>
<td><strong>458,498</strong></td>
</tr>
</tbody>
</table>

Note: "Teachers" include principals and those who are directly concerned with educational activities while "other personnel" means clerical workers and those who are engaged in supportive services.

Various kinds of allowances are paid in addition to the salary such as family allowances, cost-of-living adjustment allowances, housing allowances, commutation allowances and bonuses. Bonuses are paid three times a year (in June, December, and March) and amount in total to 5.2 times of the monthly salary. Under the mutual aid schemes, teachers are also provided with welfare benefits such as coverage of medical care expenses, child-birth expenses, illness allowances, disaster allowances, retirement annuities, disability annuities, widow/widower/orphan annuities.

Table 2. Level of Educational Attainment of Teachers (October 1992)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Elementary Teachers</th>
<th>Lower Secondary Teachers</th>
<th>Upper Secondary Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities (including Graduate programs)</td>
<td>79.1 %</td>
<td>89.8 %</td>
<td>96.6 %</td>
</tr>
<tr>
<td>Junior Colleges</td>
<td>20.0</td>
<td>9.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Upper Secondary Schools, etc.</td>
<td>0.9</td>
<td>0.4</td>
<td>0.8</td>
</tr>
</tbody>
</table>


Table 3. Average Number of School Hours per Week for Public School Teachers

<table>
<thead>
<tr>
<th>School Level</th>
<th>1965</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>31.5 Hours</td>
<td>18.0 Hours</td>
</tr>
<tr>
<td>Lower Secondary School</td>
<td>28.0</td>
<td>14.4</td>
</tr>
<tr>
<td>Upper Secondary School</td>
<td>22.1</td>
<td>14.0</td>
</tr>
</tbody>
</table>


Table 4. Average Monthly Starting Salary of National School Teachers by School-level and by Educational Attainment (School Year 1995)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Kindergarten Teachers</th>
<th>Elementary and Secondary Teachers</th>
<th>College and University Teachers (Assistants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral Degree (3 years)</td>
<td>367,200 Yen</td>
<td>373,300 Yen</td>
<td>377,500 Yen</td>
</tr>
<tr>
<td>Master's Degree (2 years)</td>
<td>318,400</td>
<td>323,600</td>
<td>325,500</td>
</tr>
<tr>
<td>Bachelor's Degree (4 years)</td>
<td>286,600</td>
<td>291,200</td>
<td>287,900</td>
</tr>
<tr>
<td>Associate Degree (2 years)</td>
<td>245,000</td>
<td>245,700</td>
<td>228,900</td>
</tr>
</tbody>
</table>

Notes: The figures include bonuses. Each figure = monthly salary x 17.2/12. Special allowances are included for elementary and secondary school teachers.

3. In-service Training Programs of Teachers

**Law for Special Regulations concerning Educational Public Service Personnel**

Soon after the new education system started to operate after World War II, questions regarding the status and working conditions of school teachers arose, and the Law for Special Regulations Concerning Educational Public Service Personnel was enacted in 1949. The first article of the law stipulates that public school teachers are personnel serving the whole nation through educational activities, and as a consequence, their duties and responsibilities are different from other public service personnel. This legislation took into account the special role of the public school teachers and prescribed somewhat different personnel regulations than those applied to public service personnel in general.

The employment and promotion of teachers was to be determined by means of nomination rather than competitive examination. Some other measures that regulated the status of teachers, their duties and in-service training, were that:

- Teachers are required to hold certificates,
- Teachers are required to possess higher level of knowledge,
- Teachers are required to behave ethically.

For teachers, in-service education is considered to be indispensable to carry out their professional responsibilities. The law requires teachers to pursue consistent in-service training, and educational authorities are required to provide opportunities for in-service education to teachers as well as to encourage teachers to participate in those programs. For this purpose, various systematic programs are conducted at national, prefectural, municipal, and institutional (school) levels. This law has been revised more than twenty times since its enactment fifty years ago, but is still serving as a basis for in-service training of teachers.

**In-service Training at National Level**

The Ministry of Education, Science, Sports and Culture annually holds "central workshops" for school principals, vice-principals, coordinating and advising teachers on subject matters, who play the leading role at the prefectural level. In this workshop, lectures and seminars related to school administration and management, curriculum and instruction are provided, and participants are selected and sent by the boards of education of every prefecture. In 1991, 800 principals participated in 4-week workshops and 1,000 leading teachers took part in 6-week workshops.

The Ministry sends about 5,000 elementary, junior high, and senior high school teachers abroad every year for the purpose of broadening their international perspective as well as to strengthen their consciousness towards their own profession. This program started in 1959.
There are two types of programs: long period (30 days) programs and short period (16 days) programs. The Ministry also provides grants for in-service training provided by prefectural boards of education, teacher education institutions, and others.

**In-service Training at Prefectural Level**

Prefectural boards of education are responsible for planning and providing in-service training to teachers in their respective prefecture. Prefectural Education Centers play an important role in the in-service training of teachers. Those centers are usually equipped with accommodation facilities for teachers who are not able to commute.

Prefectural boards of education also send teachers to universities, research institutes, private firms and other institutions for long-term training in order to improve their professional competencies and their social character.

Prefectural boards also conduct periodic in-service training for teachers at various stages of their teaching career, currently after 5 years, 10 years, and 20 years of service. Another type of in-service training, that is directed towards meeting the learning needs of teachers in various positions such as principals, vice-principals, and coordination and advising teachers are also conducted.

**Induction Training for Beginning Teachers**

Induction training for beginning teachers was introduced when the Law for Special Regulations Concerning Educational Public Service Personnel was promulgated in 1989. The Induction Training Program for elementary school teachers started in 1989, for junior high school teachers in 1990, for senior high school teachers in 1991 and for kindergarten teachers in 1992. Induction training is conducted for all beginning teachers in national and public elementary schools, lower and upper secondary schools, schools for the blind, the deaf, and otherwise handicapped for one year after their appointment.

At least a total of 90 days is spent for training within one year, of which 60 days or more (about 2 days a week) are school-based training. Beginning teachers receive instruction from their advising teachers. Beginning teachers also spend one day a week, not less than 30 days a year, attending lectures, seminars and various practical training sessions that include five-day workshops held in Education Centers and other institutions outside of school.

The Ministry of Education, Science, Sports and Culture conducts about a two-week induction training ocean cruise, in cooperation with the prefectural boards of education to promote communication among teachers from different types of schools and from various regions.

Prefectural boards of education and Municipal boards of education in 12 designated large...
cities plan concrete programs of induction training for beginning public school teachers and provide substitute teachers during the training sessions. However, in many prefectures, some difficulties are observed in finding substitute teachers.

**Characteristics of In-service Teacher Training in Japan**

The predominant aim of in-service training for teachers in Japan is, like in other countries, to improve teachers' professional competencies. However, in Japan, the participation in in-service training is not normally rewarded with salary increase, like for example in the United States. Although the main reason for this difference can be explained as emanating from economic reasons, another explanation might also be possible. Japanese culture is rather monolithic, unity with others is regarded as important in the organization and in the management in Japan. Therefore large differences in the teachers qualifications as well as differences in the salaries are considered that they may weaken the unity or solidarity among teachers in the school.

Those factors must be taken into consideration when in-service training programs are planned. The same thing can be said to the teacher certification and compensation programs as well.

**References**


Ensuring Opportunities for the Professional Development of Teachers: The Malaysian Experience

Haji Ahmad Bin Mohamad Said

Director
Teacher Education Division
Ministry of Education

Summary

In-service training (INSET) has long been an important feature of the Malaysian teacher education system. Its importance is explicitly expressed in the Strategic Operational Target, the master plan of the Ministry of Education. The policy ensures the professional right of every in-service teacher to be provided with INSET throughout his or her teaching career.

The success of any educational initiative depends on the readiness of the teachers to take up the challenges. In the Malaysian context, the Smart School initiative has called for our in-service teachers to be trained in various competencies suitable for technology based learning.

The most constructive way to ensure the effective professional development of in-service teachers is by means of their continuing professional development. Their initial teacher education should provide a strong foundation, and then it should be supported during their internship as beginning teachers and further enriched during the long period of in-service.

Professional development of in-service teachers can be well-supported in an environment of a learning organization. Cooperation and collaboration are important strategies that offer learning opportunities for individuals in an organization.

Professional development programmes can be of various designs to cater for the needs and demands of in-service teachers. The concerns of INSET should cover not only knowledge and skills, but perhaps more importantly teacher attitudes. Teachers should be provided with intrinsic as well as extrinsic motivations to continue developing themselves professionally.

Innovations can be introduced at the different stages of the INSET cycle. At the implementation stage, the quality of training can be ensured by having well-trained trainers. In this context, professional development of teachers should also be considered the professional development of teacher-trainers.

1. Introduction

The Malaysian Ministry of Education reflects its policy in its mission statement that reads:

"To develop a world class quality education system which will realise the full potential of individuals and fulfil the aspirations of the Malaysian Nation."

It is implied that Malaysia will strive to attain a high standard of education that will enable her
citizens to develop and to become respectable Malaysians recognized worldwide. It is undeniable that the chances of that aim being achieved lie greatly in the hands of the teachers, who are the vital operators of the system of education.

The Ministry of Education trains the pre-service and in-service teachers for its government-aided schools in 31 Teacher Training Colleges. Currently the programmes are of 3 types, namely:

i. The *Malaysian Diploma in Teaching* – a 3-year programme introduced in 1996 replacing the Teaching Certificate course for primary schools.

ii. The *Post Diploma Certificate in Teaching* – a one-year programme introduced in 1995 for primary schools. This programme will be phased out in 1999 because the first cohort of Malaysian Diploma in Teaching will graduate in mid 1999.

iii. The *Postgraduate Diploma in Teaching* - a one-year programme introduced in 1989 for secondary schools.

Besides these, local universities also train teachers resulting in a Postgraduate Diploma in Teaching. They are namely:

i) University Malaya

ii) University Science Malaysia

iii) National University Malaysia

iv) University Putra Malaysia

v) University Technology Malaysia

vi) International Islamic University

vii) University Utara Malaysia

viii) University Pendidikan Sultan Idris

ix) University Malaysia Sabah

The table below shows the number of graduates from teacher training colleges from 1988 – 1998.

**Table 1: Number of Graduates from Teacher Training Colleges, 1988-1998**

<table>
<thead>
<tr>
<th>Year</th>
<th>Teaching Certificate</th>
<th>Post-Diploma in Teaching</th>
<th>Postgraduate Diploma in Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>3,718</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1989</td>
<td>2,795</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1990</td>
<td>10,094</td>
<td>-</td>
<td>812</td>
</tr>
<tr>
<td>1991</td>
<td>6,042</td>
<td>-</td>
<td>743</td>
</tr>
<tr>
<td>1992</td>
<td>6,532</td>
<td>-</td>
<td>1,501</td>
</tr>
<tr>
<td>1993</td>
<td>8,967</td>
<td>-</td>
<td>2,010</td>
</tr>
<tr>
<td>1994</td>
<td>11,004</td>
<td>-</td>
<td>1,856</td>
</tr>
<tr>
<td>1995</td>
<td>11,550</td>
<td>-</td>
<td>2,253</td>
</tr>
<tr>
<td>1996</td>
<td>14,566</td>
<td>1,306</td>
<td>2,810</td>
</tr>
<tr>
<td>1997</td>
<td>13,794</td>
<td>1,184</td>
<td>2,248</td>
</tr>
<tr>
<td>1998</td>
<td>2,100</td>
<td>448</td>
<td>638</td>
</tr>
<tr>
<td>Total</td>
<td>91,162</td>
<td>2,938</td>
<td>14,873</td>
</tr>
</tbody>
</table>
In addition, over the past 10 years, the Ministry of Education has sent teachers for pre-service and in-service training to universities abroad, in particular to the United Kingdom.

In-service teachers constitute the largest number of the education workforce and it is estimated that the country will employ 280,000 teachers by the year 2000.

Table 2: Number of Trained Teachers by On 30th June 1998.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>129,406</td>
<td>136,758</td>
<td>146,981</td>
<td>154,829</td>
</tr>
<tr>
<td>Secondary</td>
<td>82,802</td>
<td>86,874</td>
<td>101,920</td>
<td>102,139</td>
</tr>
<tr>
<td>Total</td>
<td>212,208</td>
<td>223,632</td>
<td>248,901</td>
<td>256,968</td>
</tr>
</tbody>
</table>

In-service training (INSET) has long been an important feature in the Malaysian teacher education system. Its significance is reflected in the policies and the organizational structure of the Ministry of Education.

In 1993, the Ministry of Education, in its attempt to upgrade its services, formulated its Strategic Operational Target in which its work priorities are spelled out. It is clearly stated that the Ministry has set the target that by the year 2000 every in-service teacher in the country will be able to attend INSET courses at least once in a year to have their pedagogical knowledge and skills updated. The move towards that goal has been the organization of courses around the year and increasing the number of participants progressively.

The table below shows the actual number of teachers who have received in-service training from 1988 to date:

Table 3: Number of Teachers who have received In-service Training 1988-1998

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of teachers in schools</th>
<th>No. of teachers who received INSET</th>
<th>Percentage (%) who received INSET</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>174,053</td>
<td>57,456</td>
<td>33.01</td>
</tr>
<tr>
<td>1989</td>
<td>178,666</td>
<td>19,086</td>
<td>10.68</td>
</tr>
<tr>
<td>1990</td>
<td>192,480</td>
<td>15,035</td>
<td>7.81</td>
</tr>
<tr>
<td>1991</td>
<td>201,718</td>
<td>63,682</td>
<td>31.57</td>
</tr>
<tr>
<td>1992</td>
<td>209,603</td>
<td>107,039</td>
<td>51.07</td>
</tr>
<tr>
<td>1993</td>
<td>217,927</td>
<td>109,326</td>
<td>50.17</td>
</tr>
<tr>
<td>1994</td>
<td>224,753</td>
<td>119,077</td>
<td>52.98</td>
</tr>
<tr>
<td>1995</td>
<td>228,838</td>
<td>138,656</td>
<td>60.59</td>
</tr>
<tr>
<td>1996</td>
<td>239,475</td>
<td>176,067</td>
<td>73.52</td>
</tr>
<tr>
<td>1997</td>
<td>256,968</td>
<td>193,033</td>
<td>76.09</td>
</tr>
</tbody>
</table>

In 1995, further development with regard to the administration of INSET was made with the establishment of a special sector in the Education Ministry to look into the professional affairs of in-service teachers. This sector is placed under the Teacher Education Division.
Chart 1: Teacher Education Division - Structure of Organization

This sector also acts as the Secretariat of the Central Committee for In-service Training, Ministry of Education. The Director-General of Education himself functions as its chairman. The Committee is as shown in chart 2.

Chart 2: Central Committee For In-Service Training: Ministry Of Education

Recently, the Teacher Education Division has prepared a working paper outlining strategies for the continuous development of teachers at all three stages i.e. pre-service, beginning and in-service. This is in line with the emphasis given by the Director-General of Education in his "Focus on Educational Management" which, among others, emphasizes the development of a professional teacher.
For 1998 with the economic slowdown, the sector has had to manage its resources more efficiently as it is expected that INSET activities are to go on despite the situation. The budget provision for INSET this year is RM 17,490,000 only compared to RM 64,008,000 for 1996 and RM 71,780,000 for 1997.

For 1998 the focus of INSET is on:
- The training of trainers and teachers for Smart Schools,
- Information Technology, and
- The teaching of critical subjects.

2. Education Initiatives

Smart Schools

Currently the attention of INSET in the country revolves around the subject of Smart Schools, which is an initiative undertaken by the Malaysian government in line with and, in support of, the nation’s drive to fulfill Vision 2020. This vision calls for sustained, productivity-driven growth, which will be achievable only with a technologically literate, critically thinking workforce prepared to participate fully in the global economy of the 21st century. This initiative is well-supported by the National Philosophy of Education which calls for "developing the potential of individuals in a holistic and integrated manner, so as to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious". As a nation we are in agreement that the catalyst for this massive transformation will be technology-supported Smart Schools, which will improve how the educational system achieves the National Philosophy of Education, while fostering the development of a workforce that is ready to meet the challenges of the next century.

Transforming the educational system will entail changing the culture and practices of Malaysia’s primary and secondary schools, moving away from memory based learning designed for the average students to an education that stimulates thinking, creativity, and caring in all students, that caters to individual abilities and learning styles and is based on more equitable access. It will require students to exercise greater responsibility for their own education, while seeking more active participation by parents and the wider community.

Smart School Teachers

Where will our Smart Schools be without our so-called "Smart Teachers"? We are looking for teachers who are able to uphold the principles set out in the Smart School system and who are able to translate those principles into effective practice. The demands as spelt out in the Smart School Blueprint are heavy. They require educational personnel to have new skills and
commitment to implement key dimensions, which set out strategies for acquiring and developing a range of systems software and materials in the following areas:

- Teaching and Learning
- Assessment and Certification
- School Management
- Systems Integration

With expanding technology and a rapid increase in knowledge, the society requires a different type of teachers in our schools. The new generation of teachers is not merely instructor, rather it is expected to be an enabler, facilitator, problem-solver, catalyzer and organizer of learning.

3. Teacher Education

**Continuing Education of Teachers**

Teachers have always been expected to play the role of the main agent of change. For any educational reform to work, teacher preparation is vital. The teacher education system ought to imbibe our teachers with the capabilities to handle challenges in whatever situation they are placed.

In the Malaysian context, teacher education programmes have often placed emphasis on the total development of the teacher, where the infusing of new knowledge and skills is balanced with the need of sustaining cultural values and maintaining national identity. The cause for teacher education reform, therefore, is based on the concern about the "quality" of the teachers and teacher education programmes.

We view teacher education as a continuum of three interlocking stages:

i) pre-service teacher education,
ii) induction and continuing guidance for the beginning teacher,
iii) systematic and appropriately structured programme for the teacher in service.

The pre-service, in-service and continuing education are important components of the career pattern for all teachers. In the case of pre-service teacher education, we provide the necessary training to prepare the would-be teachers to meet the challenges of the actual school situation and those of the community at large. To keep up with the latest trends and changes, the teacher education curriculum is reviewed and revised whenever necessary. The recently revised curriculum has been designed to include the following considerations:

(i) developing an insight into the National Ideology and National Vision;
(ii) developing an insight into the teaching profession as dictated by current and future policies and practices;
(iii) developing a broad general education which would give impetus to further growth;
(iv) developing a strong foundation in a specialized school subject area;
(v) developing a working knowledge and competence in co-curricular activities which serve to enrich pupils' learning experience;
(vi) developing competency in classroom teaching.

Self-access and self-directed learning are important strategies to produce student teachers who are capable to self-improve and can take responsibility for their own learning. Peer teaching and collaborative presentation is another effort that contributes to quality teacher development. The strategy requires student-teachers to plan and work out assignments together. They share ideas and information and map out presentation strategies. We are hopeful that this collaborative effort will eventually lead to our student-teachers practicing favorable professional habits in their workplace.

Process based coursework (PBC) is another important component in the course curriculum. In PBC, the student teacher is given a topic and is required to follow a set procedure. In the course of completing the project, the trainee will from time to time be required to discuss with the lecturers the progress made and problems encountered. This activity encourages interaction and communication. The student-teacher has got to be critical as well. All this helps develop teacher personality. In terms of academic skills, the experience helps to develop information literacy which is appropriately defined as the ability to find, read and evaluate information needed to function as productive members of society. As would-be teachers, these skills are pertinent to their professional development.

The next is the stage of beginning teachers. Efforts are made to assist beginning teachers to settle down and adjust themselves to the school environment and workplace. The Teacher Education Division has initiated induction programmes to make them feel welcome and be part of the school. New teachers are encouraged to share their ideas with their colleagues, to discuss their problems and to cooperate in providing solutions to the problems. Head teachers and senior subject teachers are encouraged to work closely with these beginning teachers to provide support. The idea of mentoring has been actively introduced to schools and more experienced teachers are coached to become good mentors.

The most important stage is concerned about a systematic and appropriately structured programme of professional development for in-service teachers. We know how important it is to maintain, improve and raise standards of teaching. If guidance and collaboration between beginning and experienced teachers can help improve teacher quality, it is pertinent that efforts are made to sustain the positive attitude that has been developed. The Ministry has designed and initiated several strategies to ensure that teachers are constantly kept in touch with the latest trends and developments in teaching. An array of in-service courses is being organized to cater
to the needs of the teachers. At the school level, in-house training programmes have been developed, resource centers established and constant monitoring of the suitability of teaching methods is performed to ensure that the right attitude, the best resource materials and the most suitable methods are available to the teachers.

In-service Teacher Training

Realizing the importance of INSET, recently a lot more is done for it. One important initiative is the building of a team of INSET leaders. As a start, in October 1997, a group of 20 participants was sent to the University of Wales in Cardiff, UK to follow a course on effective INSET. The course aimed to equip the course participants with knowledge and skills on designing, organizing and evaluating INSET programmes. Important topics under study were:

(i) Effective Schools: Effective Curriculum
(ii) INSET Models
(iii) Designing and Managing an INSET
(iv) College/School Collaboration and Mentoring
(v) Leadership in Education System

On their return, the team carried out an action plan involving short courses for INSET. The programmes under their management promise better deals for teachers all over the country, in particular those in the rural or remote areas. Under their guidance, each training centre is empowered to run courses catering for the needs of those teachers within its locality. Proper planning and monitoring of courses are being emphasized. We are hopeful that this effort will bring about a positive impact on the professional development of our in-service teachers.

4. Learning Organization

What is central to our vision of teacher education programmes is treating teachers as professionals who are responsible for their own learning. As discussed earlier, we believe the factors influencing their being professional are not only their knowledge and skills, but perhaps more importantly is their attitude.

How is a professional teacher conceptualized in our context?

Basically, we acknowledge the fact that the teaching profession has developed as a profession that demands time and energy. The image of a teacher is presented as someone who is morally committed to his work i.e. teaching and learning. He or she is first of all a learner, who is willing and ready to get well informed about what current trends in education are. He or she learns by being reflective and is critical of his own professional practices. He or she is involved in research activities and is open to new ideas when looking for answers for problems he or she
faces in the classroom. He or she is prepared to take up new challenges as he or she believes that anything could be possible through collaboration and cooperation with his/her fellow teachers. He or she is willing to contribute for the betterment of education of the country. To him or her new experiences are learning experiences.

Chart 3: Professional Roles of Teachers

The concept has influenced us to see that a meaningful way to organize professional development of teachers involves focusing on teacher learning. Teachers as learners can never fail to see how they can benefit from any situation they are in. This is the attitude that pushes them forward to new horizons. Motivation comes from within. Education providers like the Ministry of Education can provide the necessary courses, but if the teachers are not the willing participants, little can be gained from the efforts. For this reason, courses that are run for in-service teachers take into consideration the aspect of teacher attitude and motivation.

Developing teachers' thinking is also another way of improving their performance as learners and teachers. Thinking makes them not only critical but also creative. We are not saying that our teachers are not really thinking but many times we observe that they don't do it to the best of their ability.

We see how the discussion about teacher learning has also led us to the subject of teacher-trainers. We are fully aware that for teacher education, unless we improve the delivery methods of teacher training, we will not be able to move ahead at the rate we want to. There is a need to bring forth a new generation of teacher-educators for in-service training. As a result, teacher education has to include developing teacher-educators as well. After all, they are also
teachers in their own right.

Another important group in the whole scenario of teacher education is the group of education managers. For a long time this group did not seem to operate as a team with the classroom teachers. We now believe that true collaboration in education takes into account the involvement of everyone whose role is important in ensuring professional success. There is a need for teamwork. If learning is to be the important factor in the professional development of our teachers, let it be so for everyone in the education organization. We want the concept of learning organization to be adopted well and to be an important policy in our education system.

5. Professional Development Programmes

Types, Contexts and Motivators

We have organized what we identify as, short-term and long-term courses. The short-term courses are those that last no more than three months of training. The long-term courses take more than three months to complete. The courses can either be categorized as academic upgrading or professional development or both. Different types of courses are introduced as the result of the different needs and requirements of the in-service teachers.

The contexts refer to the sites where the courses are run. Innovations are seen in the form of modes of training. In addition to courses conducted face-to-face, distance and offshore approaches have also been explored. This is done to provide wider access to training for in-service teachers. Besides the consideration of distance which has deprived some of the teachers of the learning facilities, these innovative approaches have also opened channels for learning opportunities to teachers who are in the age zones not qualified for government scholarships or study leaves.

The offshore approach allows the teachers to attend courses by having the providers to come to them. The course providers make arrangements to run the courses at the teachers' base. This has proven to be more cost-effective and acceptable for those who find it difficult to leave home to attend courses. This approach has also enabled us to increase the number of teachers to undergo certain courses.

We have also been innovative by venturing into partnership arrangements for training. This has involved higher learning institutions locally and abroad. The 'twinning programmes', as they are called, involve co-operation between the Ministry and the institutions concerned. The teachers are partly trained in our teacher training colleges and partly in the partnership institutions.
Motivation for Professional Advancement

A recently launched programme is a good example of programmes practicing the partnership concept and it also provides good motivators for professional development. It is a major upgrading programme involving a large number of our teachers. It has benefited the teachers in terms of their academic and professional advancement. The programme enables our teachers to obtain their degree education and move up the ladder of the salary scale. At present the country still employs teachers who have not done their degree education. They are employed under the non-graduate salary scheme. Most of them are teaching in the primary schools but there are a few in the secondary schools, especially those who have been in the service for a long time. The Ministry of Education has undertaken a policy that by the year 2000 all our teachers in secondary schools will be university graduates. Currently the percentage indicates that 61.97% (73,298) of the total population of secondary teachers are of this status.

The related upgrading programme is offered to non-graduate teachers who meet the selection criteria without discriminating primary and secondary teachers. This is to practice an open policy to allow every qualified teacher to have the opportunity to develop himself or herself. However, even though the move is profitable to the teachers in general, it has caused a setback in the primary education system. As many good experienced teachers from the primary schools are qualified to follow the programme, they will be of great loss to our primary schools because on graduation they will be serving in the secondary schools. We have to address this issue as soon as possible.

The programme also takes care of the shortage of appropriately qualified teachers in our secondary schools. Two most important areas are those of Science and Mathematics.

The above programme was launched in 1996 and it required our teachers to do a year-long specialist course in our teacher training colleges and another two or three years in graduate schools situated in local or foreign universities. Those who were in the foreign universities were engaged in TESL and Music and the institutions involved were in the United Kingdom and New Zealand.

Table 4: Number of teachers involved in the programme

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>3,000</td>
</tr>
<tr>
<td>1997</td>
<td>3,000</td>
</tr>
<tr>
<td>1999</td>
<td>2,000</td>
</tr>
<tr>
<td>2000</td>
<td>2,000</td>
</tr>
<tr>
<td>2001</td>
<td>2,000</td>
</tr>
</tbody>
</table>

We have halted the programme for 1998 to give way to programme evaluation and review. Another factor that has forced us to take that decision is the economic downturn of the country, which has affected a lot of our professional planning.
Short-term Courses

More often, short-term courses are organized to meet the immediate needs of the classroom teachers. With the inception of the Smart School concept, formally structured courses are run by teacher training colleges to equip the teachers with the knowledge and skills in technology and the appropriate pedagogical methodology. For computer literacy the INSET record is as shown:

Table 5: INSET record: Number of Trained Teachers, 1995-1997

<table>
<thead>
<tr>
<th>Year</th>
<th>Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>58</td>
</tr>
<tr>
<td>1996</td>
<td>1,050</td>
</tr>
<tr>
<td>1997</td>
<td>1,472</td>
</tr>
</tbody>
</table>

Trainer Training Courses

Much of our funds has also been spent for the professional development of the teacher-trainers. For example, among the World Bank projects in our country, between 1993-1996, we organized numerous courses for the teacher-trainers. The courses were of two categories, firstly "Overseas Fellowship and Training" and secondly "Local Fellowship and Training". The trainers were sent overseas on attachments to higher learning institutions to gain professional experiences in the training of adults. A number has also been enrolled in postgraduate schools to do Master's and doctoral studies. When they returned home they were required to design training modules and conduct training sessions using the materials for the purpose of dissemination.

Improvement in trainer competencies is seen as having a positive impact on the quality of training for our teachers. Therefore, we have embarked recently on a trainer training course with a difference. Through this programme, the teacher-trainers are identified to attend a special course on trainer competencies. After completing the course they produce training materials for areas of training they have identified according to the needs of their target group.

Another change made with regard to teacher-trainers is the composition of the training teams. Besides the teacher-trainers from the teacher training colleges, we have also brought in classroom teachers to collaboratively work as training teams. The combination seems to work to the advantage of not only the course participants but also the trainers themselves. The trainer teams capitalize on the strengths of both the college trainers and the classroom practitioners. By working together the college trainers are able to refresh their experiences about classroom practices which they have left for some time, and the teachers are able to check their theoretical knowledge of teaching and learning which they may have neglected already. As a result, the shared ownership of in-service training has enabled our lecturers and teachers to break the professional boundaries, which they have often created between them. The participants are
more satisfied now in that they are getting inputs from more professional trainers. They are also more confident of teamwork as they can witness it has worked for the lecturer-teacher teams.

Having more competent trainers is also pertinent to ensure effective dissemination of new pedagogical knowledge and skills gained from exclusive courses. With limited resources, only a few are able to gain access to specially tailored and exclusive courses. So we need to structure a training machinery to enable knowledge and skills to be shared with the general population of educators. We have decided on a cascading approach to meet this need, but also we have to make sure that training sessions at various levels are done systematically and effectively.

6. Conclusion

In our attempt to improve the INSET programmes we have introduced several innovations. Generally, the innovations take place within a programme cycle. The INSET cycle, as it is called, encompasses a string of activities as demonstrated in the graphics below:

Chart 4: INSET Cycle

![INSET Cycle Chart](chart.png)

Source: "Effective INSET" University of Wales, Cardiff (1997)

With this new approach to INSET management, any programme is not to be regarded as a one-off effort but rather one that develops in a cycle of related activities as shown in the INSET cycle. It begins with the acknowledgement of our previous experiences. Then identification of
needs is carried out. Needs identification involves not only the central agency of the Education Ministry but also the state departments. The process of making decisions now involves top-down and bottom-up communication. Negotiations between policymakers, course providers and the course recipients are the order of the day. Training programmes are now being promoted more widely through the circulation of memos, pamphlets and brochures. The extensive information about programmes is helpful to school heads to decide on suitable candidates for any programmes.

Monitoring activities have been given due attention as well. We have organized training programmes within the country and abroad to prepare our personnel with monitoring competencies. We are determined to carry out the monitoring activities more systematically to ensure its efficiency, both financially as well as administratively.

To ensure that all INSET programmes recognize and implement the activities in the INSET cycle, the state education departments as programme managers are required to show their performance on expenditure, which is demonstrated, in the following quota, officially set by the Ministry of Education:

- 10% for identification of needs
- 70% for the implementation of courses
- 20% for monitoring and evaluation

As a conclusion, I wish to say that as long as we are committed in seeing that all our INSET programmes are managed efficiently, we can be confident that we can very well achieve our aim to ensure that the standard of education for our children in schools can be constantly improved.
Ensuring Opportunities for the Professional Development of Teachers in Nepal

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Country Brief

Nepal is a landlocked country situated between the two giant countries – China to the north and India to the east, west and south – with 22 million people having a growth rate of 2.39% a year, being one of the highest rates in the world. With an agriculture based economy, a literacy rate of 48.2% and a per capita income of US$ 220 (CBS, 1998), the country is heavily reeling under poverty and a poor resource base. Majority of the people lives in rural areas, which characterized by a high rate of illiteracy, shortage of food, inadequate sanitation facilities, and a rapidly degrading environment. The basic health indicators – life expectancy of 54 years and less for women, under-five mortality rate being 128 per 1000 and protein energy malnutrition for children under-five being 50% – speak for themselves about the sorry plight of the state (UNICEF/N, 1996). The country has revived multiparty democracy in 1990 with an expressive commitment made to change the fate of the rural poor.

