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JOURNAL OF EDUCATIONAL PLANNING AND ADMINISTRATION
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CONTENTS

	<i>Page No.</i>
ARTICLES	
The School and the Community <i>André Béteille</i>	191
Higher Education and Economic Development: India, China and the 21 st Century <i>Martin Carnoy</i>	203
Student Loan and Financing of Higher Education in India <i>Jandhyala B.G. Tilak</i>	231
Equity and Education <i>Dhanwanti Nayak</i>	257
RESEARCH NOTES/COMMUNICATIONS	
Role of Organizational Justice in Determining Work Outcomes of International and Local Academic Staff – A Case Study <i>Junaidah Hashim and Arif Hassan</i>	275
BOOK REVIEWS (See overleaf)	287

BOOK REVIEWS

- Models of Teaching by Jeanine (M. Dell'Olivo and Tony Donk) 287
V.P. Garg
- Development and Problems of Higher Education in Barak Valley and Karbi
Anglong Areas of Assam (Brinda Rymbai Brazeley) 289
P.C. Bansal
- The Management of University-Industry Partnerships in Eastern Asia: Report
of an IIEP/ESMU Distance Education Course (Michaela Martin, UNESCO) 292
Ivy Dhar
- Making Sense of Research (What is good, What is not; and How to Tell the
Difference (Elaine K. McEwan and Patrick J. McEwan) 294
R.P. Singh
- Monitoring Educational Achievement (T.N. Postlethwaite) 296
R.P. Singh
- Private Higher Education: An International Bibliography [and] International
Higher Education Finance: An Annotated Bibliography (Alma Maldonado,
Yingxia Cao, Philip G. Altbach, Daniel C. Levy and Hong Zhu) 298
Jandhyala B.G. Tilak

The School and the Community*

André Béteille**

I have to begin this address with an apology. I am not an expert or a specialist in the field of elementary education. However, as a concerned citizen, I recognize its great value as an end in itself, and, as a sociologist, its importance as a means to other ends, such as higher education and many forms of gainful employment.

Indian society is still a highly stratified society in which the channels of individual mobility are narrow and restricted. In the modern world, this state of affairs is unhealthy from the economic as well as the political point of view, but it cannot be remedied without massive advances in education in both quantitative and qualitative terms. Elementary education must not only be made available to all, but its standard must be such that those who receive it are able to put it to some use in subsequent phases of their lives.

It is well to remember that the idea that all children, irrespective of class, community and gender, should go to school and spend a minimum period of time in it is a relatively new one, not only in India but in the world as a whole. Even in countries such as England, France and Russia, children of peasants and workers did not all go to school as recently as in the 19th century. One has only to read the novels of Dickens, Balzac and Tolstoy to realize how important, socially, economically and politically, the division was between the lettered and the unlettered. Effective participation of all members of society in civil and political life had to await the effacement of that division.

Universal elementary education does not do away with all inequalities, but it does undermine some of the most odious forms of social exclusion. While social stratification continues to exist in Britain, France and other western countries, its social and political significance has been reduced through increased individual mobility across households and across communities. Inequalities in the distribution of life chances are a reality, but so are high rates of individual mobility. Universal elementary education is not a sufficient condition for the changes experienced by the advanced countries in the last hundred years, but it is a necessary condition for them. Without education, for which elementary education provides the base, the chances of individual mobility in a class divided society are severely limited.

This essential condition for a society to take its place in the modern world remains unfulfilled in India even sixty years after independence. The continuing divide between

* Keynote address delivered at the National Learning Conference 2007 on 'Equitable Education for Equitable Society', organised by the Azim Premji Foundation, Bangalore (May 24-26, 2007).

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those who enjoy the benefits of education and those who have little