1. Background

Teacher Education in the Sixties and Seventies

The education system of a country cannot be any better than its teachers is often quoted, to strongly emphasize the need for professional development of teachers through a well-built and established teacher education system in general and an effective teacher training program in particular. There is no doubt that the teachers are both the initiators of change and the bearers of its impact and therefore, their professional development must be based on the solid foundation of a sound pedagogy, updated knowledge and consolidated skills. The advancement into the 21st century is to be made both smooth and fruitful by implementing necessary reforms and innovation in the teacher education system.

A look into the past reveals that a systemic effort to establish a national level teacher training center was made in the early fifties, when the first National Teacher Training Center was formally established in 1954. In 1956, the Normal School System, later known as Primary Teacher Training System, replaced the National Teacher Training Center to give the teacher training program for the pre-service primary school teachers a new thrust. By 1962 permanent teacher training centers were established, replacing the normal schools. The normal schools, in fact, trained about 9,000 primary school teachers between the time of 1956 and 1971.
As the emphasis was placed on providing training opportunities to the primary school teachers for their professional development in the early sixties and seventies, its contribution in spreading educational awareness throughout the country along with the supply of trained teachers to rural and remote areas has been considered highly significant.

**Teacher Education in the seventies and eighties**

Implementation of the National Education System Plan (NESP 1971-76) provided a new impetus to teacher education and the training system in several ways:

- training was mandatory for tenure in teaching;
- an additional salary structure was introduced for trained teachers;
- the training institutions were brought under the single umbrella of the Institute of Education under the Tribhuvan University;
- pre-service and in-service teacher training programs were not separated, rather they were brought under the fold of the institute now known as Faculty of Education;
- the Ministry of Education and the Institute of Education started their cooperation to ensure training opportunities for the professional development of teachers;
- educational administration was made much more flexible to respond to the training needs of the educational personnel;
- regular professional forums were created to address the issues confronting the teacher education system;
- the Education Act was created to provide a strong legal basis for the education system in general and the teacher training system (sub-system) in particular;
- many innovative programmes, such as Radio Teacher Training, distance learning, women teacher training program, remote area teacher training program, on-the-spot training etc. were launched.

Despite these attempts and innovations to ensure opportunities for the professional development of teachers, a sudden amendment of the Education Act had far-reaching consequences to the overall teacher education and training system. Mandatory training was relaxed for the teacher’s tenure with an immediate resultant outcome of the heavy dropout in the involvement in the education/teacher training institutions. Also, a drastic cut was made in the number of in-service teachers in the Education Campuses.

**Teacher Education in the Nineties**

The time of the nineties is characterized by two important events in so far as to provide opportunities to the teachers for their professional upliftment:

- Creation of two high level education commissions to review the education system and
recommend measures.

- Revival of mandatory teacher training for the tenure.

The Education Commission of 1992 revived the mandatory teacher training system and suggested the opening of private teacher training institutions to cater for the growing demand for training. It also redefined the national goals of education.

The Education Commission of 1998 was established after an interval of 5 years since the previous Commission had suggested the extension of secondary education to the pre-school education with a different curriculum structure for the secondary level. Training of educational personnel, especially of teachers, is again given new consideration. Full-fledged implementation of the Reports of these two commissions is however yet to be realized.

One of the striking features of the nineties is that in-service teacher training is highly emphasized and the involvement of the Ministry of Education is very much visible through project supported activities that tend to reduce the duration of training from 10 months to a minimum of 2.5 or 1 month. Currently, the Faculty of Education plays quite an insignificant role, compared to the role of the Ministry, in providing in-service training opportunities for the professional development of the teachers. The faculty, unlike before, has now a fairly limited role to provide only pre-service training opportunities to people who may or may not enter the teaching profession upon the completion of their educational degrees.

2. Innovative Approaches to Training

It was until the eighties that the Faculty of Education had a close link and collaboration with the Ministry of Education in organizing training programs for the teachers of primary to secondary level. Since 1981, the Ministry of Education took the sole responsibility of in-service teacher training of teachers which meant that strong financial support went to the in-service training programs which were basically project based and the pre-service training programs suffered a setback in terms of the resources and institution-building. At the same time, most of the innovative approaches adopted by the Institute of Education, now called Faculty of Education, in the field of teacher training were discontinued. Therefore, the Faculty has limited itself to the pre-service structure of teacher education leading to the academic degrees of B.Ed., and M.Ed.

The innovative approaches that were adopted in teacher education and training programs were of two types: in-service and pre-service and two levels: primary and secondary. Some of these innovative approaches are still continuing in the form of near-the-school training like the resource center approach of the Basic and Primary Education Project (BPEP), distance education centers and secondary education development units of Secondary Education Development Project under the Ministry of Education. What follows is a brief description of the
programs adopted in the country at various times with the explicit aim of reaching the unreached (untrained) teachers for their professional development.

3. Primary Teacher Training

**Women Teacher Training Program**

The Equal Access of Girls and Women to Education (EAGWE) program was initiated as a strategy to promote education for women to increase the enrollment of girls in the primary schools of remote and socially backward areas of the country. In the Nepalese cultural context, the availability of women teachers is an important determinant factor to raise the enrollment of girls in the schools. Some 200 female trainees per year were accommodated in the hostels built for them on the campus premises of Dhankuta, Birgunj, Pokhara, Surkhet and Jumla. Refresher courses were also arranged for in-service female teachers to acquaint them with the recent trends in teaching. The evaluation studies (CERID 1974 and 78) found that the program had a positive impact on increasing the participation of girls in primary education.

**Remote Area Teacher Training Program**

A special primary teacher-training center was established in 1973 in Jumla in the western part of the country. Considering the low academic qualifications of the teachers in remote areas, a four-year teacher-training program was conducted for those who had completed the sixth grade. This program covered the content of pedagogical courses leading to SLC with teacher training.

**A-Level Program**

The A-Level 10-month primary teacher-training program was organized for pre-service as well as in-service teachers with S.L.C. qualification. Since the A-level program was the first year of I.Ed., this paved the way for many primary school teachers to upgrade their academic qualifications and attain the status of lower-secondary teacher.

**Campus Based B-Level Program**

The B-Level (10-month and non-credit) primary teacher-training program for the in-service as well as pre-service teacher was an alternative structure designed to provide chiefly the in-service training to the primary school teachers of the urban areas. Some courses were taught in the morning sessions at a convenient place, while the methodology courses were taught in their own schools. A mobile team of teacher-educators moved from school to school to supervise the planning of lessons, preparation of teaching materials and actual teaching in the classroom.
use of a new modality and techniques of training in teacher education were a marked feature of this program. This was a trainee-centered and community based or school based training program in many respects and it became popular among the teachers as the training was conducted in the familiar local community environment without being absent from their school work. At the same time, they could also apply the skills and knowledge they have received from the training in their day-to-day class teaching.

**Primary Teacher Training Through Distance Learning**

Primary teacher training through distance learning was adopted as another alternative modality to upgrade the skills of teachers in the remote and rural areas at a lower cost. A set of self-study materials on teaching school subjects and professional matters was prepared in simple language. The distance learning teams conducted admission tests and organized orientation programs of 90 hours for the teachers who passed the admission tests. Under the guidance of the district education supervisors, the trainees studied the self-study materials for three months in their own districts with pre-arranged contact sessions to monitor their progress. An intensive two-month practice course was conducted for those trainees following their satisfactory performance in the self-study materials. At the end of the course, a weeklong semester examination was conducted. On the basis of their achievements, certificates were distributed to the successful trainees. This program was found to be very popular among the in-service teachers because it ensured wider participation even from the remote areas.

**Field-Oriented Primary Teacher Education Program**

Since the primary teacher training program had to be relevant to the particular needs of the teachers who are responsible for running schools, the Institute of Education developed a comprehensive action-research project as an alternative for the primary teacher training program. This project was carried out with the objective of improving the quality of the primary school teacher education programs by incorporating the professional skills needed for the teachers to adapt themselves to the local situation.

**Radio Education Teacher Training Program (RETTP)**

Through radio broadcasts in combination with self-study materials, a training program for in-service teachers was organized. Experienced teacher-educators prepared the self-study and broadcasting materials. The trainees were required to study the materials and listen to the radio broadcasts according to a prescribed time schedule. The teachers received training on an individual and self-monitored basis in a home setting. Contact sessions were also arranged to reinforce the training in their respective districts. A final examination was arranged at the end of
each academic year.

Since a large number of teachers can be trained without having to leave their teaching in the schools, especially in the rural and remote areas, the RETTP can be considered to be both innovative in its approach and effective in practice.

_Education for Rural Development Project (ERDP/Seti Project) and Its Primary Teacher Training Program_

To develop the rural communities through quality education in Seti Zone, the far-western region of the country, ERDP initiated a program of training primary school teachers in order to prepare them as “change agents” or catalysts for rural transformation. The Seti Project also helped to link school activities with the development and improvement of the educational environment of the rural primary schools. A short-term teacher-training program (21 days), followed by seven days refresher training courses was considered to be a minimum requirement to be primary school teachers in the project districts. The training packages included activities and program components such as orientation to the project activities, teaching techniques, preparation of lesson plans and related instructional materials and teaching practice. Promising trainees were asked to participate in a 10-month (230 working days) training program. The curricular activities were organized in such a way that the trainees were able to develop basic skills, attitudes and knowledge necessary for successful teaching in primary schools, as well as working successfully with the rural community. Short lectures (no more than 15 minutes) followed by a demonstration lesson, micro-teaching by trainees and group discussion led by a resource person and the resource center based short-term teacher training were characteristic features of the project.

_Basic Teacher Training Program (150-hour training)_

To implement the basic education program, all the primary school teachers were required to attend short-term courses organized by the MOEC. For this purpose, the MOEC, in collaboration with experts from the FOE, devised several 150-hour initial training packages with special emphasis on pedagogical skills. Three distinct packages were prepared for the three distinct types of teachers at the primary level i.e. (a) grade 1-3 teachers; (b) grade 4-5 science and mathematics teachers with training experience or proficiency certificate degree, and; (c) English teachers with low proficiency in the English language. Provisions were made to provide N.Rs. 65/- per trainee, for constructing a set of teaching aids during the training period so that they could take these materials to their respective schools upon the completion of the training.
Primary Education Project (PEP) and Its Teacher Training Program

The teacher-training component of the PEP may be considered as another significant step taken in the direction of improving the quality of primary school teachers. The PEP was originally initiated as a very short training program (12 days) for primary school teachers. It adopted the resource center/cluster model pioneered by the ERDP Seti Project to organize in-service teacher training in different parts of the Center (RC) by the resource persons and specialists. Intensive supervision would follow after the training. This training was conducted for developing practical teaching skills by using the instructional materials prepared by the project.

The short-term in-service training, followed by a 10-day refresher training, has brought about some visible instructional changes among the primary school teachers. Since the training was based on the realities of the local situation, it was successful in responding to the needs of the teachers and the community. The Friday meeting of the “Satellite Schools” teachers at the Resource Centre had also demonstrated the need for the adoption of a need-oriented approach to solve the instructional problems of the individual teachers on collective basis.

The report of the Royal Commission on Higher Education that came out in 1983 specifically mentioned that degree-oriented programs would be organized by the Institute of Education whereas shorter-duration in-service training programs were to be conducted by related agencies of MOE. At the same time, the IOE was transformed into the Faculty of Education (FOE) and all education campuses were administratively and financially placed under Tribhuvan University’s central office. Although the FOE can give academic direction to the education campuses, it is not in a position to influence programs, even in its own campuses. The budgetary allotment also limited the role of the FOE so that it can hardly undertake any innovative teacher education programs in the country. At the same time, introduction of the multiple campus system at the Tribhuvan University also aided to the deterioration of the quality of teacher education programs within the FOE.

4. Secondary Teacher Training

Pre-Service Teacher Education

Pre-service teacher education follows a “2+3+2” structure after the School Leaving Certificate (SLC), leading to a Proficiency Certificate Level (PCL), Bachelor in Education (B.Ed.) and Master in Education (M.Ed.) degrees respectively. The PCL is designed to prepare teachers for lower secondary schools. It is a two-year program after 10-years of schooling. Higher Secondary Schools offering education courses also train lower secondary teachers. These schools have a two-year course for students with the SLC in hand. The B.Ed. program intends to prepare trained teachers for secondary schools. The duration of this program has been
increased from two to three years from the academic year of 1996/97 in line with the recent decision of TU to adopt a three-year Bachelor's program. In addition, there is a one-year B.Ed. program particularly designed for those who have already earned a Bachelor's degree in other disciplines. The M.Ed. program is traditionally designed to prepare teacher-educators and specialists in areas such as curriculum development, educational measurement and evaluation, educational administration and supervision. Recently, with the adoption of 10+2 structure, one additional purpose of the M.Ed. program has been to prepare teachers for higher secondary schools. By definition, a teacher with a degree in education is called a trained teacher.

Recently, the FOE has started two new programs: (a) a Post-Graduate Diploma in Education (PGDE) and (b) a B.Ed. program in primary education. The PGDE is a one-year (two semesters) course particularly designed for preparing teachers for higher secondary schools in three major areas: English, Mathematics and Science. A Master's degree in Science, Mathematics or English is the minimum entry qualification for the PGDE. The B.Ed. program in primary education, on the other hand, has been designed to prepare different categories of trained manpower. They will lead the primary education in sub-sectors as teacher-trainers, supervisors, school administrators, curriculum specialists, resource persons etc. It follows the curriculum structure of the three-year B.Ed. program, but offers primary education related courses as specialization and electives. Table 1 shows the pre-service teacher education programs offered by TU at its education campuses.

Table 1: Programs Offered by TU at its Constituent Campuses

<table>
<thead>
<tr>
<th>Development Region</th>
<th>Campus</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Development Region</td>
<td>Ilam Campus</td>
<td>PCL; B.Ed</td>
</tr>
<tr>
<td></td>
<td>Siraha Campus</td>
<td>PCL; B.Ed</td>
</tr>
<tr>
<td></td>
<td>Dhanuka Campus</td>
<td>PCL; B.Ed</td>
</tr>
<tr>
<td></td>
<td>Birgunj Campus</td>
<td>PCL; B.Ed</td>
</tr>
<tr>
<td>Central Development Region</td>
<td>Tahachal Campus</td>
<td>PCL; B.Ed., M.Ed.</td>
</tr>
<tr>
<td></td>
<td>Sanothimi Campus</td>
<td>PCL; B.Ed.</td>
</tr>
<tr>
<td></td>
<td>Kirtipur Campus</td>
<td>B.Ed.; M.Ed.</td>
</tr>
<tr>
<td></td>
<td>Gorkha Campus</td>
<td>PCL; B.Ed</td>
</tr>
<tr>
<td>Western Development Region</td>
<td>Pokhara Campus</td>
<td>PCL; B.Ed.</td>
</tr>
<tr>
<td></td>
<td>Butwal Campus</td>
<td>PCL; B.Ed</td>
</tr>
<tr>
<td></td>
<td>Surkhet Campus</td>
<td>B.Ed.</td>
</tr>
<tr>
<td></td>
<td>Jumla Campus</td>
<td>PCL</td>
</tr>
<tr>
<td>Mid-Western Development Region</td>
<td>Jumla Campus</td>
<td>PCL</td>
</tr>
<tr>
<td>Far-Western Development Region</td>
<td>Dadeldhura Campus</td>
<td>B.Ed.</td>
</tr>
</tbody>
</table>

As shown above, altogether 13 constituent campuses of TU offer pre-service teacher education programs. PCL courses are offered at 10 campuses, B.Ed. courses at 11 campuses and M.Ed. at two campuses. In addition, there are 10 private campuses offering PCL and B.Ed.
programs.

Table 2 shows the enrollment patterns in teacher education programs over a five-year period. Enrollment in teacher education programs has increased in recent years. In 1994/1995 the number of students enrolled in teacher education programs was an all-time high, 16,661. Several things have occurred in recent years. First, the Government has made a policy statement that training will be mandatory in order to become a permanent teacher. Second, a number of private campuses have been established in different parts of the country which offer teacher education programs. Furthermore, education campuses have seen growth in their enrollments as a result of the large number of SLC graduates seeking admission to the university. These three reasons possibly explain the growth in enrollment in teacher education programs.

Table 2: Enrollment in Teacher Education Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>PCL</th>
<th>B.Ed.</th>
<th>M.Ed.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992/93</td>
<td>4,807(344)</td>
<td>4,542 (607)</td>
<td>186</td>
<td>9,535</td>
</tr>
<tr>
<td>1993/94</td>
<td>4,724(635)</td>
<td>6,146(1,557)</td>
<td>526</td>
<td>11,396</td>
</tr>
<tr>
<td>1994/95</td>
<td>5,861(1075)</td>
<td>10,070(3,434)</td>
<td>730</td>
<td>16,661</td>
</tr>
<tr>
<td>1995/96</td>
<td>6,149(966)</td>
<td>8,438(2,266)</td>
<td>743</td>
<td>15,330</td>
</tr>
</tbody>
</table>

Note: Figures in parentheses represent enrollment in private campuses.

A total of 438 teacher-educators are presently serving at 13 Education Campuses of FOE, of whom 430 have Master's degree in education or in other disciplines. The number of Ph.D. degree holders is only 20.

In-service Teacher Education

In-service education is regarded as a function of the Ministry of Education. A four-week in-service course in five core subjects for lower-secondary and secondary teachers has been developed. In-service training to lower-secondary and secondary schoolteachers is provided through SEDUs. SEDUs are established under the auspices of the Science Education Project. The Project was designed to upgrade science-teaching skills and to improve science education through a network of 25 Science Education Development Units (SEDUs) located at strategic locations in 25 districts of the country. Units were established to provide in-service training programmes of short duration for teachers of Science, Mathematics and English and also for school administrators and supervisors. Each SEDU was intended to provide service to three districts, thus covering all the 75 districts of the country. A Science Education Development Center (SEDEC) was established within the Ministry of Education to coordinate the work of the SEDUs. SEDEC was also responsible for providing training for Science Master Trainers (SMTs) who are in charge of each SEDU.

With the initiation of the Secondary Education Development Project (SEDP), both SEDEC
and SEDUs have been brought under it. SEDEC is primarily responsible for the development of in-service training courses for lower secondary and secondary teachers. SEDEC provides professional and logistical support to SEDUs. The SEDUs are primarily responsible for the delivery of short-term training courses to lower secondary and senior secondary teachers serving in their districts. The staff of each SEDU consists of a Secondary Master Teacher (SMT) and a small administrative staff. Each SEDU has a training hall equipped for science, a storeroom and a preparation room, storage for books, offices, living quarters for the SMT, and a residential hostel with up to thirty beds and a kitchen. The majority of SMTs were first appointed under the Science Education Project. The SMTs are permanent secondary school teachers (some of them are even head-teachers), who are, more or less, on deputation at the SEDUs.

When residential training courses are organized, the SEDU recruits additional professional staff, especially for courses, which are not the area(s) of subject specialization of the SMTs. These temporary additional trainers and resource persons are drawn from the ranks of serving senior secondary school teachers, from local university campus staff, and from District Education Office personnel.

On average, each SEDU serves three districts, with a minimum of two and a maximum of four districts. The average number of schools per SEDU is 308, with a minimum of 129 and a maximum of 875 schools. The SEDU-teachers ratio is found to be 1:1,256. The SEDU located in the Kathmandu Valley has the highest number of teachers (5831), the lowest being at the Rukum SEDU. Table 3 shows the regional distribution of the SEDUs.

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Districts</th>
<th>No. of SEDUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Region</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Central Region</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Western Region</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Mid-Western Region</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Far-Western Region</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

In its early stage, the SEDP conducted a ten-month in-service training course for secondary teachers who are teaching English, Mathematics and Science. This training consisted of two residential periods of two months each in the SEDU and two periods of three-month long supervised teaching practice in the trainees’ own schools. The supervision was carried out by headmasters, school supervisors and SMTs. As of May 1997, the number of teachers completing the various phases of the 10-month training was as follows: Phase I, 1128; Phase II, 973; Phase III, 843 and Phase IV, 646. Those who complete all the four phases receive a training certificate. Recently, the MOE has decided to phase-out the 10-month training course and replace it with shorter residential courses of four-week duration.
In the past, the FOE used to conduct in-service courses of longer duration to help teachers acquire higher degrees in education. The MOE used to send in-service teachers for longer duration training at the education campuses. The MOE paid a training allowance to such teachers. Both prospective and in-service teachers used to attend the same program. Currently, there is no active government-financed training program for in-service teachers at the FOE. However, in-service teachers are, at times, found attending FOE campuses at their own costs. The Education Regulations provide for full-pay study leave to teachers who wish to attend FOE campuses. Many schools cannot afford to release their teachers due to their inability to hire substitute teachers.

In-service training courses are intended to update the content knowledge and teaching competencies of teachers. Teachers, whether trained or untrained, attend these courses. Teachers who are selected for these short training courses are given a training allowances of NRs.1,800 plus travelling expenses. The SEDUs are presently financed with loan assistance from ADB. Teachers are not charged any fees. These courses are not compulsory. The training allowance gives them a motivation to join the training program. Apart from the training allowance, participation in in-service training courses does not provide any other incentive to the teachers in terms of promotion or salary increase. The courses are not organized into credits, which cumulatively would lead to the acquisition of degrees at the end of several sessions.

Each SEDU can organize a maximum of eight four-seek courses in a year. As a rule, 26 teachers are to be enrolled in each training course. If the SEDUs are to run training courses at their full capacity, they can train 5,200 teachers each year. In 1996/97, 2,555 lower secondary teachers were reported to have undergone in-service training. That is 8% of the total lower-secondary and secondary teachers who have had an in-service training opportunity. It appears that the existing capacity of the SEDUs is far below what is actually needed to meet the in-service training needs of lower secondary and secondary teachers.

SEDEC is staffed by four Science specialists, four Mathematics specialists and three English specialists, all of whom have B.Ed. degrees. The minimum qualification of the SMT is a Bachelor's degree in Education. The SMTs were given an initial three-month training course. Subsequently, they received a further two-month training course in the Philippines. The SMTs were recruited from among the serving secondary teachers.

5. International Linkages

Teacher’s Organizations

One of the growing opportunities for the professional upliftment of teachers in created by the establishment of various forms of teacher organizations and associations that were established
mainly after the revival of multiparty democracy in the country in 1990. Though these teachers' organizations bear many political connotations because of their close affiliation with various political parties, one of their main concerns is directly related to the promotion of professional capacities of the teachers. Mainly, three types of activities related to the professional development of the teachers initiated by these organizations have surfaced:

- English language training;
- Leadership training in school management;
- Workshops, seminars and forums to address various educational issues of topical importance.

In addition to the organizations created by the teachers working in grant-aided schools, an organization called PABSON (Association of Private and Boarding Schools – Nepal) is there to voice the concerns of private schools and has become a forum for building the capacities of teachers working in these schools. The schools belonging to this organization also run in-house training-programmes for the teachers on regular basis. A recent study (SEDP, 1997) showed that private schools proved to be lot better than the grant-aided schools in the overall performance of the schools and the teaching capabilities of the teachers. Private schools nearly account for 33% share in the total number of schools in the country and they also have nearly 80% share in the School Leaving Certificate Exam of the country.

**Private Institutions**

Private institutions that are authorized to run teacher training and other forms of educational training are basically working at the grassroots level to cater for the regional demands for trained educational manpower, especially at the primary level. The National Center for Educational Development (NCED), an apex body under the Ministry of Education created recently by the government to provide high level training to educational personnel, provides affiliation with these private institutions in terms of their potential contribution to training. Of 16 such institutions, only 13 are functioning properly. The positive aspect of these institutions is that private sector involvement is creating opportunities for the professional development of teachers, but caution is necessary to stop them from deviating from the expected norms or levels of performance.

**NGOs and INGOs**

Some of the NGOs and INGOs are supporting local schools in capacity building through scholarship for training provisions. Though such provisions are small in scale, they are good to motivate the teachers for their upliftment and academic upgrading. Some of the popularly known INGOs that are working closely with the NGOs in strengthening the professional development of teachers are: Save the Children (UK), Redd Barna Nepal, Action Aid Nepal, PLAN International,
Care International. These are examples of cooperation and collaboration and also indicating that professional development of the teachers should not necessarily be the responsibility of the government alone. Also, it speaks for the necessity of having institutional linkage and cooperation in providing institutional support to professional development activities in a more sustainable way and in a more effective technique.

**International Cooperation Missions**

International cooperation missions, some of official nature like the USAID, NORAD, JICA, DANIDA and some of missionary nature like the UMN – United Mission to Nepal, have component plans to assist other organizations and/or organize themselves activities/programs that directly contribute to the professional growth of the teachers. Though most of these kinds of assistance are funneled to programs that show concern toward the academics of the primary or lower secondary teachers, their contribution to upper secondary level teacher training also can be felt. Occasionally, overseas study/training scholarships are provided to the teachers, even directly. Mostly such scholarships are made available, though limited, on tailor-made basis and often result in improved skills and knowledge of the awardees.

Organizations such as VSO, Peace Corps, JOCV, SNV invite foreign experts/nationals to local institutions to share the expertise and knowledge and reinforce the skills of the local teachers.

6. **Problems and Issues**

A developing country like Nepal is often fraught with the problems of structural inadequacies and a poor resource base to create any such opportunities to develop the teachers on a more professional basis. Moreover, an unwelcoming attitude often coupled with poor incentives, strikes at the root of our inefficient system. The government, as well as the people and various organizations, are fighting to create a favorable atmosphere for the new entrants so that they can be retained in teaching by effectively utilizing their commitment and concern for a more professional world. Here are some concerns, problems and issues that are directly related to making adequate and qualitative provisions for initiating and strengthening professional development of teachers:

- The existing teaching force is heavily untrained whereas the need for quality education and professional capacity building up in a even more pronounced way.
- The pre-service vs. in-service dichotomy in providing training opportunities to the teachers is not clearly delineated. In-service training is created in areas where financial resources are available and the pre-service training opportunities are either curtailed or financially
Ensuring Opportunities for the Professional Development of Teachers

Growing demands for more professional capacity building usually outnumber the available limited opportunities, also the same time pointing at the structural inadequacies to address the issues at hand.

Existing levels of teacher competencies have put a question mark to the efficiency and effectiveness of teacher training institutions.

Frequent changes in the teacher training policy place the professional development task of the educational personnel at a crossroads, giving the impression to the public that such professional training institutions might not be necessary.

The majority of the teachers working in higher secondary schools, popularly known as 10+2 schools, are untrained and underqualified to teach the classes and this has resulted in an alarmingly low student achievement rate in the final examination.

Training meant for professional capacity building is often equated with academic degrees leaving those who complete the training/degree course neither well-grounded in their academic knowledge nor skilled in their profession.

Resource persons and trainers are often not competent and qualified enough to deliver training in an effective way, meaning classroom application of training has a little relevance.

This has been a country of commissions and committees. There have been two national level commissions (1992, 1998) over a short period of time, but there has been little implementation of their recommendations, such as the standardization of the teaching profession like any other recognized professions.

The training centres are developed in such a way that they do not cater for the needs of schoolteachers in remote rural areas, leaving most of them out of their reach. Such a situation has often resulted in an unequal distribution of qualified teachers mostly concentrating in urban areas and the rural areas have to be satisfied with the not so good teachers.

Teacher performance evaluation is not given due consideration, when promoting the teachers. This has rendered severe blow to the competent teachers.

Professional development of female teachers is severely handicapped in the absence of incentives to motivate females to join the teaching profession.

Quality of education is much more decried today rather than identifying alternative measures to remedy the situation.

7. Conclusion

The professional development of teachers is an arduous job and it demands a sufficiently
thought-out plan backed up by necessary infrastructural, human and financial resources. It goes without question that the teacher occupies a pivotal position in the overall system of education and hence his/her professional development makes and marks the quality of the system. Better prepared, competent and professionally sound teachers are what we need today to face the challenges of the 21st century, where the teachers will eventually be made much more responsible for maintaining and sustaining the fabric of the education system of the country.

"Upgrading teacher qualifications" is to start right from today, through institutional linkages and collaborations, in order to improve the quality of teacher education in the Asia-Pacific Region.

Selected References


SEDP (1997), Secondary Education Perspective Plan, SEDP/MOE, Sanothimi, Bhaktapur, Nepal.
Summary

1. Issues and Concerns

The teacher is backbone of an educational system. In Pakistan, teacher training has not been according to supply and demand of teachers and there is a mismatch between the two. Although facilities of teacher education have expanded, the qualitative dimension of teacher education has received only marginal attention. The quality concerns relate to policy formulation, planning and development, management of teacher education programmes, provision of an adequate information structure for training institutions' pre-service and continuous in-service education of teachers educators, enrichment of curriculum contents, methods, educational techniques, teaching aids and other teacher related resources. Some of the major issues and concerns are:

1. Lack of commitment and motivation for the teaching profession.
2. Short duration of the teacher education programme.
3. Political interference and disregard of merit when making appointments.
4. Teacher training is taking place without a viable policy framework.
5. Poor quality of textbooks in teacher education and lack of teaching materials.
6. No standardized procedures for the appointment of teachers in teachers training institutions.
7. Shortage of physical facilities in teacher training institutions.
8. Absence of in-service training programmes for teachers, specific training opportunities, and lack of quality.
9. Inadequate evaluation.
10. Teachers' absenteeism, defective management, lack of supervision and accountability.

At present, the following institutions impart teacher-training programmes.

<table>
<thead>
<tr>
<th>Programs and Institutions</th>
<th>Punjab</th>
<th>Sindh</th>
<th>NWFP</th>
<th>Balochistan</th>
<th>Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Teacher Certificate /Certificate of Teaching (Government College of Elementary Education and Training(GCET))</td>
<td>34</td>
<td>24</td>
<td>18</td>
<td>10</td>
<td>4</td>
<td>90</td>
</tr>
<tr>
<td>B.Ed./B.S.Ed (College of Education)</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>M.Ed./M.A(Ed) Institute of Education and Research / University Departments of Education</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Extension/Staff Development (In-service Education) Provincial Institute of Teacher Education (PITE)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>PITEs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
The description of various training programmes is as follows:

<table>
<thead>
<tr>
<th>Training Program</th>
<th>Qualification for Admission</th>
<th>Duration of Training in Academic Years</th>
<th>Classes to Teach</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.T.C</td>
<td>Matriculation</td>
<td>1</td>
<td>I-V</td>
</tr>
<tr>
<td>C.T</td>
<td>Intermediate</td>
<td>1</td>
<td>I-VIII</td>
</tr>
<tr>
<td>B.S.Ed (12+ 3)</td>
<td>Intermediate</td>
<td>3</td>
<td>VI-X</td>
</tr>
<tr>
<td>B.Ed (14+ 1)</td>
<td>B.A/B.Sc.</td>
<td>1</td>
<td>VI-X + Students</td>
</tr>
<tr>
<td>M.Ed.</td>
<td>B.Ed.</td>
<td>1</td>
<td>Teachers of PTC, CT and B.Ed + Supervision</td>
</tr>
<tr>
<td>M.A.Ed.</td>
<td>B.A/B.Sc.</td>
<td>2</td>
<td>VI-XII + Students Teachers of PTC, CT and B.Ed + Supervision</td>
</tr>
</tbody>
</table>

Allama Iqbal Open University (AIOU) contributes to the training of teachers through distance learning. It offers PTC, CT, B.Ed, M.Ed in teacher education.

The annual training capacity of formal training institutions is 30,000. The total enrolment of AIOU is 10,000. Thus total training capacity is 40,000, including AIOU, and is sufficient to meet the demand. Around 65,000 trained teachers are unemployed due to the continuing suspension of the recruitment of teachers.

The New Education Policy (1998-210) provides a framework for re-vamping teacher education through the creation of a closer relationship between supply and demand of teachers. It utilizes the existing capacity of teacher training institutions by using outposts to be established under the Teacher Education Project and strengthening the capacity of AIOU. To raise the quality of the teacher education programme, the policy stipulates a rise in the minimum educational qualifications for primary teacher from Matriculation to Intermediate.

Two parallel programmes of Faculty of Arts (FA)/Faculty of Science (F.Sc.) Education and B.A /B.Sc. programme will be launched. The content-and methodology of Teacher Education curricula will be reviewed. The frequency and depth of in-service training courses shall be increased by utilizing the in-services programmes through school clustering and other techniques.
Teacher Education National Education Policy 1998-2010


1. The duration of the Primary School Teaching Certificate (PTC) shall be increased. The Diploma in Education on the pattern of 10+3 years should be started for involving trainees in training for three years.

2. The B.Ed. programme for science students for secondary level on the 12+3 years pattern should be extended to cover arts students as well.

3. The introduction and strengthening of M.Ed. degree programs in Departments of Education, IERS and Colleges of Education for Educational Administrators, Planners, Supervisors, Researchers and Curriculum Planners etc.

4. Three months intensive training programme for Supervisors in PITEs and Education Extension Centers.

5. A National Institute of Teacher Education (NITE) will be established at Federal level for the training of Teacher Educators.

6. Curriculum of PTC, CT, B.Ed. and M.Ed. programmes will be improved. A semester system will be introduced. Vacations will be curtailed to extend the period of study.

7. A separate teacher education cadre will be created.

8. For non-formal primary education institutions a three months intensive orientation programme under the umbrella of AIOU will be established.

9. A stipend scheme will be started to attract talented students of intermediate and degree level to teaching profession.

10. A Teacher Foundation shall be established in all the provinces to provide financial assistance to the spouses of the deceased teachers and scholarships to their talented children.

11. For attracting female teachers in Primary Education three pronged measures will be adopted.
   a. In new primary schools only female teachers will be appointed.
   b. Staggered pre-service training courses during vacations will be launched at PTC and CT level.
   c. No upper age limit will be set for females.

12. For remote, rural areas following steps will be taken:
   a. Stipends will be given to female students in schools and colleges and contracts will be signed with them to serve in specific institutions for a period of 3 to 5 years.
   b. Provision of special pay and allowances as incentives for serving in remote rural areas.
   c. Residential facilities and commuter services will be provided to rural teachers. Retired personnel may be engaged for teaching.
   d. Day care centers for female teachers' siblings will be opened near schools.
1. **Issues and Concerns**

The quality of education is directly related to the quality of instruction in the classrooms. The teacher is considered the most crucial factor in implementing all educational reforms at the grassroots level. It is a fact that academic qualifications, knowledge of the subject matter, competence and skills of teaching and the commitment of the teacher all have an effective impact on the teaching-learning process. Recognizing the deteriorating quality of education at various levels, efforts need to be intensified to accord adequate priority to the effectiveness of teacher education programs in the country. With our recent focus on ensuring massive access to “Education for All”, the teacher education system has quantitatively expanded to keep a reasonable equilibrium between demand and supply of teachers. However, the qualitative dimension of teacher education programs has received only marginal attention resulting in mass production of teachers with only a shallow understanding of both the content and methodology of education.

Many factors are responsible for shaping the quality of teacher education in the country. These factors range from ideological and psycho-economic needs to the existing structure of the education system as well as ill-defined theories and practices of teaching and learning. The population growth pressure obviously remains a prime impetus for the rapid expansion of education in the years to come. The teacher education program, being an integral part of the education system, has also expanded and will expand further to cater for the needs of the country. Due care, however, needs to be taken that the essential qualitative imperatives of teacher education are also considering, while meeting the pressures of demand on the system. The quality concerns of teacher education relate to policy formulation and planning, development and management of teacher education programs, provision of adequate infrastructure to training institutions, pre-service and continuous in-service education of teacher-educators, regular enrichment of curriculum content, methods, evaluation techniques, teaching aids and other teacher related resources.

The existing teacher education program is considered not being adequately responsive to the demands for quality education in the school system. There is a wide range of issues and concerns being expressed about teacher education in Pakistan. To improve the existing situation, in the field of teacher education, the development of any strategy should give due consideration to these issues. Some of the major issues and concerns are indicated below:

i. The profession of teaching is usually the last choice for young men. The teachers are, therefore, said to be neither committed nor motivated to teach. This is more true in the case...
of male teachers than female teachers.

ii. The teacher training programs possess an imbalance between the courses pertaining to academic knowledge of the subject, content of school curriculum, teaching methods, teaching practices and curricular activities. This is because of the short duration of most of the existing teacher education programs.

iii. The appointment procedure for the teachers usually disregards merit, due to political interference and other malpractices prevailing in society.

iv. The teacher training institutions are facing budgetary and financial constraints and are not adequately equipped to meet the requirements of a dynamic system of quality teacher education.

v. There is no effective relationship between the demand and supply of teachers at any level of education in Pakistan. Teacher training is carried out without a viable policy and planning framework, resulting in imbalances between the demand and supply situation.

vi. The quality of textbooks in teacher education is poor. The learning materials neither relate to real educational environment nor inspire and motivate the prospective teachers for further studies. There is no mechanism to make teachers guides and supplementary materials available for working teachers.

vii. There is no standardized procedure for the appointment of teachers in teacher training institutions. In the existing system, any person belonging to the school or college cadre can be shifted to a teacher education institution.

viii. The teacher training institutions face acute shortage of facilities, such as buildings, equipment, furniture, teaching aids, library books and other reading materials. Teacher education is not provided with the necessary support services. These institutions are also not supervised in an effective manner.

ix. In-service training programs for teacher-educators are almost nonexistent. There is no institutionalized arrangement for providing regular training to teachers and teacher-educators. Sporadic training opportunities, if any, lack in quality.

x. The examination system is highly defective. Essentially external in nature, it deprives the students of creativity and leadership qualities.

xi. Teacher absenteeism, defective management, lack of supervision and accountability practices are some of the major issues that need to be appropriately addressed in the teacher education programs.
At present, the following institutions offer various training programs:

**Table 1: Programs offered by various institutions**

<table>
<thead>
<tr>
<th>Programs and Institutions</th>
<th>Punjab</th>
<th>Sindh</th>
<th>NWFP</th>
<th>Balochistan</th>
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</thead>
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<td>16</td>
</tr>
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<td>1</td>
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<td>-</td>
<td>4</td>
</tr>
<tr>
<td>PITEs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
</tbody>
</table>

Since Independence, there has been a substantial expansion in teacher education institutions. At present, there are 90 elementary colleges and 30 high schools, which offer teacher training programs for PTC (Primary Teaching Certificate) and CT (Certificate of Teaching) to teachers. Institutions that prepare secondary school teachers are known as Colleges of Education. There are 11 Colleges of Education, 4 Institutes of Education and Research and 2 Departments of Education at universities, which offer programs of secondary school teacher education leading to a Bachelor’s degree in Education (B.Ed). The Allama Iqbal Open University (AIOU) is also contributing to the training of teachers by means of distance learning. It offers PTC, CT, B.Ed and M.Ed. programs of teacher education. A description of various training programs is given below:

**Table 2: Description of training programs**

<table>
<thead>
<tr>
<th>Training Program</th>
<th>Qualification for Admission</th>
<th>Duration of Training in Academic Years</th>
<th>Classes to Teach</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTC</td>
<td>Matriculation</td>
<td>1</td>
<td>I-V</td>
</tr>
<tr>
<td>CT</td>
<td>Intermediate</td>
<td>1</td>
<td>I-VIII</td>
</tr>
<tr>
<td>B.S.Ed (12 + 3)</td>
<td>Intermediate</td>
<td>3</td>
<td>VI-X</td>
</tr>
<tr>
<td>B.Ed (14+ 1)</td>
<td>B.A/B.Sc.</td>
<td>1</td>
<td>VI-XI + Students Teachers of PTC, CT and B.Ed +Supervision</td>
</tr>
<tr>
<td>M.Ed.</td>
<td>B.Ed.</td>
<td>1</td>
<td>VI-XII + Students Teachers of PTC, CT and B.Ed +Supervision</td>
</tr>
<tr>
<td>M.A.Ed.</td>
<td>B.A./B.Sc.</td>
<td>2</td>
<td>VI-XII + Students Teachers of PTC, CT and B.Ed +Supervision</td>
</tr>
</tbody>
</table>

The annual training capacity of all the formal training institutions is about 30,000. In almost all the institutions, there is a pressing demand for admission in teacher training programs. In most of the cases, there are more applicants than places available. The total enrolment of AIOU is about 10,000 per annum, of which about 7,000 complete various courses every year. The PTC, CT and B.Ed programs of AIOU are offered in alternative years. The staff of the teacher training institutions belongs to the education service. There is no special cadre of teacher-educators. Any serving teacher or lecturer with a Master’s degree with or without professional qualifications, can
be appointed as a teacher-educator although preference is given to those who hold a Master's degree in Education. Pre-service teacher training is an essential prerequisite for teaching in primary, middle and secondary schools. However, no pre-service training is required for teaching at higher secondary and degree levels.

Keeping in view the existing capacity of our teacher training institutions, which is around 40,000 including AIOU, one may safely conclude that the existing institutions are sufficient to meet the quantitative requirements of teacher training in the country. It is estimated that around 65,000 teachers with different qualifications are unemployed because of the suspension of new recruitment during the past six years.

2. Objectives of Education Policy (1998-2010) on Teacher Education

- To create a matching relationship between the demand and supply of teachers.
- To increase the effectiveness of the system by institutionalizing the in-service training of teachers, teacher-trainers and educational administrators.
- To upgrade the quality of pre-service teacher training programs by introducing parallel programs of longer duration at post-secondary and post-degree levels.
- To make the teaching profession attractive for young talented graduates by introducing a package of incentives.
- To develop available frameworks for policy, planning and development of teachers' education programs, both in-service and pre-service.
- To provide for management training of education administrators at various levels.

3. Physical Targets

The requirements of new teachers during the period of implementation of the policy are given in Table 1 and 2.


- The annual requirement of teachers in each province shall be worked out on both a short- and long-term basis. The teacher training institutions shall be required to restrict their admissions accordingly.
Table 3: Literacy Elementary Education 1996-97 to 2003 and 2010

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Literacy (Percentage)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>50.00</td>
<td>52.00</td>
<td>55.60</td>
<td>59.20</td>
<td>62.80</td>
<td>66.40</td>
</tr>
<tr>
<td>Female</td>
<td>25.00</td>
<td>27.00</td>
<td>29.60</td>
<td>32.20</td>
<td>34.80</td>
<td>37.40</td>
</tr>
<tr>
<td>Total</td>
<td>38.90</td>
<td>40.00</td>
<td>43.00</td>
<td>46.00</td>
<td>49.00</td>
<td>52.00</td>
</tr>
</tbody>
</table>

| **2. Primary (5-9) Years.** |                |                   |         |           |           |           |
| **a. Population (000)**    |                |                   |         |           |           |           |
| Male                        | 9,839.00       | 1,0252.00         | 10,518.40 | 10,784.80 | 11,051.20 | 11,317.60 |
| Female                      | 9,384.00       | 9,712.00          | 9,946.40 | 10,180.80 | 10,415.20 | 10,649.60 |
| Total                       | 19,223.00      | 19,964.00         | 20,464.80 | 20,965.60 | 21,466.40 | 21,967.20 |
| **b. Enrollment (000), Classes(I-V)** |                |                   |         |           |           |           |
| Male                        | 8,324.00       | 9,250.00          | 9,707.00 | 10,164.00 | 10,621.00 | 11,078.00 |
| Female                      | 5,400.00       | 5,800.00          | 6,372.80 | 6,945.60  | 7,518.40  | 8,091.20  |
| Total                       | 13,724.00      | 15,050.00         | 16,080.00 | 17,110.00 | 18,140.00 | 19,170.00 |
| **c. Participation Rate (%)** |                |                   |         |           |           |           |
| Male                        | 84.60          | 90.23             | 92.29   | 94.24     | 96.11     | 97.88     |
| Female                      | 57.54          | 59.72             | 64.07   | 68.22     | 72.19     | 75.98     |
| Total                       | 71.39          | 75.39             | 78.57   | 81.61     | 84.50     | 87.27     |
| **d. No. of Schools (000)** | 145.00         | 150.00            | 152.00  | 155.00    | 157.20    | 159.60    |

| **3. Middle (10-12) Years.** |                |                   |         |           |           |           |
| **a. Population (000)**      |                |                   |         |           |           |           |
| Male                        | 4,783.00       | 4,896.00          | 5,115.40 | 5,334.80  | 5,554.20  | 5,773.60  |
| Female                      | 4,720.00       | 4,932.00          | 5,010.20 | 5,180.40  | 5,366.80  | 5,544.80  |
| Total                       | 9,503.00       | 9,828.00          | 10,125.60 | 10,510.20 | 10,921.00 | 11,318.40 |
| **b. Enrollment (000), Classes (VI-VIII)** |                |                   |         |           |           |           |
| Male                        | 2,700.00       | 3,050.00          | 3,394.00 | 3,738.00  | 4,082.00  | 4,426.00  |
| Female                      | 1,650.00       | 1,740.00          | 1,960.00 | 2,180.00  | 2,400.00  | 2,620.00  |
| Total                       | 4,350.00       | 4,790.00          | 5,354.00 | 5,918.00  | 6,482.00  | 7,046.00  |
| **c. Participation Rate (%)** |                |                   |         |           |           |           |
| Male                        | 56.45          | 62.30             | 66.35   | 70.07     | 73.49     | 76.66     |
| Female                      | 34.96          | 36.01             | 39.12   | 42.02     | 44.72     | 47.25     |
| Total                       | 45.78          | 49.24             | 52.88   | 56.24     | 59.35     | 62.25     |
| **d. No. of Schools (000)**  | 14.60          | 15.90             | 18.80   | 21.60     | 24.40     | 27.20     |
| **e. No. of Teachers (000)** |                |                   |         |           |           |           |
| Male                        | 57.10          | 60.80             | 69.80   | 78.80     | 87.80     | 96.80     |
| Female                      | 38.70          | 40.00             | 46.00   | 52.00     | 58.00     | 64.00     |
| Total                       | 95.80          | 100.80            | 115.80  | 130.80    | 145.80    | 160.80    |

Sources: 1. Planning and Development Division (Education Section).
          2. Female Economic Survey, 1996-97
          3. Academy of Educational Planning and Management, Islamabad.
Table 4: Secondary, Higher Secondary and Vocational Education

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>4. High (13-14) Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Population (000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3,199.00</td>
<td>3,264.00</td>
<td>3,410.40</td>
<td>3,556.80</td>
<td>3,703.20</td>
<td>3,849.60</td>
</tr>
<tr>
<td>Female</td>
<td>3,147.00</td>
<td>3,222.00</td>
<td>3,340.60</td>
<td>3,459.20</td>
<td>3,577.80</td>
<td>3,696.40</td>
</tr>
<tr>
<td>Total</td>
<td>6,346.00</td>
<td>6,486.00</td>
<td>6,751.00</td>
<td>7,016.00</td>
<td>7,281.00</td>
<td>7,546.00</td>
</tr>
<tr>
<td>b. Enrollment (000) Classes (IX-X)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,270.00</td>
<td>1,300.00</td>
<td>1,516.00</td>
<td>1,732.00</td>
<td>1,948.00</td>
<td>2,164.00</td>
</tr>
<tr>
<td>Female</td>
<td>680.00</td>
<td>750.00</td>
<td>867.00</td>
<td>984.00</td>
<td>1,101.00</td>
<td>1,218.00</td>
</tr>
<tr>
<td>Total</td>
<td>1,950.00</td>
<td>2,050.00</td>
<td>2,383.00</td>
<td>2,716.00</td>
<td>3,049.00</td>
<td>3,382.00</td>
</tr>
<tr>
<td>c. Participation Rate(%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39.82</td>
<td>39.83</td>
<td>44.45</td>
<td>48.70</td>
<td>52.60</td>
<td>56.21</td>
</tr>
<tr>
<td>Female</td>
<td>21.61</td>
<td>23.28</td>
<td>25.95</td>
<td>28.45</td>
<td>30.77</td>
<td>32.95</td>
</tr>
<tr>
<td>Total</td>
<td>30.78</td>
<td>31.61</td>
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<td>111.00</td>
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<td>171.70</td>
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<td>11.60</td>
<td>12.20</td>
<td>12.80</td>
<td>13.40</td>
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<tr>
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<td>171.20</td>
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<td>6. Secondary Vocational/Commercial</td>
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<tr>
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<td>2.14</td>
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<td>2.35</td>
<td>2.46</td>
<td>2.58</td>
<td>2.69</td>
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<td>10.00</td>
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<td>127.00</td>
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<tr>
<td>c. No. of Teachers(000)</td>
<td>2.14</td>
<td>2.24</td>
<td>2.35</td>
<td>2.46</td>
<td>2.58</td>
<td>2.69</td>
</tr>
</tbody>
</table>

- For the training of educational administrators during the coming years, Departments of Educational Administration and Management offering M.Ed. and B.Ed. degrees shall be opened. The Academy of Educational Planning and Management shall develop specialized training programs for in-service educational administrators.
- Effective measures shall be taken to strengthen in-service institutions in order to provide regular and high quality in-service training to the existing corps of educational administrators.
• Both formal and non-formal means shall be used to provide increased opportunities of in-service training to the working teachers, preferably at least once in five years.
• Special arrangements shall be made for the training of teacher-educators by using the National Institute of Teachers Education and its affiliated centers.
• The curriculum and methods of instruction in teacher training institutions shall be reviewed and revised to bring them in line with the requirements of modern trends in this field.
• On the pattern of B.S.Ed. being offered in only two institutions in Punjab, FA/ F.S.Ed. and BA.Ed. shall be introduced.
• A special package of incentives shall be provided to attract and retain talented students in the teaching profession.
• A special package of incentives shall be provided to rural females to join the teaching profession.
• A new stream of vocational and technical training shall be introduced in pre-service teacher training institutions, initially at post-degree level.
• A new cadre of teacher-educators shall be created.
• In order to make the integration of secondary and higher secondary level possible, pre-service training shall be made compulsory for those teaching at the higher secondary level.
• The Academy of Higher Education in the University Grants Commission shall be strengthened to provide in-service training programs to degree and post-degree teachers.

5. Implementation Strategies

Constant observations are taking place and one of them is that the duration of the Primary School Teaching Certificate is far below the norm of other developing countries in the world. Generally, the programs for Primary School Teaching Certificates range from 12 to 16 years of both general education and teacher training programs. The norm is, therefore, around 14 years of education in most of the countries in the world. In order to strengthen the primary level teacher training programs, the start of a 3-year Diploma in Education for matriculates is being proposed. Through this Diploma, the teacher will study up to the Higher Secondary School Level, as well as obtain pedagogical skills for teaching at the Primary level. This Diploma will provide the teachers with integrated training in the school subjects as well as pedagogical skills. This will enable them to pursue either general studies up to BA., B.Sc. and M.Sc. level or continue to serve the teaching profession.

At present, only a few institutions in the country offer an integrated program at B.Sc. + B.Ed level known as B.S.Ed. program. These programs have proved successful, as they attract
students at F.Sc. level and induct them in the teaching profession by providing them with a 3-year integrated training with the benefit of two degrees. It enables the students to receive the qualifications of both the B.Sc. and B.Ed levels and enables them to pursue their higher studies at M.Sc and M.Ed. levels. This open-ended facility to pursue either of the two programs has attracted a vast number of talented students to the teaching profession. It is proposed to expand this facility horizontally to those students who want to pursue general education as well as obtain a B.Ed. degree through an integrated B.A + B.Ed. program at the colleges of education. The students of these programs will have the opportunity to continue their studies at MA., M.Sc. or M.Ed. levels. These teachers will be equipped with academic background of school subjects and be trained in pedagogical skills to teach students from grades 6 to 10. All colleges of education will offer this combined degree program to meet the emerging needs of quality teacher education at the secondary level.

To impart management capability, the M.Ed. degree at the university level will be improved/strengthened to produce a corps of trained educational/administrators and supervisors who can become headmasters/headmistresses of middle and high schools as well as District Education Officers (DEOs), Sub-Divisional Education Officers (SDEOs) and ADEOs to provide leadership in the field of education. Besides university departments of education and IERs, leading colleges of education in the country will also be strengthened to offer this degree so as to cater to the expanding needs of the country.

Good governance on educational institutions will be achieved by imparting intensive training in management and supervision through Provincial Institutes of Teacher Education (PITEs) to all headmasters/headmistresses and personnel of supervisory cadres.

A National Institute of Teacher Education (NITE) will be set up at the national level to improve the capabilities of academic staff in teacher training institutions. About 300 teacher-educators will be enabled to improve their professional qualifications through this institute every year.

The curricula of PTC, CT, B.Ed and M.Ed. levels will be improved in order to make these programs more learner-centered. They will also provide opportunities to the prospective teachers to received necessary training in pedagogical skills involving creativity, problem-solving, project method and use of other innovative approaches.

Curtailing spring, winter and summer vacations will extend the academic calendar of these institutions.

The programs will be based on semester system.

Apart from the sporadic non-formal education training programs run by NGOs, an extensive nation-wide orientation program for providing basic teaching skills will be run under the umbrella of Allama Iqbal Open University.
In order to attract talented students to the teaching profession, a stipend scheme will be started for studies at the intermediate and degree levels. These students will be contracted to join the teaching profession on the completion of their studies. Those receiving higher qualifications during their service will be given adequate incentives of advance increments, as well as, rapid promotion within their cadres so as to retain them in the profession.

The Academy of Educational Planning and Management (AEPM) is the principal training institute at the national level, educating administrators, supervisors and planners. Its training capacity and resources shall be strengthened and long-term training programs shall be launched for school administrators.

Teacher Foundations shall be established in all provinces. These will provide financial assistance to the spouses of the deceased teachers and scholarships to their talented children for pursuing higher education. In addition, children of teachers shall be exempted from payment of tuition fees in the public sector educational institutions.

There is sufficient evidence to substantiate the fact that female teachers are more effective than male teachers at the primary level are. In order to encourage more female teachers to join the primary institutions, three pronged measures will be adopted, viz.:

(a) Female teachers will staff 70% of newly established primary schools. These schools will provide education to both boys and girls;
(b) staggered pre-service training courses during summer vacation will be launched at PTC and CT levels through which untrained female teachers will be provided pre-service training during summer vacation; and
(c) there will be no upper age restriction for female teachers joining the teaching profession.

In order to universalize primary education in the country and to extend educational facilities up to the elementary level, it is necessary to provide a suitable number of trained teachers to disadvantaged institutions. This may be done through various efforts by

(a) providing stipends to female students at school and college levels and contracting them to serve specific institutions for a period of 45 years;
(b) providing incentives in terms of special pay and allowances for working in remote rural institutions;
(c) extending residential facilities and daily commuter services to these institutions besides these measures, retired personnel may also be engaged in teaching in these institutions until regular staff is attracted to serve these institutions through various schemes of incentives; and
(d) opening day care centres near the schools for the siblings of female teachers.

The policy provides for offering a separate stream of Matric (Technical) in secondary schools. Initially, the institutions having a laboratory and a qualified teacher will be allowed to
offer this facility. In the meantime, the scheme of studies for B.Ed. programs will be revised to offer B.Ed. (Technical) to the trainees. The existing programs of M.Ed. (Technical) will be expanded to ensure a supply of trained technical teachers. A rational planning system will be introduced. The offering of Matric (Teaching) in high schools will correspond to the number of trained teachers that become available, every year. Thus the guaranty of employment will attract talented young graduates to this field.

The policy provides for the opening of vocational schools at each district headquarters. These schools will provide training to both genders. Arrangements will have to be made to provide teachers to these institutions. Experience indicates that it will not be appropriate to train a separate cadre of teachers in this field, and make arrangements for their pre-service training. Skilled and/or qualified manpower available in the field will be used for the teaching assignments. If feasible, the teachers so recruited will be provided short-term training in vocational institutes, already working in the public or private sector.

This country report is based upon an extract from the "National Education Policy (1998-2010)" - Government of Pakistan, Ministry of Education Islamabad.

Table 5: Allocation for Education Policy (1998-2003) Total (Development + Recurring) Rs. in million

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<th>Sindh</th>
<th>NWFP</th>
<th>Balochistan</th>
<th>Federal</th>
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<th>Public</th>
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<td>960</td>
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<td>2,977</td>
<td>32,500</td>
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The Striving and the Struggle for Teacher Development: The Contexts, Issues, Trends, and Opportunities in In-Service Teacher Training in the Philippines

Allan B. I. Bernardo

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De La Salle University, Manila, Philippines

In this paper, I will attempt to provide an overview of in-service training of teachers in the Philippines. In order to situate the various efforts towards in-service training, I shall first give a background description of the context of pre-service teacher training in the Philippines. Within this context, I will attempt to underscore the strong imperative for in-service training for teachers. I will then proceed to describe various efforts at having large-scale in-service training for teachers, and identify problems, trends, and issues in such programs. In doing so, I hope to also highlight the positive and innovative efforts to address these concerns.

1. The Context: Filipino Teachers and Pre-Service Training

When I was beginning my career as a teacher in the Philippines, there was a not so unpopular joke among students regarding the choice of teaching as a career. It goes as follows, "Kung hindi ka matalino, at hindi ka maganda, mag-titser ka na lang." In English this translates, "If you’re not smart, and you’re not good looking, you might as well just be a teacher." Such jokes all too effectively illustrate the popular view about teaching as a profession, and teacher education as a choice for higher education.

Indeed, a survey by the DECS-World Bank (1995) found that only about 15% of high school graduates pick teacher education as their chosen course for tertiary education. Although some might say that 15% is a figure that ought not to be dismissed, the same survey showed that the high school students who chose a career path in education score between the 60th and 75th percentiles in the nationally administered National College Entrance Examinations (NCEE). This...
shows that the high achievers do not choose training and careers in education. The estimate is reflected in the proportion of students enrolled in teacher education (13.68%) compared to all the other programs (see Appendix A).

Once this group has entered the teacher training institutions, 29% of them drop out at some stage. Hence, only 71% of 15% (or about 10% of the corresponding population of high school graduates) actually complete their teacher training, and become eligible to take the licensure examination for teachers. Although some might interpret this as a good form of attrition, as those who lack in academic aptitude drop out of the teacher-training program, the data do not seem to bear out this view. Indeed, those who drop out are of comparable ability levels as those who stay and complete their training.

The overwhelming majority (about 67%) of these students train in elementary education and obtain BEEd (Bachelor of Elementary Education) degrees. The rest obtained degrees in BSEd (Bachelor of Science in Education) which allows them to teach at the intermediate and secondary levels. The latter group of students is required to major in a subject area of specialization. A notable result of the survey was that only 1.5% of the BSEd students choose to major in science and mathematics, creating a clear scarcity of trained teachers in these two important subject areas. Fortunately, the 1.5% who do choose to major in mathematics and science belong to the upper 15% of enrollees in teacher education program in terms of ability and achievement indicators.

To further explore this environment of pre-service teacher training, let us look at the teacher education institutions and their curricula. An assessment done by the Teacher Education Council (studying the 533 teacher education institutions in the country at the time of the survey) revealed that only 23.6% (or 126) meet the minimum standards of set by the Department of Education, Culture, and Sports (DECS). Moreover, only 18.0% (or 96) have received Level II accreditation from the various accrediting bodies (i.e., mainly the Philippine Accrediting Association of Schools, Colleges, and Universities, or PAASCU). Hence, in terms of requirements related to faculty profile, library and other academic resources, most teacher education institutions leave much to be desired.

As with most tertiary education programs in the Philippines, the curricula in teacher education institutions contain mostly courses in general education (as a means of compensating for the short basic education term). The requirements specified by the Department of Education, Culture, and Sports (MECS Order 26, S. 1983, and MECS Order 37, S. 1986) indicate that in the BEEd curriculum, general education courses make up 74% (107 out of 144 units) of the course requirements. For the BSEd curriculum, the proportion is 56% to 61% (99 out of 161 or 176 units). The professional education courses add up to only 37 units or 26% in the BEEd curriculum and 32 units or 18% to 20% in BSEd curriculum. Of these totals, 10 units are for practice teaching,
and the remaining units are theoretical foundations courses. Hence, for the BEEd curriculum, only 9 units (three subjects, or 6.25%) are actually for practical matters like teaching strategies and curriculum development, among others. For the BSEd curriculum, the same type of courses only add up to 6 units (two subjects, or 4%).

As a result, most graduates are not as extensively exposed to the content and methods in the field. This has led many observers to question the relevance of the pre-service training curriculum in the preparation of teachers (see e.g., Burke & McCann, 1993; Cortes & Savellano, 1993). A related observation regards the passing rate in the licensure examination for teachers. There is a very low passing rate among teacher education graduates who take the licensure examination (formerly the Philippine Board Examination for Teachers or PBET, and now the Licensure Examination for Teachers, LET). The report of the Task Force to Study the State of Higher Education (1987) found that from 1978-1984 an average of 25.6% passed the licensure exams for teachers. But in a more recent study, Ibe (1991) found that only 10.6% of the examinees passed. She also found some of the examinees scored zero in either of the two parts of the exam, as well as on some of the sub-areas. The mean score of the examinees during that year was equivalent to 37.18% on the whole test. Fortunately, the passing rate has climbed in the years following the overall passing rate from 1991 to 1994 rose to 24.92% (see Appendix B). But the recent improvement notwithstanding, the competency of the average graduate of teacher education institution is clearly way below acceptable standards.

This claim is further verified by observations regarding the qualifications and competencies of licensed teachers in schools. For example, the Department of Science and Technology (cited in The Congressional Commission on Education [EDCOM], 1993) found that majority of teachers handling mathematics and science at the secondary level were not qualified to teach these subjects. They found that the percentage of teachers qualified to teach particular subjects are as follows: 33.90% of general science teachers, 30.51% of biology teachers, 15.41% of chemistry teachers, 4.44% of physics teachers, and 54.67% of mathematics teachers. The National Education Testing and Research Center (1990, cited in Cortes, 1992) also found that teachers’ mean score in standardized achievement exams, was 54.08, just 8.79 points higher than that of students. In mathematics, teachers scored only 4.2 percentage points higher than students did. In Filipino, the students outscored the teachers (60.25% against 56.88%). Hence, there is an acute shortage of qualified teachers in subjects like science, mathematics, Filipino, among others.

All these observations indicate the general environment where there is a very clear need for continuous in-service training for teachers at all levels. It is with regard to this situation that the Philippine Congress enacted RA 7836 or the “Philippine Teachers Professionalization Act of 1994.” This law requires that teachers obtain continuing professional education credits before
their teaching licenses are renewed. The next section considers the general context in which in-service training takes place in the Philippine educational system.

2. The In-Service Training Environment

The report of the Teacher Education Council (1995) very explicitly stated that "There are no permanent, well-structured in-service training programs available to the over 300,000 basic education teachers in the country."

First, the situation in the teacher's work environment is not conducive for professional growth. A series of studies (DECS-Bureau of Higher Education, 1989; Cortes & Soegiarto, 1986; Cortes, 1990; World Bank, 1988) cited by the Congressional Commission on Education (1993) point to the lack of adequate library facilities in most schools. Library facilities are actually scant or not available in 85% of primary and secondary schools.

The typical teacher's workload also seems rather heavy and is quite time consuming. According to a study of the World Bank (1988), in the public schools the teaching load is 15 to 20 hours per week. In private schools, teachers work for 20 to 30 hours per week. The report of the Civil Service Commission (1991) further states that at the primary school level, classes ranged from 36 to 47 pupils, and in the secondary level, classes ranged from 39 to 61 pupils. But what really prevents teachers from taking time for their own professional development is the fact that they are assigned many non-teaching tasks and the reality that their salaries are quite low.

The non-teaching tasks include doing clerical work in the principal's office, planning and supervision of students' extra-curricular activities, cooking and entertaining during athletic meets, entertaining guests, raising funds for school and community activities, taking the census for the National Statistics Office, serving various election for the Commission on Elections, serving in health, nutrition, immunization, and drug abuse programs of the Department of Health and the Department of Social Work and Development. Incidentally, most of these duties are not compensated. All these hardly leave enough time for class preparation, much less for personal readings or self-study. Because the salaries of teachers are rather low, teachers cannot afford to pay their tuition for graduate studies or other training programs for their professional development.

3. Government Programs for In-Service Training

There are however opportunities for in-service training available. In the recent past, the government has undertaken a number of large-scale in-service training programs in connection with the implementation of new curricula. For example, prior to the implementation of the New
Elementary School Curriculum (NESC) under the Program for Decentralized Educational Development (PRODED, from 1982-1988) and the New Secondary School Curriculum (NSSC) under the Secondary Education Development Program (SEDP from 1990-1994), the Department of Education, Culture, and Sports (DECS) organized several training programs. To promote these programs, the DECS provided a range of incentives for participants which included, (a) increased opportunities for salary upgrading for accommodating credit allowance given to attendance in the training activities, (b) promotion in rank or position, (c) service credits, (d) certificates of attendance which indicate equivalent credits or points, and (e) stipends and honoraria.

The DECS was able to undertake such large-scale in-service training programs with the support of the Fund for Assistance for Private Education (FAPE) and selected teacher education institutions. More important, funding for these programs came from a range of foreign funding agencies like the UNESCO, the Asia Foundation, the United Nations Development Program (UNDP), the World Bank, the Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH), the Association of Southeast Asian Nations (ASEAN), among others. Indeed, it seems unlikely that the Philippine government could actually put together enough financial resources to undertake such a mass in-service teacher training program.

The College Faculty Development Fund

However, the Philippine government realizes the need for more large-scale mass in-service programs for Filipino teachers. In 1989, the Philippine Congress enacted RA 6728 or the Government Assistance to Students and Teachers in Private Education (GASTPE) Act. Under this Act, the College Faculty Development Fund (CFDF) was created to provide scholarships for graduate degrees and non-degree workshops or seminars. The Commission on Higher Education (CHED) and the FAPE collaboratively administer this program. Recipients of such scholarships are required to render return service to their institutions. Recent reports from the CHED show that the recipients of such scholarships increased for 29 in 1991 to 671 in 1996 (and a projected and estimated 1,534 in 1997).

The Centers for Excellence in Teacher Education.

A more important government initiative was started in 1994. The Philippine Congress enacted RA 7784 or “An Act Strengthening Teacher Education in the Philippines by Establish Centers of Excellence.” A center of excellence is selected for each of the country’s regions to take the lead in providing in-service training for teachers in the region. The centers of excellence are teacher education institutions that are mandated, among other things, to experiment and try
out relevant and innovative pre-service and in-service teacher training programs, to organize and coordinate collaborative researches on teacher education, and to develop curricula and instructional materials. In each region, the various teacher education institutions are attached like nodes to the regional center of excellence. The center is mandated to provide professional assistance to the teacher education institutions, and is generally given the responsibility of facilitating the development of the teacher education institutions. These teacher education institutions are then tasked to undertake the in-service training programs for the teachers in the various primary and secondary schools in the regions. Therefore, the centers of excellence were established to provide the foundations for a network of teacher education institutions that will coordinate efforts for developing teacher competencies; the skills and knowledge of teachers are designed to flow from the stronger institutions (the centers of excellence) to the weaker ones.

The selection of the regional centers of excellence was completed in 1996, and the master plan for teacher education and training programs, formulated by the Teacher Education Council (1995), was also set to define the specific plans and strategies for teacher education and training in the medium term. At present, the cooperating agencies are at the earliest stages of implementation of the various in-service programs planned; the slow movement in these efforts is mainly due to constraints in funding.

**Programs on Science and Technology Education.**

I earlier noted the acute shortage of qualified teachers in the areas of mathematics and the sciences. This fact, coupled with the Philippine government's focus on developing science and technology in the country, has led to development efforts to focus on education in science and technology. One program that was already completed is the Engineering and Science Education Program (ESEP). The main objective of the ESEP was to support technology development for industrialization in the Philippines by increasing the supply of well-trained scientific and technical human resources (Department of Science and Technology, 1997). The program, which ran from 1992 to mid-1998 with financial assistance from the World Bank, the Japanese and Philippine governments, had as one of its components faculty development through local and foreign Master's and Ph.D. scholarship programs, post-Master's and Ph.D. fellowships, and visiting professorships. As regards this component, as of the end of 1997, 4,477 scholars have completed their training programs, and 1,150 are in the process of completing their studies. Among those who completed their programs, 4,307 studied in Philippine institutions, and 170 studied overseas; among those still studying, 1,025 are in Philippine institutions, and 125 are abroad. The program overshot its target of 5,157 manpower development slots by 472. Notice however, that the main targets of the ESEP are science and engineering teachers in the tertiary level.
More recently a similar initiative was launched, but one focusing on training science and mathematics teachers in primary and secondary schools. This project is called Rescue Initiative for Science Education (Project-RISE) and is receiving financial assistance from several government agencies including the DECS, the CHED, the Department of Science and Technology, and the Technical Educational Skills Development Authority, among other government and semi-government organizations. The program aims, among others, to achieve a target of 100,000 teachers to be trained by identified centers of excellence in the various regions (following the same model as the centers of excellence in teacher education). Although funding is supposed to have been committed for this project, the implementation of the training programs has been stalled due to recent government cutbacks on spending, due to the Asian financial crisis.

The Third Elementary Education Project

The Third Elementary Education Project (TEEP) is a foreign-assisted project (a loan from the International Bank for Reconstruction and Development) which seeks to place selective investments towards the improvement of public elementary education in the 26 poorest provinces in the country (DECS-Bureau of Elementary Education, 1997). It is planned for completion over a seven-year period, which started in 1996. One of the 13 components of the TEEP is in-service training. The aim of this component is to provide 50,000 grade school teachers with in-service training to improve their classroom management and teaching skills, and to improve the instruction leadership skills of 2,000 principals and district supervisors. The Central Office-Project Implementation Unit of the TEEP is just now beginning the process of selecting the consultants who will design and implement the training programs.

Government In-Service Training Programs: Issues and Trends.

I note a few significant observations regarding government in-service training programs for teachers. First, such programs are largely dependent on foreign-assisted funding. The programs that are shown to have met its targets are those that are financially supported by external agencies. On the other hand, the programs that are primarily dependent on local government funds are slow in moving (e.g., the centers for excellence, and the Project-RISE). But such is the reality of a developing country with limited fiscal resources.

The second notable observation is that the in-service programs are conceived in traditional formal models, wherein teachers upgrade their competencies by enrolling in formal graduate degree programs. For the most part, the programs mentioned provide support for teachers who will work towards completing a Master's or a Doctoral degree. There is less support for attendance of conferences, short-term workshops and seminars, and the like; there is hardly any
mention of institutional support for more innovative forms of in-service training for teachers.

Finally, an important component of government in-service programs is the implicit recognition that there is a rather large variance in the levels of competency of teachers across different teacher education institutions and education institutions in general. Although teachers in certain institutions display very high levels of competence, the larger proportion of teachers in the larger proportion of education institutions need extensive upgrading of competencies. This premise provides the motivation for the system of establishing networks among schools and teachers, found in the centers of excellence, and in the design of the programs of the ESEP and Project-RISE, among others. The system recognizes that educational institutions in the Philippines cannot be left to fend for themselves and to compete with each other. Rather, the system encourages a symbiotic relationship among the stronger and the weaker institutions - the stronger provider support for the weaker.

At this point it might be worth considering what was the dominant model for the delivery of in-service education in the Philippines. Previously, a hierarchical and top-down model was followed (Burke & McCann, 1993). At the national level, programs and materials are designed for teachers. At the regional level, courses are offered regarding the new material, and divisional representatives attend these. Divisional courses are offered and attended by district representatives; district courses are offered for school representatives. At each level the participants are expected to "echo" what they have learned to their constituents or subordinates. Given the size and scale of the Philippine educational system, the effectiveness of this model has been seriously questioned. One wonders how much is lost as the new information trickles down the ranks of the educational system. Moreover, this system completely precludes the possibility of utilizing the expertise of highly effective classroom practitioners who are often not involved in the administrative and planning processes. Although the model involving networks of schools with centers of excellence at the core is still to some extent hierarchical, the network is much flatter organizationally, which leaves a lot of room for more interaction and mutual exchange among teachers and teacher-educators. Most importantly, the new "decentralized" model recognizes the capabilities of local and/or regional education institutions for innovation and development, and the potency of harnessing these local capabilities for local development efforts.

Whether such a system will succeed in improving the general competencies of teachers depends on three important provisos. First, the lead institutions should do their part in sharing their expertise to the weaker institutions. If these institutions were duly supported to do so, one would think that there should be no reason for such institutions to decline from this responsibility. However, there is the unstated long-term concern among these institutions that if they help the weaker institutions grow and develop well enough, they will most likely become strong
competitors in the future. This concern is particularly true among private schools in the rural areas where the education "market" is not as large. Fortunately however, so far, such a concern has not led any leading institution to decline its specially designated responsibilities.

The second proviso relates to whether the lead institutions truly explore and develop new and improved ways of teaching and instruction. Indeed, the teachers in the weaker institutions can improve only as much as the stronger institutions can show them truly innovative ways of knowing and teaching. If the lead institutions merely train the teachers in the same old ways, we cannot expect any substantial improvements in the short and long term.

Finally, the ultimate success of this model of in-service training networks will be based on whether the stronger institutions can develop among the teachers of the weaker institutions enough wherewithal so that the latter will cease being largely dependent on the former for professional development. This means that the training of the teachers should also emphasize their own empowerment as learners and teachers, so that they themselves can plan and take action towards their own professional growth, and so that they themselves will develop, try out, and implement their own innovative ways of improving teaching to facilitate higher levels of student achievement.

4. Private Sector Programs for In-Service Training

I will now consider in-service training programs for teachers initiated by non-government agencies (that is, agencies other than the Department of Education, Culture, and Sports, the Commission on Higher Education, or the Department of Science and Technology).

The Philippine Association for Teacher Education.

One of the most active advocates for improving the welfare and competencies of teachers is the Philippine Association for Teacher Education (PAFTE) which was established in 1967. The PAFTE has chapters in all the regions of the country that maximizes its reach to teachers and teaching education institutions. The PAFTE has been particularly effective in its programs, because it works closely with the government agencies. In particular, the PAFTE has helped the DECS in planning and implementing in-service programs at different levels. At the national level, training workshops and seminars are held for regional representatives. At the regional level, the in-service programs are implemented for principals, master teachers, and department heads. The latter groups will then supervise and provide local in-service support for teachers. The PAFTE has been largely responsible for organizing the local expertise at the regional level, so that these will be utilized in the provision of in-service training at the local level. This organizational work achieved by PAFTE has had profoundly positive effects in improving the
effectiveness of government-initiated in-service programs.

It is worth noting that it was the PAFTE’s institutional capability study (PAFTE, 1991) that called policymakers’ attention to the fact that teacher education institutions had considerable capacity for providing in-service training. The PAFTE study noted that the teacher education institutions were relegated to providing pre-service training, while the government agencies like the DECS were largely responsible for in-service training programs. These important observations provided some of the most important rationales for the new models for the delivery of in-service training for teachers discussed earlier.

The Fund for Assistance to Private Education.

Among the various semi- and non-government agencies focusing on education, perhaps the one with the strongest presence is the Fund for Assistance to Private Education (FAPE), which was established in 1968 through an Executive Order by the President of the Republic. The FAPE was given the mandate to assist private education to enhance educational opportunities in the country. One of the primary goals of the FAPE is to upgrade the academic qualifications and teaching competencies of teachers in the private sector. Among its many programs is the Graduate Education Program (GEP), wherein teachers are selected as FAPE Faculty Fellows and given scholarships to enroll in graduate programs in selected priority areas. The scholarships do not only include financial grants (tuition and other fees, book and transportation allowance, subsidies for the teacher’s schools towards the payment of a substitute teacher). But more important, the FAPE closely monitors the academic progress of faculty fellows and provides other forms of assistance like access to the FAPE’s Educational Data Bank and support for research work to ensure that they complete their training.

The FAPE also has a Thesis/Dissertation Assistance Program (TDAP), which is available for private school teachers, even those who are not FAPE Faculty Fellows, who have completed their academic requirements and in the process of completing the research requirements for their graduate degree. This program provides financial grants for research and production costs, access to the FAPE Educational Data Bank, computer time, and free technical advice from experts on research design and methodology.

Aside from its programs designed to help teachers obtain advanced degrees, the FAPE also conducts short-term faculty enrichment and teacher competency seminars in various disciplines and aspects of the teaching practice.

The University of the Philippines Open University.

The University of the Philippines is a state funded institution, however, its programs and initiatives are conceived and implemented independent of the policies and programs of the
DECS and the CHED as it has its own charter. One of the recent programs initiated by the University of the Philippines is the Open University (UPOU), which was established in 1995. The University System treats the UPOU as one autonomous unit among its many units, but it is different from all other units, because all its programs are delivered in the distance mode. The UPOU offers a range of graduate degree programs; currently only a few are for teacher education (e.g., the Diploma in Science Teaching, Ph.D. in Education). The program is designed so that instead of enrolling in residential courses, students take modular courses. The UPOU develops and publishes modules for courses; these modules are self-study instructional materials, study guides, and textbooks that a student can use at his/her own time and place. The UPOU ensures that within the geographic location of the student, an accredited tutor and library facilities are available to complement the modules given the students. During the summer term, some courses are also offered in residence. The UPOU also plans to set up workstations with Internet capabilities in several Regional Science Training Centers to facilitate communication between the students and course instructors.

The distance mode programs of the UPOU are conceived as an alternative mode of obtaining formal education for those who do not have the time and resources to enroll in residential programs for an extended period. The main target of these programs are working professionals, including teachers whose work loads are as heavy as their financial resources are slight. The programs and enrollees of the UPOU are still small in number, compared to those in the residential programs. However, with more external (government and non-government) agencies providing scholarships and financial support, the UPOU’s offerings and students are increasing in number.

Aside from the UPOU, other universities like the Centro Escolar University and the Polytechnic University of the Philippines have began programs involving similar delivery systems.

**De La Salle University Teacher Education Programs**

Many of the larger higher education institutions design and offer programs for teachers to upgrade their academic qualifications and teaching competencies. As a case in point, I will discuss two programs offered by De La Salle University (DLSU), Manila. The first program is the Summer Institute of Graduate Studies (SIGS) which was started in 1995. The program is designed for teachers in different levels in a wide variety of areas; the teachers attend intensive courses during the summer for four successive summers. (Similar programs are in place in St. Scholastica’s College, Ateneo de Manila University among other institutions.) They are granted full scholarships and are provided other support to finish their degrees in good time, without requiring the teachers to take a leave from their teaching responsibilities. Hence, the program
Ensuring Opportunities for the Professional Development of Teachers

does not disrupt the teachers' regular schoolwork; the teachers' schools do not have to hire substitute teachers, yet the teachers get substantial inputs towards their professional growth.

The SIGS program departs from the conventional residential course work as the courses, which are typically spaced over 14 to 16 weeks, are packed into 10 days. In one summer the students take three or four such courses in sequence. The time course of the classes demands that the teachers use alternative ways of instruction and innovative learning activities and that the students exert extra effort to complete the course. An implicit outcome of the SIGS is that it has forced teachers (actually teacher-educators in various fields) to re-conceive the specific expected outcomes of the course, and to design the learning activities accordingly.

Another program at the DLSU is the College of Education Extension Program (CEDEP). The CEDEP offers graduate programs for teachers in primary, secondary, and tertiary educators in the teachers' own school. In a manner of speaking, the concept of the program is akin to the mountain coming to Mohammed. Recognizing that a problem in the typical delivery of in-service training for teachers is that it disrupts the schoolwork of the teacher, the program locates itself precisely where the teacher's work is and provides the courses during the weekends when the teacher typically does not have to work. The program simply requires the school to ensure that a sizable number of students enroll in a degree program. For the school administrators, the program is attractive because they can "watch over" their own staff while they are studying and more closely monitor their progress. There is also some added motivation on the part of the students to finish, as their cohorts in the program are people they work with.

The Continuing Studies in Education via Television.

In 1996, the Foundation for Upgrading the Standards of Education (FUSE), De La Salle University, the University of the Philippines, and Ateneo de Manila University, together with support from the DECS, the Philippine Government Television Station (PTV4), and the Countrywide Development Fund of specific legislators launched the Continuing Studies in Education via Television (CONSTEL). The CONSTEL consists of 40 episodes of television programming for teachers in science, physics, and chemistry telecast of national television. The television programs are designed to help teachers in these subjects to update their knowledge in the subject areas and to introduce them to new models of instruction in these subjects. In 1997, the second phase of this program was launched, and the programs were designed for teachers of the English language. Aside from the television programs, the project also provides teachers with additional support materials for classroom enrichment and supplemental classroom activities. Videotapes of the programs have also been distributed to regional offices of the DECS to give teachers at the division and district level access to the tapes. The major advantage of the program is that even without the videotapes, the programs are very accessible to teachers.
because of the wide reach of television in the country. A similar program, called the Master of Education in Television, was recently launched by the Philippine Women's University and the People's Television Network.

**Private Sector Sponsored In-Service Training Programs: Issues and Trends.**

A number of private sector initiatives are similar to government initiatives in their use of the more conventional formal in-service training programs (i.e., obtaining a Master's or Doctoral degree through formal education). However, new issues appear when these programs to help teachers obtain advanced degrees are sponsored by the private sector. For example, the FAPE discovered in one of their surveys of their Graduate Education Program that many schools were reluctant to recommend their teachers to the GEP, because they were worried that once the competencies of their teachers are raised, they would decide not to stay in the school and market their skills elsewhere where the pay and working environment is better. The GEP requires schools to give a counterpart in the substitute teacher's salary, hence, participation in the program is also a risky investment on the part of the school. (The private schools are probably more concerned about the bottom line compared to the public schools, simply because their existence really depends on whether they are financially viable.)

A number of relatively innovative programs were initiated and are maintained by non-government agencies (often with some government support). These include using the various types of distance modes and alternative delivery systems. Interestingly, the programs of the UPOU, the DLSU SIGS and CEDEP, and the CONSTEL share an important feature. That important feature is that they are all criticized regarding the quality of the education they provide. The UPOU, for example, has been criticized within the University of the Philippines System, for being too lax in its admission requirements and in approving and implementing new academic programs. Questions have also been raised about whether the self-instruction learning materials can actually provide the same quality of training given in the residential mode. The spirit of the criticism is that the UPOU seems to be compromising the high standards of educational excellence that the University is known for.

Similar criticisms are raised from certain sectors of De La Salle University community about the SIGS and the CEDEP. The concern typically lies in the packed schedule of classes for the different courses. Critics have raised concern about whether this manner of scheduling classes allows the learner to learn and to develop a full appreciation of the material in the classes. There has also been some criticism about more relaxed admission requirements. Again, the concern is whether the programs are cutting too many corners, and compromising the standards upheld by the university in its academic degree programs.

On the other hand, the CONSTEL programs have been criticized for using the media of
television simply as an alternative mode of presentation. Indeed, the television programs are for the most part televised classroom lectures, supplemented by some camera-visual effects. The pedagogy demonstrated in the programs conform to the most standard and most conventional forms of teaching and instruction (lectures and demonstrations). It is as if the traditional classroom science lessons, which are of limited effectiveness in the first place, were simply videotaped and shown on television.

Currently, there are no complete and adequate evaluations of these more innovative programs, as they are all in the earliest stages of implementation. But the effectiveness of these programs will really need to be assessed, particularly in regard to whether there is a substantial effect on the teachers' classroom practice and whether these impact on student achievement.

5. Summary and Conclusions

The pre-service training of teachers and their work environment point to a very clear need for mass in-service training of teachers. The Philippine government has initiated large-scale in-service training programs for teachers. However, these programs are largely dependent on foreign financial assistance. An important development in these government-initiated programs is the development of a new model for the delivery of in-service training programs. This program departs from the conventional hierarchical top-down flow of information. The model draws from local regional capabilities for providing in-service training and "forces" educational institutions at the local level to forge mutually beneficial relationships for the overall development of teacher competencies in the area.

The private sector organizations have worked closely with government agencies in providing the venues for in-service training. The private sector has also experimented with more innovative forms delivering in-service training for teachers. However, these experiments are getting their share of criticism, and need to prove their effectiveness with comprehensive evaluations of the program.

The current political administration, particularly the education agencies, realizes that a very important step towards improving the Philippine educational system is to engage in a sustained, large-scale in-service retraining of teachers. However, the good intentions of the Philippine government need to be tempered by financial constraints. Hence, government initiatives need to be complemented by similar efforts by private institutions. It seems that government and the private sector are slowly but surely moving towards a fuller form of collaboration.

What seems to be lacking in all these initiatives is a honest-to-goodness evaluation of the programs. One can wonder whether a teacher who has recently completed a Master's degree
will be a better teacher, and whether his/her students will attain higher levels of achievement. On this matter, I wish to put forward a personal observation. I have been a consultant and resource person for in-service training programs in many schools in the Philippines for a few years now. I have found that teachers are generally very receptive to new and innovative ways of facilitating learning in students, even if these new strategies depart substantially from their conventionally defined dominant role in the classroom. Indeed, they are always excited about learning new strategies to help students attain higher levels of achievement, even if these strategies are difficult and would require them to re-learn entirely new approaches. Often, the suggestions coming from the resource person, are practices that the teachers have thought about themselves. But when I talk to teachers about whether they think they will be able to implement such strategies and use such knowledge in the classroom, the reply is most often not positive, and very often very hesitant. The problem lies in the fact that teachers, no matter how skilled and knowledgeable find it hard to feel empowered do to what they think is right in the classroom. They are mandated to follow a very detailed and highly packed curriculum, even if they do not subscribe to the assumptions of the curriculum, which are developed by national curriculum developers. The dense curriculum does not give them time to try out more innovative strategies (which requires giving students more time to engage the material, too), so the tendency is to fall back to traditional methods. There are often no or little resources available within the schools to help them keep abreast with the developments in their profession. They are closely monitored and evaluated for their performance using assessment instruments that favor traditional modes of instruction. I can go on with this litany of woes, but the point I wish to make is that the organization and culture of educational institutions in the Philippines is such that the benefits of current in-service training programs are being blunted, because the bottom line is that teachers are not truly empowered to innovate in the classrooms. More than this, the disempowerment of teachers is even reinforced when they realize that after they obtain continuing professional training, they still cannot try out their newfound knowledge and skills for one reason or another. They often realize that if they try our new techniques, they might be putting themselves and their students at a disadvantage, given that the existing structures and incentives within reward the conventional modes of thinking and doing.

In one of our university's extension programs, a group of students already decided not to continue pursuing their degree. I was shattered when I heard that their main reason was that in their experience, obtaining the degree would not really make any difference. Later on they decided to finish the degrees anyway, as it will help them get promoted. But these students were clearly just trying to get through the requirements with as minimal effort as possible. For them the training embedded in the degree program will not make them better teachers, nor will it benefit their students; however, the degree is a credential that will help them get promoted.
We should be worried that programs for delivering in-service training for teachers do nothing beyond giving teachers better credentials. Instead, we should ensure that whatever innovative in-service programs we conceive of would have maximal impacts on the development of the teachers and on students’ learning. In this regard, a very basic problem becomes apparent. The Philippine government has not yet articulated a clear and singular vision for in-service teacher training and continuous development. Hence, efforts at developing teachers are sporadic, isolated, and uncoordinated. There should be an effort at systematically planning, implementing, and evaluating in-service training programs. These programs should work within a framework that addresses the problems in the larger educational context within which teachers are expected to operate, to grow, to achieve, and to succeed. The irony is that in developing countries like the Philippines need to simultaneously address problems about the organization of the educational system, financing, curricula and learning materials, evaluation, and teacher education, yet their resources allow them to approach these concerns in piecemeal efforts. A singular unified vision and framework is all the more urgent in such a context.

But I wish to end with a more optimistic note. I think that among important policymakers in the Philippines, there is a changing perspective regarding why there needs to be mass in-service re-training of teachers. The view seems to be moving away from one that is premised on blaming the teacher for all the failings of the education system. I think the emerging perspective is one that recognizes the importance of teachers, their professional growth, and their welfare as integral components of a larger system with many different components, all of which have to change and grow if we wish our students to achieve the heights of learning. For our teachers, and their students, that is an acknowledgment that is long overdue.

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Table 1: Higher Education Enrollment in the Various Major Areas (1995-1996)

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Enrollment</th>
<th>Proportion %</th>
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<tbody>
<tr>
<td>Arts and Sciences</td>
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<td>11.20</td>
</tr>
<tr>
<td>Teacher Training and Education</td>
<td>276,046</td>
<td>13.68</td>
</tr>
<tr>
<td>Engineering and Technology</td>
<td>275,695</td>
<td>13.67</td>
</tr>
<tr>
<td>Medical and Health Related Programs</td>
<td>238,988</td>
<td>11.84</td>
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<tr>
<td>Commerce and Business Management</td>
<td>603,575</td>
<td>29.91</td>
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<tr>
<td>Agriculture, Forestry, Fisheries, and Vet. Med.</td>
<td>72,656</td>
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<td>Law</td>
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<td>Religion/Theology</td>
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<td>Information Technology</td>
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<td>Criminology</td>
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<td>TOTAL</td>
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Table 2: Passing Rates in Professional Licensure Exam for Teachers

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<thead>
<tr>
<th>Year</th>
<th>Total No. of Examinees</th>
<th>Passing Examinees</th>
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<td>1990</td>
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<td>14,847</td>
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<tr>
<td>1991</td>
<td>130,442</td>
<td>17,972</td>
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<td>1992</td>
<td>142,133</td>
<td>35,951</td>
<td>25.29</td>
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<tr>
<td>1993</td>
<td>130,889</td>
<td>44,976</td>
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<td>1994</td>
<td>165,906</td>
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Ensuring Opportunities for the Professional Development of Teachers in Thailand

Mayuree Charupan

Senior Expert in Educational Policy and Planning
Teacher Reform Office
Office of the National Education Commission

Summary

Man, money, machine and management are the 4M’s necessary to achieve any success. To upgrade the quality of education, it is essential to upgrade teachers and teacher education because teachers play key roles in educating the youth in our society. With adequate funding, functional facilities and expedient management, good teachers should be able to greatly improve the quality of education. On the contrary, quality education will be impossible if one simply pours in a large sum of money or just installs more computers or writes new curricula while teachers are under-qualified and educational administrators concern themselves less with education quality, but more with their own advances.

Of all 114 teacher training institutions in Thailand, the annual product of graduates is between 20,000 - 25,000. The overall number of teachers, at present is about 600,000, 90% of these are the primary school teachers.

The problems of teacher training and the development of teaching profession have been lingering in the Thai society for quite a long time. The problems are not much different from those of China: one of the main issues is the inability of the selection system to attract good and capable students into the system. This is because teaching is no more a profession of honor and faith. These problems have an impact on the quality of teachers and a significant effect on the teacher profession development: a certain number of teachers has been laid off, others have come back for retraining courses.

TERO is the office directly responsible for the reform of teacher training and teaching profession development, strives to ensure a better quality of education which has a direct impact on school children. For this purpose, TERO has initiated a number of innovative projects in a form of what is called Career Ladder for Teachers, and consists of 5 steps:

**Step 1 Alternative Teacher Training System:**
To enhance quality development of teacher training and encourage the development of a wider range of alternatives in teacher training in order to produce a new generation of teachers.

**Step 2 New Generation Teacher:**
Any in-service teacher who has 1-3 years of work experience and possesses certain qualities in consistency with those specified in New Generation Teacher Standards will be supported to develop his own professional skills under this project.

**Step 3 Academic Coupons:**
To encourage teachers to receive regular in-service training of their own choice. This is done by providing teachers with academic coupons, which allow them to choose training programs suitable to their needs.

**Step 4 National Teacher Awards:**
To help raise the teaching profession to be most honorable and most attractive in the society, restore the faith in the teacher profession by praising teachers with high
professional achievement. This is done by evaluating the performance of the teachers and ask them to undertake special innovative projects for the development of teacher training and expansion of development network.

**Step 5 The Royal Academy of Teachers:**
This is an academic community, taking care of the development of values, standards, the body of knowledge, integrity and faith in teaching profession. Teachers in the Royal Academy include those teachers awarded as the National Teachers.

1. **Introduction**

In the present world fraught with unforeseen events and crises, it has become imperative that the vision of educational development be expanded beyond the previous quantitative targets. It is to include objectives of qualitative enhancement and the attainment of each individual's full potential. Indeed, the competitive edge among different countries to provide the people with quality education largely rests on teaching-learning achievements, both in schools and outside of the schooling system. To achieve this improved educational quality, several demands will have to be met, and the most important requisite of all is an unfailing supply of teachers, who account for the learning achievement of the students.

As it is often said, one of the most important factors in educational development is the teacher. Involved with many aspects of the children's development, teachers play a significant role in building up the future generation. The quality and efficiency of the development of teachers, therefore, is an urgent task for educational development.

The National Scheme of Education 1992, serving as a general framework for educational management in the country, outlined a clear policy in reforming teacher-training and developing in-service teachers. It aims at restoring and increasing the people's faith in the teaching profession, developing teachers' conscience, raising the standards of both academic and professional abilities of teachers, and improving the status of the teaching profession. This can be carried out by changing the training procedures, continuously developing in-service teachers and educational personnel, as well as improving welfare for educational personnel at all levels, and thereby raising moral and security in the profession.

2. **Present Situation and Problems**

**Present Situation**

Over the past 5 years, the number of staff in education sector has been quite stable at the average of 800,000, or 2.5% of the overall national workforce. It is estimated that the number will be the same until the year 2001. Out of the total number of 800,000, 600,000 are teachers, of which 350,000 are teaching at primary level and 120,000 are at secondary level. The number of lecturers in the universities is 25,000.
Among the 144 teacher training institutions in the country, 97 institutions fall under the jurisdiction of the Ministry of Education, the rest are under the jurisdiction of the Ministry of University Affairs (Faculty of Education). The number of teachers graduated from these teacher-training institutions during 1992 - 1996 was between 20,000 - 25,000 annually.

The estimated government budget allocated on education is at 200,000 million baht (or 5 billion $US) per annum, which accounts to 25 % of the total government budget. Half of this amount which is about 100,000 million baht per year (2,5 billion $US) is allocated for teacher salaries.

Problems

Main problems concerning the teaching profession are as follows:

- Students do not regard teaching as an attractive, desirable profession. The present recruitment system, which is the channel to receive students into teacher training institutions, is not able to bring in capable students to become future committed teachers.
- The present system can not retain high-quality teachers, because most students who entered into the institutions do not want to be in the teaching-profession.
- Teacher salaries are low when compared with some other professions, such as medical science or engineering. Teachers have to find extra money from doing some side-jobs. This has resulted in paying inadequate attention to their main career as a teacher.
- The teaching profession in Thailand, is not longer regarded as an honorable and respectful profession as it was in the past.

3. Current Crisis of Thai Teachers

In addition to the problems mentioned above, the economic crisis of the country, which started in 1997, has put even more pressure on the government. As a consequence, the government has outlined a number of measures and conditions to help lessen the undesirable effects on the teaching profession. Some of the measures and conditions are as follows:

- The intention of the government to bring about an improvement in the teaching profession can be clearly seen in the New Constitution of the Kingdom of Thailand.
- The government policy to limit the size of workforce in public sector, including teachers, by diminishing the retired positions by 80 %.
- The conditions outlined in ADB loan projects which have a direct impact on teachers as well as other educational personnel are as follows:
  - increase of teacher-pupil ratio (at primary level) from 1 : 18 to 1 : 25 by the year 2002.
  - training of primary school teachers before allowing them to teach in secondary
Ensuring Opportunities for the Professional Development of Teachers

Negative Impacts resulting from the Crisis

On the present situation of teachers

The elimination of the retired positions in government services by 80%, as well as ADB conditions concerning the change in the teacher-pupil ratio from 1:18 to 1:25 has caused the number of primary teacher to decrease by 70,000.

Crisis 1: the decrease in number of primary teacher by 70,000

On the production of teachers

From the year 1997-2001, the teacher training institutions in Thailand are going to produce 20,000-25,000 graduates at first degree level and 20,000 at higher degree level. After putting all graduates in their positions, there will be 120,000 graduates who will not be able to get work and left unemployed.

Crisis 2: 95% of new graduates from teacher training institutions will be unemployed

On the teachers in shortage areas

Outstanding students who have been recruited to train under special project for teachers in shortage areas (the number is about 3,200 students) will be unemployed, due to the cut off of the available positions.

Crisis 3: 3,200 graduates from special project for teachers in shortage areas will be unemployed

Teacher Quality

In addition to the problems concerning the number of teachers, the teaching profession has long been facing problems in terms of the quality of work. Most teachers need more training on a continuous basis, especially in the subjects they are directly responsible for.

Crisis 4: Teachers have problems in terms of quality of work.

Measures to Find a Way Out of the Crisis

In terms of economic loss, this crisis has cost up to US$ 400 - 600 million, the government, therefore, has outlined certain measures regarding this matter.
• Set up a committee to coordinate the production and development of teachers. The committee members consist of the representatives from the agencies concerned. The mission of the committee is to formulate policy guidelines for promoting the production and development of teachers.
• Terminate all plans for the establishment of new teacher training institutions.
• Slow down the number of students accepted by teacher training institutes at first degree level, in the field of primary education.

The Teacher Education Reform Office (TERO), under the office of the National Education Commission (NEC) is the unit responsible for central coordination of these efforts.

4. Innovations in Teacher Education and Teacher Reform: Means of Professional Development of Teachers in Thailand

TERO's Vision, Objectives and Goals

The poor quality of education and the decline in the quality of Thai teachers have been long noted, but the right solutions have not been forthcoming. The Teacher Education Reform Office (TERO), Office of the National Education Commission recognizes the urgency to overhaul the whole teacher education system and upgrading the teaching profession. This will be an enormous undertaking since the teacher system in Thailand is huge and complicated and the problems are deep-rooted. The simple vision to improve the education quality by upgrading teachers and educational personnel will be inadequate. The objectives must be clear and sharply focused. TERO has set as its objectives in the first 5 years to improve the teaching quality in high schools on key subjects, namely mathematics, science (physics, chemistry, biology and computer science), Thai and English. Our target goals therefore include 120,000 teachers, 2,500 schools and 114 teacher-training institutes.

TERO’s Priorities

In addition to vision and goals, there must also be priorities carefully chosen to meet the set goals. To achieve improvement of the quality of teachers, TERO has set as its top priority to turn the unpopular teaching profession into one of the most desirable professions in the country. This can only be realized by rewarding and upgrading the current working teachers and getting the best students to become teachers. Therefore the next priorities are rewarding the best teachers, providing in-service training to most teachers and developing new teacher education programs to produce a new generation of teachers.
TERO's Programs

The most important aspect in the reforms of teachers and teacher education are the innovations involved in the design of the reform programs. TERO has instituted 6 key innovations and translated each into a program. The 6 reform programs are as follows.

National Teacher Awards

To keep the outstanding teachers in teaching, they must be honored for their achievements and encouraged to help raising the teaching quality of other teachers. About 1% (1,200 teachers) of the current teachers should be selected and honored as National Teachers. Each will be asked to undertake teaching innovation projects. The duration of each project will be no more than 3 years. A National Teacher Award will consist of a supplement salary of $250/month, and a project expense of $2,500/year. There will be 3 levels of National Teacher Awards. Each will last no more than 3 years. The values of the award at the first level are as above while the values will be 2 and 3 times for levels 2 and 3 respectively. The achievements made by each National Teacher will be evaluated annually. Based on this evaluation, extension or termination of an award will be made. Therefore, a successful National Teacher can pursue a career of quality teaching for up to 9 years.

INNOVATION #1: The quality network of teachers will be created. By networking, outstanding teachers (National Teachers) are helping TERO in upgrading the quality of teachers.

New feature: National Teacher Awards are not just prizes like other outstanding awards or prizes. This award is both a prize for past accomplishments and a grant to carry out a new project on improving quality teaching and quality education.

Academic Coupons

Most teachers will be encouraged to take part in in-service training regularly by means of a special allowance which has a value of 2% the teacher’s annual salary but no more than $250. A coupon is non-transferable and non-exchangeable if it is not used within two years. Training can be provided by any competent units in government, private sector or non-government organizations (NGO), locally or abroad. Teachers will have bear any cost above the value of the coupons.

INNOVATION #2: Teachers are empowered by academic coupons to receive in-service
training of own choice.

New feature: Finance for training is given to teachers (users) rather than training institutes. So teachers can choose training programs suitable to their needs instead of being sent by the schools to some training programs that are unsuitable for their teaching responsibilities. By funding the teachers, more training providers are encouraged to offer training courses. In-service training of teachers should be speeded up and not limited to only courses offered by governmental institutes. Market forces will encourage quality and cost-effective courses.

New Generation Teacher Education

Teacher education in Thailand has always been the responsibility of government institutes. It is envisioned that new generation teachers suitable for the 21st century can be produced by new teacher education programs that are of excellent quality. This can only be realized if this program provides incentives to encourage the development of quality teacher education programs by government institutes, as well as by private institutes and NGOs. Partnerships among institutes of quality will be encouraged to form outstanding programs. They can be at either Bachelor or Master's degree levels, for example, combined degrees (B.Sc.-B.Ed.) in 4 years or M.Ed. in 1 year. Furthermore, the new teachers from these outstanding programs will receive a supplement salary of $125/month to encourage them to do innovative teaching and research. They will be given teaching positions without taking the required placement examination. Annually, 450 new generation teachers are expected from 9 new teacher education programs. While it will take a few years to produce new generation teachers from the new programs, a shortcut can be implemented as follows. Annually, 10 new teacher graduates of outstanding quality will be selected and given a salary supplement and the additional responsibility of innovative teaching and research.

INNOVATION #3: Competition for quality teacher education will stimulate diverse providers and superior teacher education. It must also be accompanied by a guarantee of a rewarding career start-up for new generation teachers from the good programs.

New feature: The new teacher education programs will be far better than the existing programs. Quality of the graduates will be assured and hence the employment and careers of the new generation teachers can be
guaranteed.

School Rating

Teachers have to work in the school environment and school administration has a profound influence, positively or negatively, on the quality of education. To encourage school administrators to promote quality teaching, rating of the educational quality by subjects, mathematics, physics, chemistry, biology, Thai and English will be carried out annually. The results will be publicized nation-wide.

**INNOVATION #4:** Competition will encourage management to improve educational quality. On the basis of the ratings, the public will have a fair choice, school administrators will be encouraged to improve the educational quality, and the budget bureau and school supporters can provide more cost-effective funding to the schools.

**New feature:** School rating will be result-oriented, whereas official school inspection tends to emphasize processes and regulations.

School Visits by Leading Thai Professionals

To link education in schools with the real world, leading Thai professionals will be invited to visit schools. Each visit will last 1-2 days. The visitor will hold meetings with students, teachers and administrators. With the students, the meeting will concentrate on the future careers and the education needed for such careers. The Meeting with the teachers will focus on the relevance of education in the real world, while administrators will share experiences in school management with the visitors. Both the visitors and the school administrators will submit reports on the visits. An annual report of the compiled visit reports will be published.

**INNOVATION #5:** Community participation to ensure the quality of the school and quality education will be encouraged.

**New feature:** The visits by leaders from various professions in the country will direct the accountability of schools to the public. In contrast, official inspection tends to focus on compliance to regulations.
The various programs for teacher reform undertaken by TERO can be demonstrated as the "Five-step Career Ladder for Teaching Profession Development"

Chart 1: Five-step Career Ladder for Teaching Profession Development

Step 1  Alternative Teacher Training System:
To enhance quality development teacher training and encourage alternative methods in teacher training in order to produce a new generation of teachers.

Step 2  New Generation Teacher:
Any in-service teacher who has 1-3 years of work experience and possesses certain qualities in conformity with those specified in New Generation Teacher Standard will be supported to develop his/her own profession under this project.

Step 3  Academic Coupons:
To encourage teachers to receive regular in-service training of their own choice. This is done by providing teachers with academic coupons, which allow them to choose training programs suitable to their needs.

Step 4  National Teacher Awards:
To help raise the teaching profession to be most honorable and most attractive in the society, restore and increase the faith in the teacher profession by praising teachers with a high professional achievement. This is done by evaluating the performance of the teachers and asks them to undertake special innovative projects for the development of teacher training and expansion of development network.
Step 5  The Royal Academy of Teachers:
This is an academic community, taking care of the development of values, standards, the body of knowledge, integrity and faith in teaching profession. Thus, this community will be a hub of good, capable teachers who really devote themselves to the teaching profession, and are ready to help develop other teachers. Teachers in the Royal Academy include those teachers who have been awarded as the National Teachers.

Furthermore, TERO has also initiated another two projects for the development of the teaching profession. The first project is the "School Rating Project" to encourage educational personnel as well as the general public to realize the importance of the capabilities and quality of schools in providing education, in that it leads to the overall quality development of education of the country. Another project is the "School Visits by Leading Thai Professionals": this project concerns with the initiation of leading Thai Professionals in various fields to pay visits to the schools. By this means, the involvement of the community is encouraged.

As already mentioned, the ladder for teaching profession consists of projects leading to the development of teaching profession introducing new and alternative methods to enhance the concrete development of teachers, with the hope to help solve the negative effects of the crisis on teaching profession.

Reform of TERO
The 5 innovative reforms outlined above, require an effective administration which cannot be provided by a government unit working under complicated regulations. Thus, to be effective in implementing the reforms, TERO must be free from the governmental regulations but yet supported by government budget. In addition, a teacher reform fund will be established to solicit support from the public. The fund will balance the government control of TERO. So, TERO will become an independent agency: Teacher Education Reform Agency (TERA).

The New Career Ladder for Teachers in the 21st Century
The 6 innovative reform programs together will form a new career path that will be quality based. In contrast, the current government career path for Thai teachers is seniority based and does not value merit and quality. However, if the new quality based career path resulted from the reforms is combined with the security of the government career, teaching will become a very attractive profession because the teachers will have both job security and the appropriate financial incentives. They should be strongly motivated to provide quality education.
Consequently, current teachers should remain in the teaching profession and the best and the brightest students will be attracted to become new generation teachers. So, teaching will be the career of choice in the 21st century and ultimately, the much-needed improvement of the quality of Thai education will be realized. Thais will be better educated and the country will be better prepared to meet future challenges.

**The Cost**

Any reform will fail if its cost is unrealistic and its sponsors cannot be found. To facilitate fund-raising, the total cost for the proposed reforms is estimated as follows.

<table>
<thead>
<tr>
<th>Table 1: Reforms for 120,000 teachers in 5 years in US$ mill.</th>
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<tbody>
<tr>
<td>National Teacher Awards: 20.9</td>
</tr>
<tr>
<td>Academic coupons: 26.8</td>
</tr>
<tr>
<td>New Generation Teachers: 1.8</td>
</tr>
<tr>
<td>School rating: 0.4</td>
</tr>
<tr>
<td>School visits: 0.3</td>
</tr>
<tr>
<td>Operation of TERA (10%): 5.0</td>
</tr>
<tr>
<td>GRAND TOTAL: 55.3</td>
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The estimated cost for the reforms is $92.5 per teacher per year. In comparison to insurance premium for a car, a house, health or life, this amount is not outrageous. Therefore, the reform cost can be considered as an insurance premium for the quality of teacher or the educational health of the country.

5. **Conclusion**

The quality of Thai education needs to be improved. The best way to achieve this is through teacher and teacher education reforms. To do so, 6 strategic programs have been formulated, based on the vision that good teaching profession is the key to transform the negative image of teachers and to attract new generation teachers. The reforms will take 5 years and will cost $92.5 per teacher per year.

In the borderless world that has been brought about by the information technology revolution and enhanced by the global open-market policies, countries with better educated population will have the advantages and will out-perform those with poorly educated citizens. Knowledge will be expanding faster and becoming ever more diverse. No education program can ever provide complete knowledge to the students. Hence, students will have to continue learning after finishing their formal education. To stay competitive in the future, a person has to keep on educating oneself throughout life. So, "Education for Life" should be more emphasized than "Education for All". Teachers of the 21st century will have to recognize this new paradigm.
Teachers can no longer just be the only source of knowledge. Knowledge can be found outside of classrooms, in the fields, in the mass media, at home, in temples and work places. Teaching "what to learn" from the professional teachers must be replaced by teaching "how to learn". The role of teachers in schools will be one of facilitators or managers of learning. Students will replace teachers as the center of learning. In addition, good teachers in the 21st century must be team players as knowledge will be more integrated. They must also be technologically competent in order to use new educational tools efficiently and effectively. They must be able to communicate clearly in their own language (native tongue) and in at least one other language.
Key Approaches to the Development of Teachers Teams in Vietnam

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Summary

This report gives an overview of socio-economical background of education in Vietnam. The training and educational background of Vietnam is presented in the form of a scheme to give a clear picture of the educational system in Vietnam. The scale of education in Vietnam is reported in a chart in order to understand the development in the recent years. The report mentions a number of problems the Vietnamese education system faces, such as the shortage of teachers and the training level of teachers. The report gives key approaches taken to solve these problems: 1. Standardization of the professional teacher at public, semi-public, private schools and implementation of various programs for teachers at all levels; 2. Development and improvement the pedagogic system; 3. The preferential treatment policy of teachers, especially those in mountainous and remote areas. The report also explains some of the achievements the education system of Vietnam has made in the process of renovation and points out some further problems.

1. Overview

Socio-Economic Background

Despite of not being a large country (Area of 331,700 km²), Vietnam is rather rich in natural resources. Being heavily damaged and by the prolonged war from 1945-1975, the country suffers from having a backward economy which is further hampered by the rapid growth of Vietnamese population as well, especially after the 1975 unification of the country.

From 1985, Vietnam shifted to a period of comprehensive renovation called "doi moi". The main feature of this period is the transfer from the centrally planned economy with large amounts of subsidies and bureaucracy to the multi-sectoral commodity economy, driven by the market mechanism under state control. With regard to international relations, Vietnam has implemented an open and cooperative policy with other countries on economic, cultural, scientific and educational aspects. This policy has enabled our country to escape from the socio-economic crisis in the eighties and created a premise for the transfer to the new period and strengthening of the industrialization and modernization process of the country.

The consistent view of Vietnam's government is to develop the economy parallel with social progress. Since 1986, so far, Vietnam has carried out various measures and policies to stabilize and improve people's living standards, building up a rich and healthy cultural life, developing education and health care and to limit socially negative behavior. Thus, the HDI of our country is
Ensuring Opportunities for the Professional Development of Teachers

ranked 121 among 174 countries in the world (As per UNDP’s 1996 Report).

Having achieved initial progress, nevertheless Vietnam is still a poor and developing country. Per capita income is low (US$325 per capita in 1995), labor productivity and the efficiency of trading and production are not high. Furthermore, technical and material facilities are lagging behind, while the population growth rate is high with an approximate annual increase of 1.3 million people on average. On top of this, an average of 500,000 people come to school additionally each year. The unemployment rate remains at a high level, in particular in urban areas (around 10%). Annually, 1.5 million people of working age need to be accommodated for in finding jobs. These factors have directly affected the training and education on two sides: Constraints on the input, that is the increasing demand on schooling of people at every age levels and every grades, and constraints on the output, that is the job-finding demands made by graduates from different forms of training.

2. Training-Education Background

Over the past 10 years, the national education system of Vietnam has undergone important changes, such as the incorporation of 4 offices in charge of training and education belonging to the government into 2 ministries in 1987, and subsequently, the integration into one ministry responsible for the governmental management of all levels in the national education system.

The national education system has been restructured as follows:
- Integration of nursery and kindergarten into preschool education;
- Formation of a complete elementary education system and a new secondary education system;
- Establishment of a recurrent education system;
- Separation of higher education into two stages and
- Establishment of post-graduate education consisting of master and doctorate training.

The restructuring of the education system has facilitated the learners to be more suitable to the changes due to the socio-economic development process and gradually brought the education of Vietnam on par with the advanced education system in the region and in the world.

In the years since 1986, the development of training and capacity of education has gone through two distinct periods:

Between 1986 and 1991 training and capacity of education of almost all levels declined due to the impact on various aspects by the socio-economic crisis. At the beginning of the renovation process, resources invested in training and education under the subsidy mechanism were cut. This is according to an evaluation of training and education and human resources conducted by UNDP, UNESCO and MOET of Vietnam. (VIE 89/022).
In the first period (1990-1992) of the renovation process, the training and education of Vietnam faced a difficult situation. Both a quantitative reduction and qualitative decline of general education and a lack of close relations between training and job-accommodation in vocational education. It was exacerbated by teachers’ poor qualifications and lack of working motivation, shortage of finance and technical and material facilities.

From 1992, together with the general socio-economic improvement, the number of students in classes and levels increased and training and the capacity of education quickly developed.

The education system of Vietnam has been continuously implementing educational reform, that is the adjustment of objectives, content, programs, as well as the renovation of concepts and teaching methodology, in order to adapt the educational system to the changing situation and meet new requirements.

The renovation process is necessary to overcome these weaknesses in order to make the training and education system capable to serve the socio-economic development of the country in the new period.

3. Situation of and Approaches for Teacher Training

During the 10-year (1986-1996) renovation-process, teacher training was affected in various aspects by the socio-economic circumstances of the transfer period to market-oriented economy such as changes in living standards and in social values. Teacher training and employment were also directly affected by changes in the educational system, such as the changes in system structure (primary education separation, establishment of new secondary education, perfection of higher education, etc.). They were also influenced by changes in the objectives and content of all educational grades such as: up-to-date education, integrated education, harmonious education (teaching 9 subjects fully at primary education) and the renovation of secondary education. All these attempts strongly affected the teacher training policy. It is therefore necessary that new approaches for extending teacher training and professional development are implemented as well.

The process of renovation requires effective educational programs for all professional teachers in public and private schools, who need to possess special skills and abilities necessary to succeed in the teaching profession.

In order to ensure equal opportunity for the professional development of teachers, the MOET of Vietnam have issued the following approaches:
Chart 1: The Education System of Vietnam

1. PRE-SCHOOL EDUCATION
   - Kindergarten (3 years)
   - Nursery (3-4 years)

2. GENERAL EDUCATION
   - Primary Education (5 years)
   - Lower Secondary Education (4 years)

3. VOCATIONAL AND TECHNICAL EDUCATION
   - Vocational Training (<1 year)
   - Technical Secondary Education (3-4 years)
   - Vocational Secondary Education (3-4 years)

4. HIGHER EDUCATION
   - Graduate
     - Doctorate
     - Master Education (2 years)
   - Undergraduate
     - Higher Education (4-6 years)
     - Junior Higher Education (3 years)
Standardization of the qualifications of professional teachers at public, semi-public and private schools:

This approach meets the requirement for improving qualifications of teachers and to facilitate the organization, and management of in-service education in accordance with the national priority program of teacher training. To implement the above-mentioned approach, the MOET of Vietnam has standardized the levels of competency and mastery of teachers in the education system. For example, the norm of lower secondary teacher is postgraduate education at junior college (graduated from upper secondary school and received a three years training 12 +3)

The Ministry has conducted various training programs for teachers in the field at every level:

- Training programmes for teachers without formal training
- Standard training programmes for under-norm teacher
- Upgrading of training programmes by a cycle of 3-5 year (for instance the 1992-1996 cycle and the 1997-2000 cycle for teachers at all levels of education).

In-service training for teachers of every level has been implemented since the early nineties. The network of education for in-service teacher-training involves national pedagogic colleges, regional pedagogic colleges, provincial pedagogic schools and district continuous education centers (nearly 300 centers from 500 districts all over the country). Pedagogic colleges have a leading role in providing a good base for educational upgrading.

The content and method of training have been more and more reformed and oriented towards the differentiation of content and flexibility and variety of organization, suitable to the current conditions of the local teacher. On the basis of the instructions issued by the MOET, some provinces have carried out re-organization and management of teacher training, such as teaching, evaluation, examination etc. suitable to local conditions and circumstances. When compared with the past, it is recognized that there is a larger participation of the community and...
higher social interest, especially by the local authorities in education in general, and the teacher in-service training in particular.

The upgrading of training programs in the period 1992-1996 for primary and lower secondary teachers, and of the period 1993-1996 for upper secondary teachers has been implemented and achieved considerable successes. They contribute to the strengthening of the education and higher qualification of teachers at general schools, having called upon 75% - 90% of the teachers to take part in the periodical training. Additionally, educational service and pedagogic colleges have held new teaching methodology classes for teachers.

Teachers at pedagogic colleges have not only attempted to do training but also planned to upgrade their own qualifications, teachers at the pedagogic schools have to attend the periodical training programmes 1993-1997 held by the Ministry.

In general, the training of teachers in the recent years (1992-1998) has made progress more positively and effectively. This has partly contributed to meeting the new demands raised by the general education. Efforts in programming, planning, training methods and minimum requirements for teacher training are considered as valuable experiences, which should be further developed.

Development and improvement of the pedagogic system

In most pedagogic colleges, the present facilities are under the norm. Teaching methodology is largely outdated, as the students are not actively involved, because of the failure to use any interactive teaching methodologies. Most teaching is based on the didactic/lecture based method. The teacher training programmes, in general, both pre- and in-service, in all levels, do not emphasize the content and skills needed by the teacher in the delivery of education in the classroom. Again, the staff largely responsible for this training, at present, do not have required skills to meet the emerging, extensive training needs. Many very capable, students do not prefer pedagogic colleges. Training objectives, subjects and methods at pedagogic colleges are slowly renovated. The shortage of teachers - an almost "perennial" problem has not been overcome completely yet.

After more than 10-year of renovation, the teacher training system for every level has been developed not only in terms of network structure but also in training capacity, especially in the local pedagogic college system. So far there have been 9 pedagogic universities, 2 pedagogic faculties, 37 pedagogic colleges and 56 pedagogic schools in the country. The pedagogic system has been developing following the open structure orientation to overcome the existing, to a certain extent closed-in, situation of the system. It calls upon universities and training colleges outside the pedagogic system to join the training program for particular types of teachers, such as technical, foreign language, computer, music and art, physical education teachers. Many local
pedagogic colleges have invested in upgrading and re-equipment their facilities so that the
teacher training will be strengthened. Under these difficult circumstances, the pedagogic college
system has tried very much to overcome and upgrade its training quality.

The effect of the general educational renovation on the education and training system is that
it has given an impulse to the development of pedagogical colleges in obtaining new approaches
and adjustment of existing programs according to training objectives and educational
renovation.

Pedagogic colleges has adjusted and perfected training objectives of education levels
focusing on renovation and modernization. During the past years, pedagogic colleges have
carried out training for primary teachers of various levels, limited the under-norm training courses,
and experimented with new training objectives and models. The pedagogic junior colleges have
focused on teacher training for extensive needs, for example, to be able to teach more than one
subject at lower secondary education.

Certain pedagogic colleges such as the Hanoi Pedagogic College, the Vinh Pedagogic
College and Ho Chi Minh Pedagogic College offer, besides the program of formal professional
training of educational teacher for secondary education, a postgraduate training program for
educational teachers in other areas such as mathematics, biology, and literature. Postgraduate
education has contributed to the training of 100 educational teachers each year, preparing for the
Master’s degrees.

Pedagogic schools affiliated to universities, high schools and technical schools have been
rearranged to make advances in professional activity in order to keep pace with the socio-
economic changes. Training of professional teachers to cater for the needs of renovation of
primary education and for remote areas and mountainous region have been extended as well.
(Enrollment totaling 58,040 students in all pedagogic colleges for year college 1995-1996, an
increase of 12,000 students (20%) compared to college-year 1990-1991)

Every year pedagogic colleges and high schools provide over 8,400 professional teachers
for secondary education, and pedagogic schools provide over 13,000 professional teachers for
primary schools and pre-schools. The number of postgraduate professional teachers is sufficient
for the promotion of compulsory primary education, for remote areas specially, mountainous
region and island, minority population.

The network of pedagogic schools has been systematically rearranged. All over the country
there are 81 pedagogic schools of which 24 schools are administered directly by MOET and 57
schools by the local governments. Basically every province or city has 1 pedagogic school. Six
out of ten pedagogic colleges and 32 pedagogic high schools also have a department of foreign
language for training professional teachers at secondary school and a department of physical
education for training professional teachers in general schools.
The strengthening of skills and abilities of the teacher has become the main objective of pedagogic schools. There are 8,523 professional teacher-educators in all pedagogic schools in Vietnam. Many of these educators have postgraduate level degrees, including: Professor 10.9%, Associate professor 13%, Ph.D. 8.3%, M.D. 44% (data from college-year 1995-1996).

Many provinces have strengthened collaborative training for teachers, up to now, there have been 8 collaborative training centers based in pedagogic colleges.

In recent years, much efforts have been concentrated on developing teaching materials and textbooks for pedagogic schools. Pedagogic colleges, high schools, technical schools have edited and printed about 1000 different teaching materials. MOET has established an editorial board to develop teaching materials and documents for primary teacher training. Every year, many thousand of textbooks are edited and distributed to pedagogic students and teacher-educators all over the country.

Pedagogic schools have taken measures to improve teaching abilities and skills in teacher training, and to meet the new demands made by general education and preschool education. On top of the renovation of the educational objectives and the content of the training programs, many pedagogic schools have implemented new teaching methodologies, such as interactive teaching methodologies, to improve professional education and teaching at vocational schools.

MOET has published the objectives, programmes, contents of training for professional teachers of all levels, with the approaches of continuous training improve the standards of training.

Preschool educational schools have broadened professional teacher training by bachelor’s degree courses. Other pedagogic schools have strengthened their teacher training by introducing Master’s degree courses. (Each year 300-400 professional teachers graduated with a Master’s degree from pedagogic colleges.) From 1995-1996, the MOET has implemented a program to train 800-1,000 professional teachers to obtain a Master’s degree.

**Preferential Treatment Policies for Teachers, especially for those in mountainous and remote areas.**

In general, the living conditions of teachers are still very difficult. The national tradition of venerating teachers has eroded and subsequently the social stature of the teacher in society has decreased. The teaching profession does no longer appeal to capable people, therefore preferential treatment policies and teacher employment have a very important significance for the motivation of the professional teacher. Besides the standard salary, additional allowances are paid from state’s budget and it is encouraging implementation of the policy on additional subsidies for teachers in local provinces as well. In order to make teaching in remote areas more attractive, it has been proposed to increase the total allowances to twice the salary for
teachers elsewhere. Many provinces have executed favorable policies for pre-school and general school teachers suitable to conditions of the area.

4. Conclusions and Future Issues

*Development of capacity:* From the period 1992-1993 the number of teachers of every level has seen an increase in number and is gradually stabilizing.

However, due to the constraint of 15 million pupils in some 14,000 schools in the existing education system and the requirement of teach 9 complete subjects at primary schools, the problem of teacher shortage still remains. Shortages has been particularly serious in secondary education, due to the rapid increase of the number of secondary pupils and the learning programmes on multi-subjects regarding technology, computer, foreign language, music, art.

**Chart 2: Number of Teachers, 1986-1998**

*Teacher Qualifications:* During the process of development, though having fluctuations in terms of quantity, teacher qualifications have increased at every level. The qualified teacher rate of primary and secondary grade rose from 34.72% (1986-1987) to 70.72% (1995-1996) and from 52.69% (1986-1987) to 83.88% (1995-1996) respectively.

However, teacher qualification in different levels and local areas is uneven. Qualified and excellent teachers concentrate only in the cities. The unqualified pre-school teacher rate remains high at 30%.

The quality of training and the qualification of teachers and educators has been considerably improved, nevertheless the quality of teacher training at every level in general is still below par, and abilities and skills have not yet met the demand for updating.
Thanks to the generous and valuable assistance granted by the international and non-governmental organizations, international cooperation in teacher training with organizations such as UNICEF, ADB and the World Bank, has achieved much progress in Vietnam. Investments by these organizations in the form of projects have been increasing.

In the future, the Vietnamese educational system will have to solve the following problems:

- How to further upgrade the quality of teachers, especially for the teachers of the pedagogic colleges.
- How can continuous training of primary and lower secondary school teachers reach the standards required for the renovation.
- How to solve the shortages of teachers at all levels, especially for upper secondary schools.
General Comments

Remarks by Dr. Rupert Maclean

Dr. Rupert Maclean, Chief of ACEID, UNESCO-PROAP in Bangkok, made the following remarks after the presentations of the various country reports on September 18th. The objective of his remarks was not to present a framework, but some general comments on the basis of his experiences at the UNESCO-PROAP and in his home country, Australia.

Diversity

Listening to the various presentations during the past two days, one can say that there is obviously great diversity between our countries. For example, some countries have been talking about an oversupply of teachers, others are saying there is a shortage of teachers. Some are saying it is still a very honorable profession, that many people still revere and respect teachers and want to become teachers, while in other countries teachers no longer have that level of respect and that level of status. In some countries teachers are relatively well paid and in fact there are more people who want to become teachers, such as Japan, than the system can accept. Being a teacher is still regarded as a well paid job, as a respected and highly desirable profession. In other countries, that is no longer the case, where it is poorly paid, where teaching is a job that is not one's first choice. In fact, in many countries, teachers have to 'moonlight', have a second occupation.

Teacher-Recruitment

I want to touch on just some of the points that are particularly interesting, and perhaps worth comment and concern. The first is the question of recruiting suitable people into the occupation. What can we do to recruit the most capable people into the occupation? What can we do to make sure that the people who want to become teachers are not just intellectually capable people, but also people who are humanistic, who have a real concern for other human beings, who have the ability to empathize with learners? Somebody might be very brilliant academically, but a very poor communicator. They may know physics or chemistry, or they may know their subject area extremely well, and yet, when it comes to talking about it, they cannot get the message across to somebody else. When it comes to teaching, we are not just concerned with recruiting the most intellectually capable people; we also want people who are good communicators, who are able to empathize with others, who are very human and warm in their interaction. After all, they have not just an intellectual role, but also a nurturing role. Pre-school teachers, primary school teachers, secondary teachers, or in fact teacher-educators, or university academics, even at the level of

1 Edited from a tape-recorded transcript of Dr. Maclean's comments.
university, although one is teaching people who are maybe in their twenties, there is still as much of a nurturing role as there is an intellectual role.

So, how can we actually, all of our countries, attract the most capable people, intellectually capable, but also very capable when it comes to this humanistic, interactive communication area. What do we have to do? Do we have to improve salaries? Do we have to improve promotion opportunities? In quite a few countries, people may become teachers, but after a while they drop out. This might be because they feel there are no promotion opportunities, there is no incentive for them, perhaps when it comes to promotion. Incentives might have to do with money, or it might have to do with status. That is the feeling that their achievements are not recognized. Often people are not simply motivated by material concerns, like salary, but that they want recognition. They want people to say, "You are doing a good job." The reward for doing a good job may involve additional money, but it also may not. It may mainly involve the award of a special title, as we heard earlier with titles such as master teachers, or executive teachers. What is important is that there is some sort of opportunity to promotion or recognition within the occupation.

A couple of speakers spoke about performance based promotion. Should we pay the successful teachers, more than the unsuccessful teachers? Should we give a financial incentive to encourage teachers to be successful? The problem with this is that it sounds very good. "If you are very successful, we will pay you more." "I you are hard working and successful, we will pay you more." In a sense, promotion is a way of paying people more. It is a way of giving a bit of extra money, or extra status, saying: "You are doing an excellent job. Congratulations." But the trouble with performance based salaries is what are the criteria that are going to be adopted. What do you mean by performance? Do you mean academic performance? Do you simply measure the results of the students and their test scores. Should we say that a teacher who gets more students through an examination is more successful than a teacher who does not get students in the same numbers through examinations. Do we say that when you have more first-class honors in your group, that you are more successful than somebody who does not have that many.

And what about the people you are dealing with as a teacher? What if you have got a class where everyone is a particularly talented? If you have a class where the students are very average, you may still be an excellent teacher on average students, but perhaps the exam results do not really reflect your true capabilities, because the people you are dealing with are not as intellectually capable, perhaps, as those being taught in a different school or classroom. There is also a danger, that if we pay by academic performance, teachers who are more experienced and are more politically-aware, will get the good students for themselves and give the poor students to the beginning teachers, because they have just come to the school and will
not have the same kind of power base in deciding who they are going to teach.

There was a program in Australia, in the 19th century called: 'Payment by results'. This was a situation where teachers were employed with a base salary. They would get about 60% of their salary as their base salary and the rest of their salary would depend upon the results of their students. To assess the teacher's performance, inspectors were employed to go around to the schools and look at how well the teachers were doing. They had to inspect them, see how enthusiastic the students were and how good the test results were. Of course, teachers were fairly astute people, and what happened under that system was that it was open to abuse. As a teacher, to maximize your salary, your students had to do well. As a result, teachers spend most of their time teaching the children the answers to the questions they were going to ask them during the test, and then of course the children performed very well. They may not know anything else apart from the answers to those particular questions, but of course they performed very well on the test.

The inspectors were also concerned with judging the enthusiasm of the children, not just their academic performance because, as I said earlier, the teacher has also the role of someone, who enthuses, who nurtures their students. There are stories, that when inspectors went to the classrooms, one of the ways that the inspector would assess the enthusiasm was the number of students eager to answer questions. As a result, teachers would say to children: "If you know the answer to the question, put up your right hand, if you do not know the answer to the question put up your left hand." During inspection, they would ask a question, such as "What is the capital of France?", and all the hands would go up enthusiastically. The inspector of course was very impressed, "What a enthusiastic class! Every child wants to answer the question! This is a good teacher!"

This example is to illustrate the issue of how we reward teachers. If we start paying salaries according to results, academic results or other kinds of results, do we look at teachers producing good people, good human beings, who are successful in terms of the moral and social development of their students? Or do we mainly stress academic considerations, and the subsequent possibilities of abuse.

Fading Qualifications

The other thing that was discussed, were the many challenges facing teacher development programs in the various countries. Some countries still do not have a very well developed pre-service teacher education program. In some countries, like Japan, there are teacher induction programs, in other countries as well, there are various forms of teacher induction programs, but in many countries there are no teacher induction programs yet. The situation in many countries is
that once people have done a pre-service course and join the teacher occupation, they are really on their own, apart from the informal support of colleagues. - The principal may come past their class, to see how they are performing, may give them some sort of advice. - But there is no structured program of teacher induction. Although countries are committed to the idea of in-service education, in many of our countries, there is no well-organized program of career-long professional development of teachers. Professional development happens on a very ad-hoc basis, there might be a course here, or course there, but there is no concentrated, well-organized program of career-long professional development of teachers.

When you do have in-service programmes, should they be compulsory, or should they be voluntary? What you can do, is to link promotion to the successful completion of in-service courses, you could say that it counts as a favor when it comes to promotion. There is that sort of incentive, but maybe the teachers who do not want to do these courses are the very ones, who need them most, they are the ones who should be doing the courses. So what can you do as an incentive? In some countries, for example, there is a system which one could call, 'Fading Qualifications'. When one complete his or her academic qualifications and teacher education qualifications, one is given a number of points. For example, as a beginning teacher, with a bachelor of education degree in hand and possessing all the professional qualifications, you have 120 points for your academic training and your professional training. In this system one might need at least 100 points, to be a qualified teacher, that is to be employable and to get a teaching license. You have 20 points above the minimum, what happens then is that for every year of service you loose 10 points, your qualifications start to fade, it is a depreciation of your qualifications. So after your first year of teaching you have 110 points left. After my second year of teaching you have 100 points left. If you have one more year without professional development you will have 90 points and will lose your license. As a result, to maintain the number of points that you need, you must continually do in-service courses. It is a voluntary thing, you do not have to do it, but if you do not do it you will lose your job. Furthermore, to become a senior master or mistress, you need a minimum of 140 points, to become a vice-principal, you need at least 160 points, and to become a principal you need to have at least 180 points. Therefore the only way you can gain these points is by upgrading your qualifications. The bottom-line is that once you get below 100 points you lose your job, and the other point is that if you want to become a principal, you must do further courses, maybe do a master's course, or two or three weeks in-service courses that give will you certain points. But you must at least maintain 100 points and to gain promotion you must go well above that. These fading qualifications are a way of motivating people, but you must however make sure that you can satisfy teacher's expectations. If everybody, or many, get the number of points required to become a senior master or senior mistress, you must make sure there are opportunities for them,
to realize their ambitions.

The other thing is, with in-service training, should it be done during school-vacations? Should it be done during weekends and evenings or should we have a system like 'sabbatical leave', that you have for academics. Will you give people off a certain time for professional regeneration? One could suggest that every teacher, after three years, is entitled to three months leave on full pay, to upgrade their qualifications. For academics in Australia there is sabbatical leave, that is, university academics get two months leave for every year of service. And every three years you can take your leave. If you are an Australian professor, every three years, you would get six months off on full pay to either go and upgrade your qualifications, or to do research, or to do writing. You might choose to stay at your university and work on your writings for six months, full time or you may choose to go abroad, and work at some other university. Should we offer a similar thing to teachers, some sort of system of paid leave to upgrade their qualifications? Of course it will add to the cost of our systems, it will make them more expensive to run and more expensive to sustain. Or do we say to teachers: "Your holidays are so long every year." For example in Australia, teachers over the year would have about 14 weeks of holidays, this is when the school closes and the children have their vacations. Should we say to teachers: "Look, like any other public servant you will have the same number of weeks leave, and the additional time are to be used for professional development." If you are in a country where public servants get, for example four weeks a year holiday, you could say teachers also have should 4 weeks a year holiday and the rest of time it is not for you to have a holiday. They are student-free days, for you to attend in-service courses.

There are many decisions to be made, when it comes to this whole question of teacher development and career-long vocation qualifications.

Quality of Teacher Education Programs

Another point we are all concerned about, is the quality of teacher education programs. There were a number of research studies done in Australia three years ago, which were very pessimistic. These studies actually said that most teacher education courses do not really have much impact on the behavior of teachers, because most of the teacher education programs are experience based, rather than performance based. In other words, many students may have a teacher education school practice department, but most of their time is spend in the lecture theatre. When I was a professor, I taught the sociology of education. Most of my students would come along for two or three lectures a week and follow-up tutorials. They would study the sociology of education, the philosophy of education, the history of education, educational psychology, management and planning, and classroom practice. They would have their methods-subjects, and then some time would be spend in schools on teaching-practice. My
Ensuring Opportunities for the Professional Development of Teachers

subject, which I tried to make as practical and relevant as possible, but still the problem was how would I assess them. I would assess them through paper and pencil testing or I would draw assignments. Still, somebody might write an excellent essay for me on why discrimination on the basis of gender is a very bad thing in the classroom. They might tell me what should be done to prevent it. They might write an essay on the disadvantages of streaming children, and the self-fulfilling prophecy when it comes to children in the lower streams being expected to perform worse, and therefore teacher expectations are resulting in them performing worse. They might get a high distinction from me for their essays, but the question remains are they better teachers in the classroom? They may go into the classroom, with high distinction for arguing the case for not being discriminatory on basis of gender, but they may be extremely discriminatory themselves in the classroom. Many argue the case that, it is not what people say that matters, as teachers, it is what they do that matters. Therefore, some would argue that far too many of our programs are experience based and are not sufficiently performance based or competency based. It is all very well for students to talk about what they may do in a certain situation, what we have to do, is watch them actually doing it and assess their behavior. That is why many countries now are moving towards school based teacher education programs. Instead of people spending most of their time in a teacher training college or a university education faculty, and only a little bit of time in schools. School based programs are a reversed situation in that teachers spend most of their time in schools, and a very small proportion of their time in their teacher training college or university. They may be working in a school for several weeks, where they teach three days a week and two days a week on the theoretical aspects of teaching, and the whole things becomes woven together. All the way through, there is an attempt to focus upon performance. Videotaping students giving lessons for example, playing back those video tapes, and sitting down with the student analyzing the lesson, stopping the videotape, asking: "Now what could you have done differently here? Did you help that child in the best possible way? Maybe you were a little bit abrupt. Did you really handle that question well?"

The whole question of the quality of teacher education programs is how effective were they? What can make the programs more effective? Should it be performance based rather than experience based? The problem is that it has implications for the cost of teacher education. The more school based programs become, the more expensive they become, the more difficult they become in terms of management. With this approach you will also need a much more favorable teacher education student-teacher ratio. I had 500 students in some of my lectures, if your are going to have that Sociology of Education-course on a school based basis, you got to work with 10 students. Obviously, it has implications of staffing of programs.

The other thing is how can you improve the relevance of the teacher education programs? One of the problems is, perhaps much of what we teach in our teacher education
programs are not terribly relevant to the improvement of the performance of teachers. People might understand the work of Piaget very well, in terms of child development, but are they applying those things? Obviously, Piaget is relevant, but is it relevant to learn about the history of education? Some would say yes, but some would say no. It depends upon your particular viewpoint.

What about the quality of the teacher-educators themselves? There is a saying, it was referred to by the colleague from the Philippines, about people going to the teaching profession. I think it was George Bernard Shaw, the great Irish playwright, who said: "Those who can't do, teach." I have been saying this earlier, in some countries those who can't do in terms of employment in a different occupation, fall back on teaching. As an extension of Bernard Shaw's saying, you can say: "Those who can't do, teach. Those who can't teach, teach teachers." Sometimes, it is true, those who can not teach, teach teachers how to teach. Sometimes, people who were not successful themselves in the classroom become teacher-educators. What sort of role-model do they provide for their students? The question is what can we do to make sure that the teacher-educators themselves are up-to-date, are skilled, are enthusiastic, are knowledgeable and actually have real experience themselves in the classroom.

Taken from my own experience, when I was the Dean of the Education Faculty in Australia, one of my dilemmas was the following: - Many of the staff were excellent, many of them were excellent practitioners, but the problem was, we were looking for somebody to teach English Method, or social science method, or science method. So we would choose an excellent teacher from the schools, bringing them into the university, and then they would stay at the university. And after four years, five years, because the salaries were better in university, because the work-conditions were better, and because they found the work more stimulating, they became remote from the classroom. They themselves had been excellent teachers, but then they lost touch with the classroom. Before, they had been working on a daily basis in the classroom, but now they worked there very rarely. I suggested that people come out of schools for five years, and then they can go back into schools and other people can come out. They were highly resistant to this, because they preferred working at the university. So, how can we make sure that people who are involved with method side of teacher education are up-to-date? Are we realistic in terms of their own skills, because we all know that the classroom and the school in many of the countries are changing rapidly. Maybe five years ago there were not many behavior problems, but now there are. The expectations of students are changing. If I were an excellent teacher in a classroom 10 years ago, maybe I would not be an excellent teacher in the classroom now, without re-training, because the classroom's demands of change, the children have changed, the expectations have changed. How do we ensure that those who are the teacher-educators themselves are skilled, up-to-date, relevant and therefore can be actually revered and
respected by their students?

Sustainability

Another issue is the issue of sustainability of programs. Colleagues have mentioned the fact that when it comes to foreign aid programs to upgrade teacher education it works very well when the money is there from outside. But once the money is no longer there, how can the government afford to sustain programs, whether it is in Nepal, or India, or Pakistan. The very reason we need outside sponsors and outside assistance is that we can not afford it ourselves. Once the money is withdrawn, what can we do? I once worked on a two-year nation-wide program to upgrade teacher education in a very poor country where salaries are very low. This was a large-scale project involving lots of outside money. It was very successful for two years, while the money was available. They send people abroad on study-tours, brought people in as consultants to help upgrade classrooms by teaching aids, by textbooks, by audio-visual materials and so on. And when the tap was open, everyone was enthusiastic, and they were highly supportive, but when the tap was turned off, and it became just a drip, how were people able to maintain the sort of things they have taken for granted. The government could not afford to replace the lost funds, with additional money even if they tried extremely hard. With the best will in the world, they simply did not have the funding, and there are so many competing demands upon them. All we have to do is try to make these programs sustainable.

For example, one UNESCO-project has been successful when it comes to sustainability. I was asked two years ago to go and design a project in Iran. The problem was there were many Iraqi refugees crossing over into Iran, because of the regime of Saddam Hussein. They were Shiite Arabs, marsh Arabs, and were being bombed, which lead them to moved into Iran. The Iranian government provided them with accommodation, food and clothing and they put them into refugee-camps. That was a very generous thing to do, a very expensive thing to do, at their own expense, with no outside funding. There were 170,000 refugees, many of them were educated people. Some of them had rural background, but others were from Baghdad and had decided to leave because of fear of persecution. UNESCO was given the job to design an educational program for these people. Many had nothing else do than just sit in these refugee-camps. They were provided with free food, but there was no activity, they were bored stiff. I was asked to develop a program by UNESCO-Paris. It involved the building of schools, portable ones, as the refugees were not expected to be there forever. It involved looking at a school-curriculum. The question was what curriculum do you teach? Do you teach the same curriculum as they would be taught in Iraq, assuming that one day they will go back their own country? Or do you assume that they will never return and they will have to be resettled in other countries, like America, Canada or Australia? If they were to be going back, it must be an Iraqi curriculum. If
they were destined to go to America or Australia, they needed a curriculum that equipped them to life in those countries. What language of instruction should we use, the Iraqi language or English, which is most likely to be the language of the country that will accept them. So you can imagine all the difficulties, such as school buildings, deciding upon the curriculum, writing textbooks, publishing textbooks, training teachers, and all the other things that were involved.

But after 18 months the tap was going to be turned off. What was going to happen then, including the payment of teacher salaries. The decision was made to build to income-generating factories. One for the manufacturing of sugar, and one for making ice. We got a loan from a Middle-Eastern bank to build these. The factories provided employment for the people living in the camps, and most importantly the generation of income, because the ice and sugar they produced was actually salable in the local towns, and therefore it provided employment, income generation, and the income pays the teacher salaries. And pays, in fact, for the further development of textbooks and so on.

Alternative Modalities

A couple more things before concluding. What about the use of alternative modalities for teacher education programs? Moving away from the need to face-to-face contact between teacher-educators and students. Do we actually have to bring people into a central location to attend teacher-education courses? Particularly, in-service training can be highly disruptive. If we have to get teachers out of school to attend teacher-training upgrading courses, who is going to undertake their work when they leave the school. If there is a sabbatical leave system, who is going cover for them, when they leave the classroom? We are looking increasingly at alternative modalities. Let me refer to a couple of things that might interest you. In Vietnam, we are having teacher development programs for teachers in remote areas. Some of the teachers are in areas where there is no electricity. But the way the teacher development program is operated, is through the use of radio. But there is no electricity, and it is very expensive to buy batteries. So UNESCO has, in order for them to be able listen to the broadcasts at a very low cost, developed solar powered radios.

Another system that we are using in Cambodia, is radio that was invented in Africa by UNICEF, it is a radio with a handle and a spring. All you have to do is to wind this spring, and that provides enough power to listen to the radio for about half an hour. It is low-cost, self-sufficient and it does not require any great inconvenience. 

In Thailand, they still have in some areas where they used to have teachers on horseback, going into the mountains. There were also teachers going to teach the children of fishermen. These groups are also using solar radios and wind-up radios, not just to teach development programs, but also to reach other populations for their own education. In remote areas where
there are not sufficient teachers the radios are used as the 'school of the air'. They are examples of the need to look for different modalities, to use interactive television, to use radio broadcasts as a part of schooling.

When I was working in Myanmar, the main programs for the professional development of teachers were correspondence courses. You would receive something through the mail, and later post it back. But the postal system was so unreliable that it might take two months for you to receive your material through the mail, and a month and a half to get back to the central office. This is another example that illustrates the necessity to look at television and radio and various alternatives.

Physical Facilities

The other thing that needs mentioning, is the whole question of the poor physical facilities of many training institutions. The libraries in teacher training institution are often inferior and very poor. There are not enough books and the books present are often out of date. In some climatic conditions, like monsoon conditions, books do not last very well.

What also happens is that, where there is a lack of printed materials, the principal will lock them away in his office, because they are too valuable to be used. In some countries they say to teachers that if they break teaching materials that were given as part of the upgrading of facilities, they will have to pay for it from their own salaries. If, for example, they would break an imported test-tube that might cost them a week's salary, and therefore are too afraid to use them. A suggestion is, that we have mobile resources centers. We did this in Myanmar, because there was the problem of poor facilities in teacher training colleges. If you try and provide materials for all institutions in the country, it is too expensive. We therefore developed five mobile resource centers, diesel 4WD trucks, and they were furnished with teaching aids, books, video and so on. It would set up somewhere next to a school and stay there for a month, teachers could learn about making low-cost or no-cost teaching materials. And after a month it would move to the next establishment and hopefully every year it would come back for at least one month.

Very popular in some places are mobile training teams. You get a group of people who are well trained on a particular aspect of teacher education or teacher development. It might be on how to produce low-cost or no-cost learning materials. It might be on child- or student-centered teaching methods. You develop a group of five people and they move around between the teacher training colleges to work with students and staff for three or four weeks. The team comes in for three or four weeks, works with the staff and the students and after that they move on to another establishment. This is a very cost-effective way of trying to upgrade the state of teacher education.
Conclusion

A lot of interesting issues have been raised during the presentations and there is great diversity between the countries. And in some cases despite cultural similarities, there is still diversity because of the economic situation. I think we could actually be more agents of change, agents of enlightenment when we return to our countries. Everyone here, has a personal responsibility, if you come to Japan for 10 days and you attend this workshop and enjoy the hospitality of the Japanese, if you go back to your country and nothing changes, in a sense you time has been wasted. I hope that before you go back you will say to yourself: “I going to make sure, that I do my best to improve the situation.” That might mean that I am going to speak to at least five other people, regarding the sort of recommendations made by this group and I am going to argue convincingly, why we should try and do at least five things to improve teacher education. I am going to have a staff seminar with my colleagues and give them a summary of the sort of things we have discussed at this meeting. They themselves may be touched by these ideas and maybe change their own outlook.

From my point of view, there should be an aspect where you will say, as a result of attending this seminar, I must do something in my own country to improve education. If I do not make an efforts to do so I am letting down the organizers of this conference, letting down my country and I am letting down myself.

Ultimately, I hope that when you go back to your country, that even in some small way, the education of children or the education of teachers will be improved. If that happens, even the smallest improvement, it makes this workshop and the funding put in by Hiroshima worthwhile. I hope we all hold that flag in terms of going forward, and going to do something in our particular way, to help realize the sort of ideas and sort or responsibilities that come out of this group.

Thank you.
Action Plan: Bangladesh

1. Present Needs in the Area of Teacher Development

1. To train the huge number of untrained teachers who at present are serving in schools (both primary and secondary),
2. To initiate school based teacher education programs in secondary schools,
3. To develop the quality of the teacher-educators in order to contribute to better input in teacher education,
4. To bring changes in the curriculum so as to incorporate participatory methods in teaching and learning situations.

2. Objectives

1. Achieve a 100% rate of trained teachers in both primary and secondary level,
2. Competencies of teachers in different subject areas (e.g. Mathematics, Science, English etc.) brought to a sustainable level,
3. Establishment of better learning and better understanding between teachers and those taught,
4. Teachers Colleges served with better qualified teachers

3. Strategies

1. Initiating awareness about the needs in the area of teacher education through:
   a. Exposés in newspapers and magazines,
   b. Arranging seminars and workshops on the theme of teacher education,
   c. Personal pursuit of the government.
2. Motivating the political leaders to create pressure on the government to activate the following schemes:
   a. Establishment of at least one Teachers' College in each district,
   b. Initiation of programs for staff development in the Teachers' Colleges on a regular basis,
   c. Catering by all Teachers' Colleges for both pre-service and in-service teacher education,
   d. Design of a new curriculum with the assistance from experts at home and from
abroad,
e. Proper allocation of funds

4. Time Frame

1999-2002 [A minimum period of four years]

5. Resources required
Fifteen to twenty percent of the annual budget needs to be spent on education.

6. Responsibility
The Ministry of Education, Government of Bangladesh.

7. Other supporting agencies
Assistance from international agencies, like the following, will be sought.
1. European Commission (As they are doing now through PROMOTE in Bangladesh)
2. Asian Development Bank (As they are doing through SEDP and HSEP in Bangladesh)
3. UNESCO (as they are funding the international seminars on the theme)
4. ODA from Japan

8. Evaluation
An integral system of evaluation will operate throughout the plan period. The Ministry of Education, Government of Bangladesh will enforce the operating agencies. At the end of each stage, partial evaluation will take place. Finally, a total evaluation will sum-up the results.
Action Plan: China

1. Current Situation

Since the mid-1980s, the Chinese government has put teacher education development both as a top priority and as a strategic mechanism in the process of educational development and reform. As a result, some remarkable outcomes have been achieved in the past decade. Among the more significant outcomes which at works are:

- The concept of life-long learning is accepted and practiced by policymakers and teacher-educators as well as teachers themselves.
- Multi-level, multi-pattern and multi-channel networks for pre-service and in-service teacher training is being established and developed.
- The number of teachers meets the demands of implementation of the 9-years of compulsory education, along with the rate of qualified teachers increasing at rapid pace.
- The "Teachers Law of People's Republic of China" and "Regulation on Qualification of Teachers" have been issued and are in effect since respectively 1993 and 1995.

2. New Tasks

Facing the challenges of the 21st century, the Chinese government has made a number of decisions to strengthen its teaching force sufficiently in number, quality and committed to teaching as the principal task in the next five years. The following have identified as areas of high priority:

- the need to make all teachers qualified as required by Law and increase the proportion of primary and lower secondary school teachers who have graduated from higher education institutions.
- To further raise the competence of teachers and quality of teaching techniques for all and more diverse students body and for the achievement of national objectives relating to economic development.
- The emphasis on updating teachers' academic knowledge and skills to meet the rapid development of science and technology and to nurture motivation to be capable of working in the knowledge based economic era.
- Place emphasis on providing sufficient upper secondary teachers, both in number and in quality to meet the demands of universalizing upper secondary education in large and
medium-sized cities and economically developed areas.

- The impact of use of modern computer technology in primary and secondary schools that should be taken up both in pre-service and in-service teaching training programs.

3. Action Plan

Over a five-year period the Ministry of Education has plans to:

- take main responsibility for teacher training and promote the strengthening of the teaching force by legal means;
- develop teachers' training plans in accordance of the actual situation and give support to undeveloped areas;
- increase the financial input for teacher training and pay more attention to in-service teacher training;
- raise primary teacher training from secondary to tertiary level and restructure the teachers' education system;
- improve teachers' training quality through further reform, especially in the areas of educational ideals, teaching contents and teaching methods.
Action Plan: India

1. Policy Makers – National Level

- Emphasis on teacher education as a recurrent and continuous process. (life-long education)
- Strengthening of institutional support structures to implement and monitor quality improvement in teacher education at National, State and district level. (Emphasis on the training aspect from now on)
- Networking between institutions for synergic action. (Feedback necessary)

2. Teacher Educators – National Level

Only well-qualified and adequately trained personnel with the right aptitude and motivation should be posted in teacher training institutions. The state governments need to formulate a well thought out personnel policy to achieve the above-mentioned objective.

3. In-Service Teacher Training Centres

(1) National Level and (2) International Co-operation

Teacher Training Institutions should develop mechanisms for the continuous professional upgrading of teachers. Besides face to face in-service teacher education, these institutions should also prepare themselves for the use of distance education in a big way to expand their reach. There are great possibilities for international cooperation in interactive distance education for in-service training of teachers through computer (Internet) and video-conferencing.

4. Curriculum – National Level

Improvement of content, processes and management of pre-service and in-service education programmes and making them a seamless whole.

5. Teachers – National Level

Streamline the system of recruitment, posting and evaluation of teachers. There should be adequate promotion opportunities, incentives for good performance and disincentives for non-
performance. Teachers should have professional freedom and should be fully involved in the formulation and implementation of educational programmes. In a nutshell, we should improve the status, motivation and working conditions of teachers to facilitate their professional development.

6. Exchange Programmes - International

There should be exchange visits of teachers, teacher-educators and educational administrators from the countries of Asia-Pacific Region to promote peace and international understanding.

1. Issues Related to Teacher’s Professional Capabilities

1. Quality of School Teaching. The learning achievements of school students have not reached the expected levels, and this has been partly attributed to teachers’ lack of quality teaching.

2. Expectations of teacher’s capabilities. Expectations of teacher’s capabilities have been changing over the past 10 to 15 years as a consequence of developments such as new teaching strategies and teaching material development due to the current development of science and technology.

3. Pre-service teacher training curricula. In the primary school teacher-training programme, the curriculum was constructed under heavy time-pressure and it is now undergoing revision, incorporating the newly developed primary school curriculum.

4. Availability of resources to support teacher training programme implementation. The quality of teaching in schools is usually related to adequate availability and use of supporting resources and facilities, which are lacking in most of the teacher training institutions.

5. Quality and quantity of teaching staff for teacher training programmes. There are significant constraints on the conditions of teaching staff for the teacher training programme implementation, including: qualifications and experiences of teaching staff; unbalanced supply of teaching, and inappropriate in-service training programmes.

6. Research and Development. A number of research studies in education have been conducted, however, very few have focused on problems in school teaching, and neither have their findings and recommendations led to improved classroom practices.

7. Teacher demand, supply, and distribution. It has often been held that there is a shortage of primary school teachers, but this is largely due to the misleading methods used to calculate the supply of teachers and it seems that there is no consensus yet with regard to the way to determine teacher demand.

8. Teacher training programme management. Managerial coordination between DGHE and other units, such as the Bureau of Civil Service and DGPSE, is needed.

9. In-service teacher development programme. The current development of science and technology, and ever changing expectations towards teachers’ capabilities and competencies require continuous in-service development programmes. In the present situation, these programmes are still not adequately organized and coordinated.
2. Needs

Derived from the aforementioned issues, the following needs for development and improvement can be identified:

1. Relevant and effective staff development programmes for teacher training institutions.
2. Improvement of pre-service teacher training curricula.
3. Provision and development of facilities.
4. A coordinated teacher supply system.
5. Development of institutional research capacity and individual staff research capabilities.
6. Improvement of teacher development program management.
7. Improvement of student teaching practice and induction programme for newly appointed teachers.
8. Improvement of in-service development programmes for in-service teachers.


In accordance with the needs for development and improvement, the following action plan is proposed. The action plan represents main components that need to be developed. The summary descriptions of the main components are presented on the following table in terms of: main activities (national and international levels), objectives/expected outcomes, implementation strategies, responsible agencies, supporting agencies, resources, and timeframe.

A Gann-chart of the action plan's timeframe is presented in the following pages.
### Table 1: Indonesia: Proposed Action Plan, 1998 – 2003

<table>
<thead>
<tr>
<th>Main Components</th>
<th>Activities</th>
<th>Objectives/Expected Outcomes</th>
<th>Responsible Agencies</th>
<th>Supporting Agencies</th>
<th>Resources</th>
<th>Implementation Strategies</th>
<th>Proposed Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) National Level</td>
<td>(2) International</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
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<tr>
<td></td>
<td>3. Giving wider mandate to the SSTE institutions (on-going program since 1997)</td>
<td>3. Increased access of secondary school graduates to non-teacher high education</td>
<td>DGHE</td>
<td>Board Administration for Civil Servant Universities</td>
<td>5-year development plan and World Bank loan</td>
<td>3. Make use of excessive capacity of SSTE institutions</td>
<td>3. 1997-2000</td>
</tr>
<tr>
<td></td>
<td>a. curriculum contents</td>
<td></td>
<td></td>
<td></td>
<td>5a to c: continual 1997: 5-yearly</td>
<td></td>
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<tr>
<td></td>
<td>b. teaching-learning processes</td>
<td></td>
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<td></td>
<td>c. teaching practice</td>
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<td></td>
<td>d. induction program (new)</td>
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<tr>
<td>B. Curricula</td>
<td>6. Technical assistance, comparative studies, institutional partnership</td>
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<td></td>
<td>7. More effective pre-service teacher training curricula</td>
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<td>C. Teaching Staff</td>
<td>6. Scholarship programs and institutional partnership</td>
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<td></td>
<td>7. More qualified teaching staff</td>
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<td></td>
<td>8. Scholarship programs</td>
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</tr>
</tbody>
</table>

**Resources:**
- DGHE: Department of Education and Culture
- Ministry of Home Affairs
- Provincial Government
- Board Administration for Civil Servant Universities
- Universities
- Partner Universities
- World Bank loan

**Implementation Strategies:**
- 1. Make use of 1996/1997 policy study findings
- 2. Coordination forums
- 3. Make use of excessive capacity of SSTE institutions
- 4. Coordination forums, computer installment, software development
- 5. National and local workshops
- 6. Scholarship programs
- 7. Continuous programs

**Proposed Time Frame:**
- 1. 1999-2000
- 2. 1996-1999
- 4. 1999-2002
- 5a to c: continual 1997: 5-yearly
- 6. Continuous programs
- 7. 1999-continuous
<table>
<thead>
<tr>
<th>Main Components</th>
<th>Activities</th>
<th>National Level</th>
<th>International</th>
<th>Objectives/Expected Outcomes</th>
<th>Responsible Agencies</th>
<th>Supporting Agencies</th>
<th>Resources</th>
<th>Implementation Strategies</th>
<th>Proposed Time Frame</th>
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</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
</tr>
<tr>
<td>D. Student</td>
<td>8. Quality improvement training of the existing staff (continuous)</td>
<td>8. Study visits and institutional partnership</td>
<td>8. More professionally capable teaching staff</td>
<td>DGHE</td>
<td>Partner Universities</td>
<td>5-year development plan and World Bank loan</td>
<td>8. Training workshops</td>
<td>8. continuous program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Developing effective student recruitment and selection system (on-going: 1997)</td>
<td></td>
<td>9. Better students in terms of expected academic, professional, and personal capability</td>
<td>DGHE</td>
<td>Universities</td>
<td>5-year development plan</td>
<td></td>
<td></td>
<td>9. National and local workshops, and field testing</td>
</tr>
<tr>
<td></td>
<td>12. Development of computer facilities (new program)</td>
<td></td>
<td>12. Effective contributions to the teacher development program</td>
<td>DGHE</td>
<td></td>
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<tr>
<td></td>
<td>15. Improvement of criteria for student achievement: academic, professional, and personal (new program)</td>
<td></td>
<td>15. Assurance of graduates' academic, professional, and personal capabilities</td>
<td>DGHE</td>
<td>Universities</td>
<td>5-year development plan</td>
<td>15. National and local workshops and field testing</td>
<td>15. 1999-2001</td>
<td></td>
</tr>
<tr>
<td>Main Components</td>
<td>Activities</td>
<td>Objectives/Expected Outcomes</td>
<td>Responsible Agencies</td>
<td>Supporting Agencies</td>
<td>Resources</td>
<td>Implementation Strategies</td>
<td>Proposed Time Frame</td>
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</tbody>
</table>

**BEST COPY AVAILABLE**
## Chart 1: Time Frame Of Action Plan

<table>
<thead>
<tr>
<th>Main Components</th>
<th>Activities</th>
<th>(Proposed) Schedule of Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1998</td>
</tr>
<tr>
<td><strong>A. Program Management</strong></td>
<td>1. Establishment of a special unit within the DGHE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Strengthening coordinated teacher supply system</td>
<td></td>
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<td></td>
<td>3. Giving wider mandate to the SSTE institutions</td>
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<td></td>
<td>4. Developing management information system</td>
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<td></td>
<td>5. a. Revising pre-service curricula</td>
<td></td>
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<tr>
<td></td>
<td>b. Developing induction program</td>
<td></td>
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<tr>
<td><strong>B. Curricula</strong></td>
<td>6. Continuing education (degree programs)</td>
<td></td>
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<tr>
<td></td>
<td>7. Recruiting new staff (Master's degree)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Quality improvement training of existing staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Developing effective student recruitment and selection system</td>
<td></td>
</tr>
<tr>
<td><strong>C. Teaching Staff</strong></td>
<td>10. Strengthening Student Support Services and Career Planning Development</td>
<td></td>
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<tr>
<td></td>
<td>11. Improving teaching laboratories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Developing computer facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. Providing current books and journals</td>
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<tr>
<td></td>
<td>14. Program evaluation: accreditation and self-assessment</td>
<td></td>
</tr>
<tr>
<td><strong>D. Student</strong></td>
<td>15. Improvement of criteria for student achievement: academic, professional, and personal</td>
<td></td>
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<tr>
<td></td>
<td>16. Policy Research</td>
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<tr>
<td></td>
<td>17. Classroom action research</td>
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<td></td>
<td>18. Strengthening in-service teacher training institutions</td>
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<tr>
<td></td>
<td>19. Coordination and collaboration of pre- and in-service teacher development programs</td>
<td></td>
</tr>
<tr>
<td><strong>G. In-service Teacher Development</strong></td>
<td>20. Strengthening in-service training program for remote areas through distance learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21. Developing learning materials and delivery systems for in-service teacher development</td>
<td></td>
</tr>
</tbody>
</table>
## Action Plan: Malaysia

### Table 1: Professional Development of Teachers in Malaysia

<table>
<thead>
<tr>
<th></th>
<th>Current Situation Targets/Outcomes</th>
<th>New Key Targets/Goals</th>
<th>Strategies To Be Undertaken</th>
<th>Time Frame</th>
<th>Resources Required</th>
<th>Who is Responsible</th>
<th>Other Support Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. In-service Training (INSET)</strong></td>
<td></td>
<td></td>
<td>(a) INSET recognized and accepted by the Central Agencies of the government as an important function of TED and Teacher Training Colleges (TTCS).</td>
<td>1998 - 2000</td>
<td>Finance</td>
<td>TED; Deputy Director – General (Schools Department); Director-General of Education</td>
<td>Public Services Department &amp; Federal Treasury (Central Agencies)</td>
</tr>
<tr>
<td><strong>1.1</strong></td>
<td>In 1993 the 'Strategic Operational Target', Ministry of Education established:</td>
<td></td>
<td>(a) policy on INSET</td>
<td>1998 - 2000</td>
<td>Finance</td>
<td>TED; Finance Division, Ministry of Education.</td>
<td>Federal Treasury</td>
</tr>
<tr>
<td></td>
<td>(b) the target by the year 2000 is that every teacher will be able to attend INSET once a year.</td>
<td></td>
<td>(b) INSET given annual budget allocation.</td>
<td></td>
<td></td>
<td>TED; Service Division, Ministry of Education; State Education Departments.</td>
<td>Public Services Department</td>
</tr>
<tr>
<td><strong>1.2</strong></td>
<td>In 1995 an 'In-Service Sector' was established in the Teacher Education Division (TED). Its status is equivalent to the pre-service Sector and aims specifically to provide INSET to trained in-service teachers.</td>
<td></td>
<td>(c) INSET recognized as part and parcel of lecturers' duties.</td>
<td>1998 - 2000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.3</strong></td>
<td>A Central Committee for INSET headed by the Director-General of Education and the In-Service Sector of TED as the secretariat was formed.</td>
<td></td>
<td>(d) Utilizing Teacher Activity Centres throughout the country for INSET.</td>
<td>1999 - 2003</td>
<td>Facilities for training</td>
<td>TED; TTCS</td>
<td></td>
</tr>
<tr>
<td><strong>1.4</strong></td>
<td>There are 352 Teacher Activity Centres' (200 with own buildings) throughout the country. They are not used to carry out INSET. Each is manned by a non-graduate teacher.</td>
<td></td>
<td>(e) TTCS train enough trainers for Teachers Activity Centers.</td>
<td>1999 - 2003</td>
<td>Financial allocation for training</td>
<td>TED; TTCS</td>
<td></td>
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</tbody>
</table>
### Action Plans

<table>
<thead>
<tr>
<th>Current Situation Targets/Outcomes</th>
<th>New Key Targets/Goals</th>
<th>Strategies To Be Undertaken</th>
<th>Time Frame</th>
<th>Resources Required</th>
<th>Who is Responsible</th>
<th>Other Support Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 There are various constraints which hinder the achievement of the target [1.1 (b)] namely:</td>
<td></td>
<td>f. Provide suitable personnel to man the Centres</td>
<td>1999-2003</td>
<td>Personnel</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>g. TTCS train trainers from the States and Districts to enable them implement INSET locally</td>
<td>1999-2000</td>
<td>Teachers (to become trainers)</td>
<td>TED; Educational Technology Division, Ministry of Education; Services Division, Ministry of Education.</td>
<td>State Education Departments; District Education Departments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>h. Provision for replacement teachers to fill up places vacated by teachers who attended INSET.</td>
<td>1999 - 2003</td>
<td>Replacement teachers</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>i. Establish alternative training modes especially for teachers in rural/remote areas.</td>
<td>1999 - 2003</td>
<td>Modules, etc.</td>
<td>TED; TTCS; Educational Technology, Division Ministry of Education.</td>
<td>Radio &amp; TV</td>
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<tr>
<td>1.6 Number of teachers trained:</td>
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<tr>
<td>Year</td>
<td>No of Teachers</td>
<td>Percentage</td>
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<tr>
<td>1995</td>
<td>138,666</td>
<td>60.59</td>
<td></td>
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<tr>
<td>1996</td>
<td>176,067</td>
<td>73.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1997</td>
<td>193,033</td>
<td>78.89</td>
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**BEST COPY AVAILABLE**
| Current Situation
Targets/Outcomes                                                                 | New Key Targets/Goals | Strategies To Be Undertaken                                      | Time Frame | Resources Required | Who is Responsible | Other Support Agencies |
<table>
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</thead>
<tbody>
<tr>
<td>2. Induction for beginning Teachers.</td>
<td></td>
<td>By the year 2000 every beginning teacher will be able to follow</td>
<td>1999</td>
<td></td>
<td>TED; Various</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>an induction programme</td>
<td></td>
<td></td>
<td>Central Committees</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Formalizing a policy on induction programme for beginning</td>
<td></td>
<td></td>
<td>of the Ministry of</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>teachers.</td>
<td></td>
<td></td>
<td>Education; Director-</td>
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<tr>
<td></td>
<td></td>
<td>b. Directive/Circular by the Director-General to all schools,</td>
<td></td>
<td></td>
<td>General of Education;</td>
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<tr>
<td></td>
<td></td>
<td>State Education Departments and District Education Departments</td>
<td></td>
<td></td>
<td>Deputy Director</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>on induction programme.</td>
<td></td>
<td></td>
<td>General, Schools</td>
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<td></td>
<td></td>
<td>c. Guidelines sent to schools to assist them implementing the</td>
<td></td>
<td></td>
<td>Department.</td>
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<td></td>
<td></td>
<td>programme.</td>
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<tr>
<td></td>
<td></td>
<td>d. Train schoolteachers to become effective mentors.</td>
<td>1999 – 2000</td>
<td></td>
<td>TTCS</td>
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<tr>
<td></td>
<td></td>
<td>e. Monitoring by various agencies of the Ministry of Education,</td>
<td>1999-2000</td>
<td>Finance</td>
<td>Schools Inspectorate,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>especially the Schools Inspectorate.</td>
<td></td>
<td></td>
<td>Ministry of Education.</td>
<td></td>
</tr>
<tr>
<td>2.1 There is no policy yet on induction programme for beginning teachers.</td>
<td></td>
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<td>2.2 1993 TED introduced mentoring system in schools where final semester teacher</td>
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<td>trainees did one-semester practical teaching. This system is still on going.</td>
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<td>2.3 Trained teachers involved as mentors were given special allowance. The</td>
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<td>economic downturn has affected the system. Besides, number of trained teachers</td>
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<td>involved are limited.</td>
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<td>2.4 Generally teachers are not receptive and do not understand their roles as</td>
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<td>mentors. On the other hand TED and TTCS, the proponent of this idea do not</td>
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<td>have the authority to compel schools/teachers to carry not mentoring.</td>
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<td>3. Quality Teachers</td>
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<td>3.1 The 'Strategic Operational Target (1993) emphasizes the need to raise</td>
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<td>teachers qualification for both primary and secondary schools. The targets are</td>
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<td>by year 2000:</td>
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<tr>
<td>a. 30% of primary school teachers are diploma holders</td>
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<td>b. 100% secondary school teachers are graduates.</td>
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<td>3. The target has been shifted to 2005</td>
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<td></td>
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<td>The target has been shifted to 2005</td>
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</table>
### Action Plans

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<th>New Key Targets/Goals</th>
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<th>Who is Responsible</th>
<th>Other Support Agencies</th>
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</thead>
<tbody>
<tr>
<td>3.2 In 1996 a Diploma in Teaching for primary school teachers was implemented replacing 'The Certificate in Teaching' courses. The 1st group of Diploma in Teaching will come out in mid 1999 numbering 8808</td>
<td></td>
<td>a. The Diploma in Teaching for primary school teachers will continue.</td>
<td>TED; TTCS</td>
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<td></td>
<td>b. TTCS will continue with the Post-Graduate Diploma in teaching especially in critical subjects.</td>
<td>TED; TTCS</td>
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<td></td>
<td></td>
<td>Simultaneously a Post-Diploma in Teaching for Diploma holders was introduced. Post Diploma holders trained:</td>
<td>Local Universities</td>
<td>Finance</td>
<td>TED; TTCS</td>
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<td></td>
<td></td>
<td>1996 - 1306</td>
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<td></td>
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<td>1997 - 1184</td>
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<td></td>
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<td>1998 - 448</td>
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<td></td>
<td>3.3 Currently about 60% teachers in secondary schools are graduates.</td>
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<td>3.4 Prior to 1990 Post-graduates. Diploma in Teaching carried out by the local universities. Since 1990 Post-Graduate Diploma in Teaching was introduced in TTCS to increase the output of trained graduate teachers.</td>
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<td>3.5 To overcome shortage of candidates for Post-Graduate Diploma in Teaching, especially in critical subject areas such as science, a Special Diploma Programme leading to a first degree was launched in 1996 for trained non-graduate teachers. The number undergoing a degree programme at local universities are</td>
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<td></td>
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<td>1st cohort - 1,870</td>
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<td>2nd cohort - 1,785</td>
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<td>1999-2005</td>
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<td></td>
<td></td>
<td>Trained non graduate teachers</td>
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<td>1999-2005</td>
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<td></td>
<td></td>
<td>Education Programme leading to a degree for non-graduate trained teachers will continue especially in critical subject areas and priority given to teachers from rural/ disadvantaged areas.</td>
<td>Local Universities</td>
<td>Finance; Lecturers from UK universities; lecturers in the TTCS; lecturers from local Universities</td>
<td>TES; TTCS; Educational Technology Division, Ministry of Education</td>
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<td>f. To have enough candidates for the critical subject areas, an intensive course in the subject areas will be given to potential candidates.</td>
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<tr>
<td>3.6 To ensure quality teachers for English, twinning programmes between TED/TTCS and UK consortia/universities and a university in New Zealand was launched. These programmes are affected by the economic downturn.</td>
<td>G. Alternative modes of training graduate teachers for teaching English in collaboration with universities in the United Kingdom and local universities.</td>
<td>1999-2005</td>
<td>Finance</td>
<td>TED; TTCS; Aminuddin Baki Institute, Ministry of Education; State Education Departments; Schools Head Masters.</td>
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<tr>
<td>4. Continuous Professional Development of Teachers</td>
<td>a. Continuous dissemination of this idea/concept to strategic groups - Heads of state, education departments, district education departments, heads of schools and senior subject teachers in schools through i. seminars ii. pamphlets</td>
<td>1999 onwards</td>
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<tr>
<td>4.1 Early this year the new Director-General emphasized '10 Focus on education'. One of them is &quot;A Professional Teacher&quot;.</td>
<td>b. Schools implementing in-house training for staff</td>
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<tr>
<td>4.2 TED has been entrusted with the task and a paper was prepared. Among others it is emphasized the need for continuous professional development (pre-service, induction and INSET). This idea has been accepted in principle by the committee chaired by the Director-General of Education</td>
<td>c. Schools implementing induction programmes for beginning teachers</td>
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<td></td>
<td>d. Schools send teachers for INSET</td>
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</table>
Action Plan: Nepal

1. Policy Makers

National Level
- Ten month's pre-service teacher training should be made mandatory as the minimum entry requirement for all levels of school education.
- All types of pre-service teacher education programs should be entrusted to the universities. A policy decision is needed as to whether teachers are hired and then given pre-service or whether pre-service is provided and successful participants are hired as teachers.
- The Ministry of Education should be made responsible for providing only short-term in-service training to those who have already received pre-service training. Pre-service training must be de-linked from in-service training.
- A teacher licensing system should be introduced immediately, mainly to ensure teachers' competencies.
- An integrated teaching service should be introduced whereby teachers' salary is equated with qualification, not with the level of the schools they work in.
- A differential salary structure should be introduced whereby trained teachers are paid considerably more compared to the untrained teachers.
- A National Council of Teacher Education should be formed under the Act to formulate policies, provide policy guidelines, monitor, coordinate and evaluate the implementation of teacher education programs throughout the country.

2. Teacher Education

National Level
- The private sector should be involved and invited for the delivery of pre-service teacher training programs.
- Multiple modalities of teacher training (on-the-spot training, training through mobile teams, training through the radio or correspondence course) should be adopted to clear the backlog of untrained teachers.
- Research and academic and professional capabilities of the teacher-educators and master teacher-trainers should be updated and upgraded.
International Cooperation

- Teacher-educators and master teacher-trainers exchange programs should be organized among countries in the region with the academic input of UNESCO.

ODA support from Japan

- Japan should provide financial assistance.

3. In-service Teacher Training Centers

National Level

- Primary Teacher Training Centers should be developed as Regional Training Centers both for primary and secondary school teachers. Both the in-service and pre-service training programs should be the inter-linked components of these centers.
- Distance Education Centers needs to expand their coverage of districts. Both the pre-service and in-service teacher training should be made parts of the centers. It should not be limited in its scope to train only primary school teachers.
- The existing Resource Centers under the Basic and Primary Education Project and Secondary Education Development Units under Secondary Education should be improved.
Action Plan: Pakistan 1998-2005

1. Policy Makers

National Level
- Annual requirements of teachers need to be worked out on both short- and long-term to restrict admissions in training institutions,
- The Academy of Educational Planning and Management needs to develop specialized training programs for educational administrators,
- Increased opportunities for regular quality in-service training,
- Establishment of a National Institute of Teacher Education,
- A revised curriculum for teacher training institutes,
- Introduction of a teacher training diploma with longer duration (10+3 and 12+3 pattern),
- Strengthening of AEPM and University Grants Commission (UGC),
- A Package for introduction for rural female teachers.

Provincial Government Level
- Effective measures to strengthen PITEs (Provincial Institute of Teacher Education),
- Special package of incentives (formulation and introduction): stipend scheme,
- Compulsory pre-service training for integration of secondary and higher secondary levels,
- Effective measures to eliminate teacher absenteeism, defective management and lack of supervision and accountability practice,
- Upgrading of the physical facilities at PITEs.

Teacher Training Institutes
- Introduction of a new curriculum for pre-service training and diploma in teacher training institutes,
- Staff development through Allama Iqbal Open University, UGC and ADB assisted teacher training projects,
- Master trainers to be trained at National Institute of Teacher Training (NITE),
- Special training packages for in-service training.

Text Books and Teaching Aids
- Development of text books in line with the new curriculum and new courses through technical support,
- Development of teaching aids through technical support,

**International Assistance (UNESCO, ADB, ODA)**

Technical Assistance is required for:

- Development of text books and teaching aids,
- Upgrading of facilities at PITEs,
- Development of specialized training packages for in-service trainers,
- Establishment of training outposts.
Philippine Action Plan: Ensuring Opportunities for Professional Development of Teachers

Note: This action plan focuses on developing opportunities for continuous teacher development after pre-service training in the Philippines. It does not address other concerns such as recruitment, pre-service training, salary and welfare, among others.

**Glossary of acronyms:**
- CHED: Commission on Higher Education
- DBM: Department of Budget and Management
- FAPE: Fund for Assistance to Private Education
- NEDA: National Economic Development Authority
- PAFTE: Philippine Association for Teacher Educators
- TEC: Teacher Education Council
- TEI: Teacher Education Institution

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<thead>
<tr>
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<th>Time Frame</th>
<th>Responsible Unit</th>
<th>Resources</th>
<th>Supporting Units</th>
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<tbody>
<tr>
<td>No general vision/ framework guiding various in-service training programs; isolated and sporadic INSET programs by different government and private agencies.</td>
<td>A vision statement regarding in-service teacher training programs following the UNESCO framework for life-long and holistic teacher development.</td>
<td>Review and evaluate career development tracking for teachers (developed by TEC) according to UNESCO framework.</td>
<td>A rational and progressive career development framework for Filipino teachers.</td>
<td>3 to 6 months</td>
<td>Teacher Education Council (TEC)</td>
<td>1M pesos</td>
<td>CHED, DECS, FAPE, PAFTE, UNESCO-APEID</td>
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<td></td>
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<td>Study INSET programs of other countries.</td>
<td>Widespread awareness of need and vision of systematic programs for INSET and teacher development.</td>
<td>3 to 6 months</td>
<td>TEC</td>
<td>2M pesos for media campaign and information dissemination</td>
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<td>Develop a framework for INSET programs.</td>
<td>Coherent INSET programs developed and implemented by different agencies.</td>
<td>1.5 years after framework is defined</td>
<td>TEC</td>
<td>1M pesos annually</td>
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<td>Disseminate vision statement to teachers, schools, and teacher education institutions using popular media, school and teacher associations.</td>
<td>Constant opportunities for teachers to develop themselves.</td>
<td>1.5 years</td>
<td>Agencies providing in-service training</td>
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<td>(Self-)Evaluate existing INSET programs of different agencies.</td>
<td>Continuous opportunities for teachers to develop themselves.</td>
<td>Continuous</td>
<td>TEC</td>
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<td></td>
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<td>Continuously implement and evaluate in-service training programs.</td>
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FAPE, TEC, CHED, see above.
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<tr>
<td>Newly hired teachers are given full teaching load, mostly with no or little supervision</td>
<td>Induction program for all new teachers</td>
<td>• Conduct needs assessment study for new teachers</td>
<td>• Implementation of a rational induction program for public and private schools nationwide</td>
<td>6 months</td>
<td>TEC</td>
<td>0.5M pesos</td>
<td>DECS, CHED, Phil. Comm. Of UNESCO, PAFTE, COE's, selected TEI's, UNESCO-APEID</td>
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<tr>
<td>Low available funds for INSET in public and private schools</td>
<td>Available funds for sustainable INSET programs in both private and public schools</td>
<td>• Design, pilot test, and evaluate induction program for selected public schools in selected regions</td>
<td>• from 2 years onwards from 1.5 years onwards from 1.5 years onwards From 1 year onwards</td>
<td>1.5 years</td>
<td>TEC</td>
<td>0.5M pesos</td>
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<tr>
<td>Slow implementation of mass INSET programs planned by government (e.g., RISE, TEEP, etc.)</td>
<td>Faster implementation of mass INSET programs.</td>
<td>• Implement induction program for public schools nationwide</td>
<td>• Sufficient funds for regular INSET for teachers who need development/training</td>
<td>from 1.5 years onwards</td>
<td>TEC &amp; FAPE</td>
<td>1M pesos</td>
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<td></td>
<td></td>
<td>• Dissemination of information on induction programs for private schools</td>
<td>• Fast delivery of INSET programs that have already been planned.</td>
<td>From 1 year onwards</td>
<td>TEC, CHED, DECS, NEDA</td>
<td>0.5M pesos</td>
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<td>• Provide technical assistance for private schools</td>
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<td>FAPE, DBM</td>
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<td>• Require all public schools to include faculty development budget in general appropriations request</td>
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<td>FAPE, TEC,</td>
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<td>• Encourage private schools to create budget for faculty development, and/or to source external funds for faculty development programs</td>
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<td>CHED, other</td>
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<td></td>
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<td>• Petition lead agencies to accelerate operations related to these programs.</td>
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<td></td>
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<td>concerned individuals and institutions</td>
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<td>• Set faster deadlines and strictly enforce deadlines for implementing units</td>
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**Resources**

- 0.5M pesos
- 1M pesos annually
- 0.5M pesos
- 1M pesos
- 0.5M pesos
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</table>
| Poor indicators of capability of TEI's to provide in-service (pre-service) training | Quality in-service (pre-service) training provided by TEI's | • Redefine minimum standards for maintaining TEI's based on new framework for teacher development  
• Re-assessment of TEI's and COE's in light of new framework for teacher development  
• Strict enforcement of minimum standards for maintaining TEI's  
• Upgrading of competencies and programs of TEI's; continuous training and re-training of TEI's staff  
• Provide technical assistance for developing and implementing INSET programs  
• Continuous evaluation of TEI's capability for providing INSET programs  
• Study alternative modes of providing INSET, including those used in other countries particularly the use of education centers, mobile resource facilities, etc.  
• Explore & implement more performance based INSET programs; e.g. use of peer-tutoring & peer-coaching schemes to take advantage of local teaching expertise | • Highest quality of TEI's, especially for COE's  
• More flexible INSET programs to address varied work situation of teachers | • 6 months  
• 6 months  
• from 1 year onwards  
• from 1 year onwards  
• from 1 year onwards  
• Continuous | • TEC,  
• TEC  
• TEC & CHED  
• TEC & FAPE  
• TEC  
• TEC & COE's  
• TEC & COE's | • 0.5 M pesos  
• 0.5 M pesos  
• 5M pesos annually  
• 1M pesos annually  
• 1M pesos annually  
• 0.5 M pesos  
• 3 M pesos annually | • CHED, DECS, Phil. Comm. Of UNESCO, FAPE, PAFTE, UNESCO-APEID, and other leading TEI's |
| Use of formal graduate training and short training course as INSET | Use of a wider variety of delivery modes for INSET | | | | | | |
Action Plan for the Professional Development of Teachers in Thailand

The quality of Thai education needs improvement. The best way to achieve this, is through teachers and teacher education reform. To do so, 2 sets of programs need to be implemented.

Part I 6 innovative programs formulated by TERO. (Teacher Education Reform Office), based on the vision that a good teaching profession is the key to transform the negative image of teachers and to attract new generation teachers. They are as follows:

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<th>Vision</th>
<th>Objectives</th>
<th>Goals</th>
<th>Innovations</th>
<th>New future</th>
</tr>
</thead>
</table>
| 1. National Teacher Awards (NTA) | The teaching profession will be effectively Improved when outstanding teachers are honored and encouraged to help raise the teaching quality of others. | 1. To honor outstanding teachers.  
2. To encourage outstanding teachers to actively engage in upgrading the quality of education. | Top 1 – 5% of teachers will be given National Teacher Award in 5 years. | A quality network of teachers will be created.  
• Through networking, National Teachers will help TERO in upgrading the quality of teachers. | NTA is both a prize for past accomplishments and a grant to carry out a new project on improving quality teaching and quality education. |
| 2. Academic coupons | Most teachers will do better if they can regularly keep up with advances of knowledge and teaching methods. | To support regular training of teachers so that they can do better and become successful in their teaching career. | 50%-80% of the teachers will receive relevant training annually. | Teachers are empowered by academic coupons to receive in-service training of own choice. | Finance for training is given to teachers.  
Teachers can choose training programs suitable to their teaching responsibilities.  
More training provided to encourage to offer quality and cost-effective courses  
In-service training of teachers should be speeded up and not limited to only courses offered by government institutions |
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<tr>
<td>3. New Generation of Teachers and Educational Personnel</td>
<td>Quality education needs a new generation of teachers and educational personnel with special qualities: -high innovative -active team player -international standards -technologically competent -bilingual (mostly Thai and English) -teacher at heart -culturally adaptive</td>
<td>To support new teachers educational programs in: -Governmental institutions -Private institutions -Non-governmental organizations -Joint programs; local or overseas</td>
<td>9 new programs in 2 years</td>
<td>-Competition for quality teacher education will stimulate diverse providers and superior teacher education -It must be accompanied by the guarantee of a certain and rewarding career start-up for new generation teachers from the good programs.</td>
<td>-New teacher education programs will be far better than the existing programs. -Quality of graduates will be assured and hence the employment and career of the new generation teachers can be guaranteed.</td>
</tr>
<tr>
<td>4. School rating</td>
<td>Independent rating promotes fair competition and encourages: -quality management -rational improvement -fair choice</td>
<td>To rate education quality of schools by subject annually in order to monitor their development.</td>
<td>2,500 high schools will be rated on voluntary basis in 4 years</td>
<td>-Competition will encourage management for education quality -The public will have a fair choice -School administrators will be encouraged to improve the quality of education -The budget bureau or school supporters can provide more cost-effective funding to the schools -Community participation for the school quality and the quality education will be encouraged so that -Students are motivated to demand relevant quality education for their future carriers. -Teachers take a more realistic approach to teaching. -Administrators seek new ways to improve educational quality. -Community can assist more effectively in upgrading local school(s).</td>
<td>School rating will be result-oriented whereas official school inspection tends to emphasize processes and regulations.</td>
</tr>
<tr>
<td>5. School visits by leading Thai professionals</td>
<td>Better and more relevant education will be enhanced by active participation of leaders from various professions.</td>
<td>To introduce new perspectives on: -future careers of students -relevance of teachers -school management</td>
<td>2,500 schools will be visited each for 2 days/year in 5 years</td>
<td></td>
<td>The visits by leaders from various professions in the country will direct the accountability of schools to the public.</td>
</tr>
<tr>
<td>Programs</td>
<td>Vision</td>
<td>Objectives</td>
<td>Goals</td>
<td>Innovations</td>
<td>New future</td>
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<tr>
<td>6. Reform of TERO (Teacher Education Reform Office)</td>
<td>Teacher education reform will be made successful and sustainable by: - Non-governmental agency - Block grant from government - Endowment fund - Efficient and Innovation strategy alliances - Community participation</td>
<td>To transform TERO into an essential agency</td>
<td>Independent TERO by 2000</td>
<td>Non-bureaucracy management for sustainable reform of education quality</td>
<td>- Independent of government bureaucracy - Result-oriented - Better prepared for change - Cost efficiency</td>
</tr>
</tbody>
</table>
Part II: Action Plan according to the National Bill

In the National Bill of Thailand, which is currently under development, "Teachers and Educational Administrators", are also part of a chapter in the Bill. Some important sections in this chapter are:

- Teachers and administrators responsible for educational management shall have a teaching administrative license.
- To promote, develop and honor teachers and educational administrators, an Act on Teachers' and Educational Administrators' Salaries and Honoraria shall be promulgated.
- There shall be a Teacher Promotion and Development Committee.
- To promote and develop the teaching profession, a committee shall be established to select teachers with outstanding performance, who shall be accorded due respect and honored as stipulated by the Educational Reform Committee.

From these sections in the National Education Bill, there should be at least 4 programs that need to be developed in 1999-2000 to support the implementation of these topics. They are as follows:

1. A research project on the model of teacher's license.
2. A research project on the model of administrator license.
3. A research project on Teachers and Education Administration' Salaries and Honoraria.
4. The establishment of the Teacher Production and Development Committee, with as members representatives from the various agencies concerned. This committee shall have the following functions.
   - Formulation of a national policy on teacher production and development.
   - Promotion of teacher production and development at all levels of education.
   - Follow up and evaluation of teachers production and the development of teacher training institution.
5. National teacher award project (mentioned in Part 1)

Strategies for the reform of teachers and teacher education

To ensure the success of the reform of teachers and teacher education:

- The political will of the government must be evident to the general public through continuous strong support, particularly through funding support.
- TERO must be free from the governmental regulations, but yet supported by government budget.
- Special funds for the improvement of teacher's competencies must be created, which
should be free from bureaucratic interference. This fund must be large enough to carry out all the required programs.

- International cooperation and ODA support from Japan should be carried out in terms of funding, but also in the transfer of appropriate innovations/experiences in teacher and teacher education reform.

- Achievements of each program will be evaluated annually and it will be considered as a part of the extension or termination of the program.
Action Plan: Vietnam

Issues

- There is still shortage of teachers in all levels and in some specific areas, such as arts, music, physical education, foreign languages, technology and informatics;
- There are still a significant number of under-qualified teachers;
- In most teacher training colleges and local educational centers, the existing physical facilities are under the norm, there is a lack of housing, school-buildings and technical material;
- Teaching methods are largely outdated;
- The curriculum of teacher training, both pre-service and in-service at all levels, does not emphasize the content and skills needed by the teachers in delivery of knowledge in the classroom;
- The staff, in charge of teacher training, at present, does not have sufficient knowledge and skills to meet the needs of emerging and extensive training.

Objectives

Strengthening the network of teacher training can be implemented through:

- Upgrading of skills of teacher-educators and trainers,
- Strengthening of facilities,
- Extending of training capacity,

in order to ensure opportunity to the development of teachers' professional.

Contents

1. Policy makers

National level

- Continue the national priority program to strengthen the normal school system and development of teacher personnel.

International cooperation

- Organize international workshops for educators at all levels regarding innovations in teacher education.
c. **ODA from Japan**

- Japan can play an important role in providing advice, experts and finance for these workshops.

2. **Teacher education**

**National level**
- Priority needs to be given to the development of teaching teams for normal universities.
- Development curriculum according to the "doi moi" policy.

**International cooperation**
- Carrying out training session for trainers in new teaching methodologies.

**ODA from Japan**
- Provision of financial assistance, advice, and experts.
- Sharing and exchange of experiences.

3. **In-service teacher training centers**

**National level**
- Strengthening of local educational centers.
- Provision for post-graduate programs for in-service teacher education.

**International cooperation**
- Share experiences of development of school-plans, programs, curriculum and implementation of new teaching methods.

**ODA from Japan**
- Support in terms of advice, experts and partial finance.

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1 *Doimi*: Innovation Program in Vietnam
Appendix A: List of Participants

Special Adviser from UNESCO PROAP, Bangkok
Dr. Rupert MACLEAN
Chief of ACEID, UNESCO PROAP

Bangladesh
Ms. Rezina SULTANA
Principal, Teacher's Training College, Dhaka

China
Mr. Liao SHULI
Deputy Director, Advanced Teacher Training Division, Department of Teacher Training, Ministry of Education

India
Mr. Anil Kumar GULATI
Director, Teacher Education, Department of Education, Ministry of Human Resource Development

Indonesia
Prof. Dr. Rochman NATAWIDJAJA
Professor of Education, Institute for Teacher Training and Educational Sciences, Bandung

Malaysia
Mr. Ahmad bin Mohamad SAID
Director, Teacher Education Division, Ministry of Education

Nepal
Mr. Keshaba Nanda GIRI
Associate Professor, Faculty of Education, Tribhuvan University, Kathmandu

Pakistan
Mr. Mohamad Ibrahim KHAN
Director General (EDU), Federal Directorate of Education
Ensuring Opportunities for the Professional Development of Teachers

Philippines
Dr. Allan B.I. BERNARDO
Dean, College of Education, De La Salle University, Manila

Thailand
Ms. Mayuree CHARUPAN
Senior Expert in Educational Policy and Planning, Teacher Reform Office, Office of the National Education Commission

Vietnam
Ms. Dao Nhu TRANG
Expert, Teacher Department, Ministry of Education and Training of Vietnam

UNESCO Japan National Commission
Mr. Hiroyuki UCHIYAMA
Deputy Director, International Affairs Planning Division, Ministry of Education, Science, Sports and Culture

Ms. Sumiko OSUGI
International Affairs Planning Division, Ministry of Education, Science, Sports and Culture

Hiroshima University Representatives
Michio OGASAWARA
Vice-President and Professor, Hiroshima University

Shuichi NAKAYAMA
Chairperson of Hiroshima University APEID Committee and Dean and Professor, Graduate School for International Development and Cooperation, Hiroshima University

Susumu TAKAHASHI
Chairperson of Hiroshima University APEID Committee, Dean and Professor, Faculty of School Education, Hiroshima University

Shigekazu TAKEMURA
Professor, Faculty of Education, Hiroshima University
Akira NINOMIYA  
Director, Center for International Cooperation in Education (CICE), Professor, Faculty of Education, Hiroshima University

Morihisa SUZUKI  
Professor, Faculty of School Education

Michio WATANABE  
Chief, International Affairs Section, Hiroshima University,

Yoshinori TABATA  
Chairperson of Hiroshima University APEID Seminar Committee, Professor, Graduate School for International Development and Cooperation, Hiroshima University

Tatsuya KASAI  
Vice-Chairperson of Hiroshima University APEID Seminar Committee, Professor, Graduate School for International Development and Cooperation, Hiroshima University

Seiji INOUE  
Professor, Graduate School for International Development and Cooperation, Hiroshima University

Hideki IWASAKI  
Associate Professor, Graduate School for International Development and Cooperation, Hiroshima University

Takashi KATOH  
Research Associate, Graduate School for International Development and Cooperation, Hiroshima University

Lyckle GRIEK  
Research Associate, Graduate School for International Development and Cooperation, Hiroshima University
Appendix B: Seminar Program

16-25 September, 1998

Sept 16 (Wednesday)
Arrival in Higashi-Hiroshima City
Higashi-Hiroshima International Plaza
Registration

September 17 (Thursday)
10:00-10:45 Opening Ceremony
Venue: IDEC Hiroshima University
Welcome Remarks by:
President of Hiroshima University,
Chief of ACEID, UNESCO PROAP
Representative from the Ministry of Education of Japan
Chairperson, Hiroshima University UNESCO-APEID Project Committee
10:45-11:00 Break
11:00-11:45 Keynote Address
Dr. Rupert Maclean
Chief of ACEID, UNESCO PROAP
"Strengthening the Career Long Professional Development of Teachers: An Asia-Pacific Perspective"
12:00-13:30 Lunch
13:30-14:00 Presentation of Country Report and Open Forum
Ms. Rezina Sultana
Principal
Teachers' Training College, Dhaka
Bangladesh
14:00-14:30 Presentation of Country Report and Open Forum
Mr. Anil Kumar Gulati
Director (Teacher Education)
Department of Education
Ministry of Human Resource Development
India
14:30-15:00 Tea/Coffee Break
15:00-15:30 Presentation of Country Report and Open Forum
Mr. Keshaba Nanda Giri
Reader (Associate Professor)
Faculty of Education
Tribhuvan University
Nepal
15:30-16:00  Presentation of Country Report and Open Forum
Mr. Muhammad Ibrahim Khan
Director General
Federal Directorate of Education
Ministry of Education
Pakistan

16:15  Return to International Plaza

18:00-20:00  Reception hosted by Hiroshima University
Venue: Higashi-Hiroshima International Plaza

September 18 (Friday)
9:30-10:00  Presentation of Country Report and Open Forum
Mr. Liao Shuli
Deputy Director, Division of Advanced Teacher Training
Department of Teacher Training
Ministry of Education
China

10:00-10:30  Presentation of Country Report and Open Forum
Ms. Dao Nhu Trang
Teacher's Department
Ministry of Education and Training
Vietnam

10:30-11:00  Tea/Coffee Break

11:00-11:30  Presentation of Country Report and Open Forum
Ms. Mayuree Charupan
Senior Expert in Educational Policy and Planning
Teacher Reform Office
Office of the National Education Commission
Thailand

11:30-12:00  Presentation of Country Report and Open Forum
Mr. Ahmad Bin Mohamad Said
Director, Teacher Education Division
Ministry of Education
Malaysia

12:00-13:30  Break

13:30-14:00  Presentation of Country Report and Open Forum
Dr. Rochman Natawijaya
Professor of Education
Institute of Teacher Training and Education
IKIP Bandung
Indonesia

14:00-14:30  Presentation of Country Report and Open Forum
Dr. Allan Benedict Bernardo
Dean, College of Education
De La Salle University
Philippines

14:30-15:00  Tea/Coffee Break
15:00-15:30  Presentation of Country Report and Open Forum  
Dr. Yoshinori Tabata  
Professor  
Graduate School for International Development and Cooperation  
Hiroshima University  
Japan

15:30-16:30  General Session  
"Presentation of Framework based on Country Reports followed by Open Forum"

16:45  Return To International Plaza

September 19 (Saturday)
10:00  Departure from International Plaza (Check Out)
11:00  Arrival at Hotel Miel Parque Hiroshima, Hiroshima City
12:00-13:00  Lunch
13:30-16:00  Excursion to the Peace Memorial Park and A-bomb Museum
17:00  Return to hotel

September 20 (Sunday)
9:30  Leave Hotel
10:00-11:00  School Visit  
Observation of School Sports Festival
12:00-13:00  Lunch
13:00-16:00  Excursion to Miyajima Shrine (World Heritage Site)
17:30  Return to the Hotel

September 21 (Monday)
9:00  Leave Hotel
9:30-11:30  Visit to Hiroshima Municipal Education Center
12:00-13:30  Lunch
14:00-16:00  Visit to Hiroshima Prefectural Education Center
17:00  Return to hotel

September 22 (Tuesday)
9:00  Leave Hotel for 1-Day Visit to Rural Schools
10:30-12:10  Visit to Sera Junior High School  
Observation of Classes
12:30-13:10  Lunch
13:30-16:00  Visit to Ohmi Elementary School (Sera-Gun)  
Observation of Classes and Discussion with Teachers
17:30  Arrival at Hotel, and overnight stay

September 23 (Wednesday)
9:00  Departure from Hotel
12:00  Arrival back in Hotel Miel Parque Hiroshima
Afternoon  Free (National Holiday)

September 24 (Thursday)
9:30  Leaving Hotel
10:30-12:00  General Session
Venue: IDEC, Hiroshima University
Preparation of the Draft Report
12:00-13:30  Lunch
13:30-17:00  General Session
Preparation of the Draft Report
(14:30-15:00)  Tea/Coffee Break

September 25 (Friday)
9:30  Leaving Hotel
9:30-12:00  General Session
Venue: IDEC, Hiroshima University
Finalizing the Draft Report
12:00-13:30  Lunch
13:30-14:00  Closing Ceremony
(Venue: IDEC, Hiroshima University)
Closing Remarks by
Dr. Shuuichi NAKAYAMA
Chairperson, Hiroshima University
UNESCO-APEID Project Committee
14:00-15:00  Business Meeting
16:00  Return to hotel

September 26 (Saturday)
Departure for home country
Appendix C: Explanatory Notes

16 – 25 September 1998

Jointly organized by
The Hiroshima University APEID Committee
and the Japanese National Commission for UNESCO
within the Framework of the Asia-Pacific Program
of Educational Innovation for Development (APEID)
UNESCO PROAP, Bangkok

We are very pleased that we will be able to welcome you at the 1998 UNESCO-APEID Hiroshima Seminar in September. In order to make the seminar a success for you personally and for the organization, we would like you to read these documents carefully, and follow the instructions as much as possible.

You might have received the general information from your national UNESCO-Committee, but in order to be sure we repeat here the rationale and objectives of the 1998 seminar.

A. OBJECTIVES

Many countries in the Asia-Pacific Region have experienced rapid economic growth as well as far-reaching changes in their societies. Not only to sustain this economic development and pursuance of a better quality of life, but also in order to solve problems such as poverty, conflict, and protection of the environment in the approaching 21st century, education needs to be improved continuously. The quality of education, needless to say, depends to a large extent upon the quality of teachers. In many countries, however, negative trends are observed with regards to the conditions of teachers, which require thorough examination in order to secure effective education.

In the sixth programming cycle of APEID, the 5-year period from 1997 to 2001, annual international seminars are organized in Hiroshima in order to explore innovative strategies to improve the quality of teacher education in the Asia-Pacific Region. The topics of the sixth cycle are "enhancing computer literacy" (1997), "ensuring opportunities for professional development" (1998), "upgrading teacher qualifications" (1999), "improving the economic status of teachers" (2000), and "strengthening and upgrading teacher education programs" (2001).
Ensuring Opportunities for the Professional Development of Teachers

This year, the seminar will focus on problems related to the professional development of teachers in the Asia-Pacific Region. This year’s seminar has the following objectives:

- Identification and exchange of key experiences concerning current problems and issues related to teachers’ competencies, teacher needs and demands, and opportunities for the professional development (or in-service programs) of teachers in urban, rural, and remote areas;
- Exploration of innovative methods and approaches presently employed to provide opportunities for professional development of teachers;
- Design and improvement of national and international cooperative frameworks and action plans to increase opportunities for professional development of teachers.

RATIONALE

UNESCO-APEID has recommended concrete action for upgrading and renewal of education through the enhancement of knowledge, skills, and attitudes of teachers. In particular, the quality of interaction between teachers and students is critical for the success in education. To enable this, capable people need to be recruited into the teaching profession.

Furthermore, high quality programs need to be provided to prospective teachers in pre-service education. Also, opportunities for in-service education and professional development must be ensured to enable teachers in field to constantly upgrade their knowledge and skills. In order to attract capable people into teaching, the profession must have certain status both socially and economically.

In many aspects, however, the situation seems to have been deteriorating. In recent years negative trends have been observed, causing many capable and qualified teachers to leave their profession. Trends such as these suggest that relevant problems and issues concerning teacher education programs need to be examined comprehensively in order to improve the quality of teachers effectively.

SEMINAR PREPARATION

Country report

As participant to this seminar you are required to prepare a country report, that describes the situation of professional development in your country. Specifically the country paper should discuss the items specified earlier under the seminar OBJECTIVES. With regards to the country-report there are the following requirements and points of
The country report should be written in English;

- Length: approximately 15-20 pages (A4, double spaced) with a separate summary of about 2 pages;
- Whenever possible, provide statistical data in order to make a proper assessment possible. If you discuss new policy-initiatives in your paper, supply the supporting structures such as budgetary frameworks as well;
- The Director of the Seminar, Hiroshima University, must receive the edited paper before 4 September 1998;
- Please send at least one hard-copy of your paper, but we prefer to receive your paper as a computer-file. Most word-processor formats such as MS-Word and WordPerfect can be processed, please let us know what kind of word-processor you have used. Please send us your files on a MS-DOS formatted floppy disk, together with the hard-copy. It is also possible to send your files attached to an E-mail message. In that case, send your file to the following address: Igriek@ipc.hiroshima-u.ac.jp We will confirm receiving your mail as soon as possible;
- If you use photocopies from other sources or images, photo's etc. in your paper, please bring the originals or high-quality copies with you to the seminar.

Presentation of the country-report

- You will have 20 minutes to present your paper during the seminar, after your presentation there will be about 10 minutes for discussion. We would like to encourage you to present your paper instead of reading it.
- If you need any, the Seminar Committee will make the necessary arrangements such as a slide-projector, a overhead projector or a multi-media projector. Please let us know if you are planning to use any of these presentation-tools.

Requesting your support

The Hiroshima University UNESCO-APEID Associated Center is also asking your support. The Associated Center is in the process of establishing a database on teacher education, and we would therefore highly appreciate it if you could bring materials such as statistical data, teachers' guides, and teacher-education regulations to donate to our collection.
Appendix D: Hiroshima University APEID Seminar Committee

Committee Chairperson

Yoshinori TABATA
Professor, Graduate School for International Development and Cooperation (IDEC)

Vice Chairperson

Tatsuya KASAI
Professor, Graduate School for International Development and Cooperation (IDEC)

Members

Shigenobu MATSUOKA
Professor, Faculty of Education

Virgilio U. MANZANO
Associate Professor, Faculty of Education

Haruhiko TANAKA
Professor, Faculty of School Education

Morihisa SUZUKI
Professor, Faculty of School Education

Seiji INOUE
Professor, Graduate School for International Development and Cooperation (IDEC)

Hideki IWASAKI
Professor, Graduate School for International Development and Cooperation (IDEC)

Lyckle GRIEK
Research Associate, Graduate School for International Development and Cooperation (IDEC)

Takashi KATOH
Research Associate, Graduate School for International Development and Cooperation (IDEC)
### List of Terms and Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank (Nepal)</td>
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<tr>
<td>AEPM</td>
<td>Academy of Educational Planning and Management (Pakistan)</td>
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<td>AIOU</td>
<td>Allama Iqbal Open University (Pakistan)</td>
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<td>APS</td>
<td>Angan Pathshalas Schools, Courtyard Schools (India)</td>
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<td>ASEAN</td>
<td>Association of Southeast Asian Nations (Philippines)</td>
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<td>B.A.Ed.</td>
<td>Bachelor of Arts in Education (Pakistan)</td>
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<td>B.Ed.</td>
<td>Bachelor of Education (Bangladesh)</td>
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<td>B.S.Ed.</td>
<td>Bachelor of Science in Education (Pakistan)</td>
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<td>B.EEd</td>
<td>Bachelor of Elementary Education (Philippines)</td>
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<tr>
<td>BIT</td>
<td>Bangladesh Institute of Technology (Bangladesh)</td>
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<td>BP3GSD</td>
<td>Bagian Proyek Pengembangan Pendidikan Guru Sekolah Dasar (Primary School Teacher Development Project) (Indonesia)</td>
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<td>BPEP</td>
<td>Basic and Primary Education Project (Nepal)</td>
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<td>BSEd</td>
<td>Bachelor of Science in Education (Philippines)</td>
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<tr>
<td>Balitbang Dikbud</td>
<td>Badan Penelitian dan Pengembangan Pendidikan dan Kebudayaan (Office of Educational and Cultural Research and Development) (Indonesia)</td>
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<tr>
<td>C-in Ed</td>
<td>Certificate in Education (Bangladesh)</td>
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<td>CBSA (SAL)</td>
<td>Cara Belajar Siswa Aktif (Student Active Learning) (Indonesia)</td>
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<td>CEDEP</td>
<td>College of Education Extension Program (Philippines)</td>
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<td>CERID</td>
<td>Research Center for Educational Innovation and Development (Nepal)</td>
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<td>CFDF</td>
<td>College Faculty Development Fund (Philippines)</td>
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<td>CHED</td>
<td>Commission on Higher Education (Philippines)</td>
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<td>CIET</td>
<td>Central Institute of Technology (India)</td>
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<td>COE</td>
<td>Centers of Excellence (Philippines)</td>
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<td>CONSTEL</td>
<td>Continuing Studies in Education via Television (Philippines)</td>
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<td>CSS</td>
<td>Centrally Sponsored Scheme (India)</td>
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<td>CT</td>
<td>Certificate of Teaching (Pakistan)</td>
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<td>CTE</td>
<td>Colleges of Teacher Education (India)</td>
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<td>D-II</td>
<td>Diploma II (Two-year Post Secondary Training Certificate) (Indonesia)</td>
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<td>DANIDA</td>
<td>Danish International Development Assistance (Nepal)</td>
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<td>DBM</td>
<td>Department of Budget and Management (Philippines)</td>
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<td>DECS</td>
<td>Department of Education, Culture and Sports (Philippines)</td>
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<td>DEO</td>
<td>District Education Officer (Pakistan)</td>
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<td>DGHE</td>
<td>Directorate General of Higher Education (Indonesia)</td>
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<td>DGPSD</td>
<td>Directorate General of Primary and Secondary Education (Indonesia)</td>
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<td>DIET</td>
<td>District Institute of Education and Training (India)</td>
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<td>DLSU</td>
<td>De La Salle University (Philippines)</td>
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<td>DPE</td>
<td>Diploma in Primary Education (India)</td>
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<td>EAGWE</td>
<td>Equal Access of Girls and Women to Education (Nepal)</td>
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<td>EDCOM</td>
<td>Congressional Commission on Education (Philippines)</td>
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<td>EI</td>
<td>Education International (PROAP)</td>
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<td>ELTIP</td>
<td>English Language Teaching Improvement Project (Bangladesh)</td>
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<td>ERDP/Seti Project</td>
<td>Education for Rural Development Project (Nepal)</td>
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<td>ESEP</td>
<td>Engineering and Science Education Program (Philippines)</td>
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<td>FAPE</td>
<td>Fund for Assistance for Private Education (Philippines)</td>
</tr>
<tr>
<td>FAPE</td>
<td>Fund for Assistance to Private Education (Philippines)</td>
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<tr>
<td>FKIP</td>
<td>Fakultas Keguruan dan Ilmu Pendidikan (Faculty of Teacher Training and Educational Sciences) (Indonesia)</td>
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<td>FOE</td>
<td>Faculty of Education (Nepal)</td>
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<td>F.Sc.</td>
<td>Faculty of Arts certificate (Pakistan)</td>
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<td>F.S.Ed.</td>
<td>Faculty of Science Education certificate (Pakistan)</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>FUSE</td>
<td>Foundation for Upgrading the Standards of Education (Philippines)</td>
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<td>GASTPE</td>
<td>Government Assistance to Students and Teachers in Private Education (Philippines)</td>
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<td>GCET</td>
<td>Government College of Elementary Education and Training (Pakistan)</td>
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<td>GEP</td>
<td>Graduate Education Program (Philippines)</td>
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<td>GOI</td>
<td>Government of Indonesia (Indonesia)</td>
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<td>guru pamong</td>
<td>teaching practice trainer/supervisor (Indonesia)</td>
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<tr>
<td>guru pemandu</td>
<td>peer teacher-trainer (Indonesia)</td>
</tr>
<tr>
<td>HEIs</td>
<td>Higher Education Institutions (China)</td>
</tr>
<tr>
<td>HPVTS</td>
<td>Himachal Pradesh Volunteer Teacher Scheme (India)</td>
</tr>
<tr>
<td>HSC</td>
<td>Higher Secondary Certificate (Bangladesh)</td>
</tr>
<tr>
<td>HSEP</td>
<td>Higher Secondary Education Project (Bangladesh)</td>
</tr>
<tr>
<td>HSTTI</td>
<td>Higher Secondary Teachers' Training Institutes (Bangladesh)</td>
</tr>
<tr>
<td>IASE</td>
<td>Institute of Advanced Studies in Education (India)</td>
</tr>
<tr>
<td>IER</td>
<td>Institute of Education and Research (Pakistan)</td>
</tr>
<tr>
<td>IKIP</td>
<td>Institut Keguruan dan Ilmu Pendidikan (Institute of Teacher Training and Educational Sciences) (Indonesia)</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labor Organization (PROAP)</td>
</tr>
<tr>
<td>INGO</td>
<td>International Non-Governmental Organization (Nepal)</td>
</tr>
<tr>
<td>INSET</td>
<td>In-Service Training (Malaysia, Philippines)</td>
</tr>
<tr>
<td>IOE</td>
<td>Institute of Education (Nepal)</td>
</tr>
<tr>
<td>IPTT</td>
<td>In-service Primary Teacher Training (India)</td>
</tr>
<tr>
<td>ITU</td>
<td>International Telecommunication Union (India)</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency (Nepal)</td>
</tr>
<tr>
<td>KIP</td>
<td>Konsorsium Ilmu Pendidikan (Consortium of Educational Sciences) (Indonesia)</td>
</tr>
<tr>
<td>kabupaten</td>
<td>District (Indonesia)</td>
</tr>
<tr>
<td>Kanwil</td>
<td>Kantor Wilayah (Regional Office) (Indonesia)</td>
</tr>
<tr>
<td>Kecamatan</td>
<td>sub-district (Indonesia)</td>
</tr>
<tr>
<td>LET</td>
<td>Licensure Examination for Teachers (Philippines)</td>
</tr>
<tr>
<td>LPTK</td>
<td>Lembaga Pendidikan Tenaga Kependidikan (Educational Personnel Training Institution) (Indonesia)</td>
</tr>
<tr>
<td>M.Ed.</td>
<td>Master of Education (Bangladesh)</td>
</tr>
<tr>
<td>MIS</td>
<td>Management Information System (India, Indonesia)</td>
</tr>
<tr>
<td>MOE(C)</td>
<td>Ministry of Education (Nepal)</td>
</tr>
<tr>
<td>MOEC</td>
<td>Ministry of Education and Culture (Indonesia)</td>
</tr>
<tr>
<td>MOET</td>
<td>Ministry of Education and Training (Vietnam)</td>
</tr>
<tr>
<td>MOHA</td>
<td>Ministry of Home Affairs (Indonesia)</td>
</tr>
<tr>
<td>MOSW</td>
<td>Ministry of Social Welfare (Indonesia)</td>
</tr>
<tr>
<td>NAEM</td>
<td>National Academy for Education &amp; Management (Bangladesh)</td>
</tr>
<tr>
<td>NAP</td>
<td>National Action Plan (India)</td>
</tr>
<tr>
<td>NCED</td>
<td>National Center for Educational Development (Nepal)</td>
</tr>
<tr>
<td>NCEE</td>
<td>National College Entrance Examinations (Philippines)</td>
</tr>
<tr>
<td>NCERT</td>
<td>National Council of Educational Research and Training (India)</td>
</tr>
<tr>
<td>NCTB</td>
<td>National Curriculum and Textbook Board (Bangladesh)</td>
</tr>
<tr>
<td>NCTE</td>
<td>National Council for Teacher Education (India)</td>
</tr>
<tr>
<td>NEC</td>
<td>National Education Commission (Thailand)</td>
</tr>
<tr>
<td>NEDA</td>
<td>National Economic Development Authority (Philippines)</td>
</tr>
<tr>
<td>NESC</td>
<td>New Elementary School Curriculum (Philippines)</td>
</tr>
<tr>
<td>NESP</td>
<td>National Education System Plan (Nepal)</td>
</tr>
<tr>
<td>NITE</td>
<td>National Institute of Teacher Education (Pakistan)</td>
</tr>
<tr>
<td>NORAD</td>
<td>Norwegian Agency for Development Cooperation (Nepal)</td>
</tr>
<tr>
<td>NSSC</td>
<td>New Secondary School Curriculum (Philippines)</td>
</tr>
<tr>
<td>NTA</td>
<td>National Teacher Award (Thailand)</td>
</tr>
<tr>
<td>NWFP</td>
<td>North Western Frontier Province (Pakistan)</td>
</tr>
</tbody>
</table>
Appendices

OBC Other Backward Classes (India)
ODA Overseas Development Assistance
PAASCU Philippine Accrediting Association of Schools, Colleges, and Universities (Philippines)
PAISON Association of Private and Boarding Schools – Nepal (Nepal)
PAFTE Philippine Association for Teacher Education (Philippines)
PBC Process based Coursework (Malaysia)
PBET Philippine Board Examination for Teachers (Philippines)
PCL Proficiency Certificate Level (Nepal)
PEP Primary Education Project (Nepal)
PGDE Post-Graduate Diploma in Education (Nepal)
PGSD Pendidikan Guru Sekolah Dasar (Primary School Teacher Education (PSTE) (Indonesia)
PITE Provincial Institute of Teacher Education (Pakistan)
PMP Pendidikan Moral Pancasila (Pancasila Moral Education) (Indonesia)
PPTG Proyek Pendidikan Tenaga Guru (Teacher Education Project) (Indonesia)
PRODED Program for Decentralized Educational Development (Philippines)
PTC Primary Teaching Certificate (Pakistan)
PTI Primary Teacher Institutes (Bangladesh)
PTTI Primary Teachers Training Institution (India)
PTV4 Philippine Government Television Station (Philippines)
Project-RISE Rescue Initiative for Science Education (Philippines)
REPELITA Rencana Pembangunan Lima Tahun (Five Year Development Plan) (Indonesia)
RETTP Radio Education Teacher Training Program (Nepal)
RIHD Rehabilitation Institute and Hospital for the Disabled (Bangladesh)
SCERT State Council of Educational Research and Training (India)
SDEO Sub-divisional Education Officer (Pakistan)
SD INPRES Primary School constructed and funded under special Presidential Decree (Indonesia)
SEAMEO INNOTECH Southeast Asian Ministers of Education Organization Regional Center for
Educational Innovation and Technology (Philippines)
SEDEC Science Education Development Center (Nepal)
SEDP Secondary Education Development Project (Nepal)
SEDP Secondary Education Development Program (Bangladesh, Philippines)
SEDU Science Education Development Unit (Nepal)
SGO Sekolah Guru Olahraga (Primary School Sport Teacher School) (Indonesia)
SIDA Swedish International Development Co-operation Agency (India)
SIGS Summer Institute of Graduate Studies (Philippines)
SKP Shiksha Karmi Project (India)
SLC School Leaving Certificate (Nepal)
SMA Sekolah Menengah Atas (Senior High School) (Indonesia)
SMP Sekolah Menengah Pertama (Junior High School) (Indonesia)
SMT Science Master Trainer (Nepal)
SMU Sekolah Menengah Umum (General Senior High School) (Indonesia)
SNV Stichting Nederlandse Vrijwilligers, Netherlands Development Organization (Nepal)
SPG Sekolah Pendidikan Guru (Primary School Teacher Training School) (Indonesia)
SPP/CBSA Supervisi Pembinaan Profesional/Cara Belajar Siswa Aktif (Supervision of Professional
Development/Student Active Learning) (Indonesia)
TDAP Thesis/Dissertation Assistance Program (Philippines)
TEC Teacher Education Council (Philippines)
TED Teacher Education Division (Malaysia)
TEEP Third Elementary Education Project (Philippines)
TEI Teacher Education Institution (Philippines)
TERA Teacher Education Reform Agency (Thailand)
TERO Teacher Reform Office (Thailand)
TPA Tes Potensi Akademik (Academic Aptitude Test) (Indonesia)
TTC Teachers’ Training Colleges (Bangladesh, Malaysia)
Ensuring Opportunities for the Professional Development of Teachers

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>TTTC</td>
<td>Technical Teachers' Training College (Bangladesh)</td>
</tr>
<tr>
<td>TU</td>
<td>Tribhuvan University (Nepal)</td>
</tr>
<tr>
<td>UEE</td>
<td>Universalisation of Elementary Education (India)</td>
</tr>
<tr>
<td>UGC</td>
<td>Universities Grants Commission (India)</td>
</tr>
<tr>
<td>UGC</td>
<td>University Grants Commission (Pakistan)</td>
</tr>
<tr>
<td>UMN</td>
<td>United Mission to Nepal</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program (Philippines)</td>
</tr>
<tr>
<td>UPBJJ</td>
<td>Unit Pelaksana Belajar Jarak Jau (Implementation Unit for Distance Learning) (Indonesia)</td>
</tr>
<tr>
<td>UPOU</td>
<td>University of the Philippines Open University (Philippines)</td>
</tr>
<tr>
<td>UPP</td>
<td>Unit Pelaksanaan Program (Program Implementation Unit) (Indonesia)</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Aid Agency (Nepal)</td>
</tr>
<tr>
<td>UT</td>
<td>Universitas Terbuka (Open University) (Indonesia)</td>
</tr>
<tr>
<td>VEC</td>
<td>Village Education Committee (India)</td>
</tr>
<tr>
<td>VSO</td>
<td>Voluntary Service Overseas (Nepal)</td>
</tr>
<tr>
<td>VTI</td>
<td>Vocational Training Institute (Bangladesh)</td>
</tr>
</tbody>
</table>
Hiroshima University UNESCO-APEID Associate Center
Previous Reports & Publications

1987  Education for All: Eradication of Illiteracy, Provision and Improvement of the Quality of Universal Primary Education.  *(no copies available)*

1988  Education for All: Developing Teaching-Learning Materials for Primary Education in Difficult Contexts.  *(no copies available)*

1989  Education for All: Multi-media Learning Package for Primary Schools in Difficult Contexts.  *(no copies available)*

1990  Education for All: Parent-Teach Cooperation for Promotion of Primary Education in Difficult Contexts.  *(no copies available)*

1991  Education for All: Enhancing Learning Achievement of Children in Primary Schools in Rural Areas and Difficult Education Contexts.  *(no copies available)*

1992  The Universalization of Primary Education: Enhancing Learning Achievement of Children in Primary Education in Asia and the Pacific.  *(no copies available)*

1993  The Universalization of Primary Education: Meeting Basic Learning Needs and Enhancing Basic Learning Achievement of Primary School Children.  *(no copies available)*

1994  The Universalization of Primary Education: Enhancing the quality of Teacher Education to Promote the Role of the Teacher as a change agent towards the 21st Century.  *(no copies available)*

1995  The Universalization of Primary Education: Enhancing Professional Development of Teachers in Primary Education in the Asia and Pacific Region  *(no copies available)*

1996  The Universalization of Primary Education: Improving Effectiveness and Quality of Primary Education through the Strengthening and Professional Competencies in the Asia-Pacific Region.  *(no copies available)*

1997  Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region: Teacher Education for the Effective Use of New Information Media in Schools.


1999  Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region: Ensuring Opportunities for the Professional Development of Teachers.

Innovation and Reform in Teacher Education for the 21st Century in the Asia-Pacific Region:
Ensuring Opportunities for the Professional Development of Teachers. 1998 Report

Yoshinori Tabata & Lyckle Griek Eds.

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Seminar room at the Hiroshima University Graduate School for International Development and Cooperation

Seminar reception
Seminar Participants visiting Miyajima Island

Participants visiting Ohmi Elementary School
Ensuring Opportunities for the Professional Development of Teachers

The Sixth Cycle (1997-2001) of the Asia-Pacific Programme of Educational Innovation for Development (APEID) deals with a broad range of issues related to meeting the educational challenges of the present and future. The Delors Report: Learning the Treasure Within to UNESCO of the International Commission on Education for the 21st Century has provided the conceptual framework which has guided the formulation of the Work Plan of APEID for this Cycle.

In September 1998 the Hiroshima University UNESCO Associated Center organized the second seminar in the Sixth Cycle in its designated Programme Area, Teacher Education. The topic of the Seminar was “Ensuring Opportunities for the Professional Development of Teachers”. This report provides an overview of the current problems and issues concerning the professional development of teachers and teacher education in 11 countries: Bangladesh, China, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines, Thailand and Vietnam. Furthermore, it provides the future directions that the various countries are currently taking and discusses the possibilities for international cooperation in ensuring opportunities for the professional development of teachers.

Hiroshima University UNESCO-APEID Associated Centre

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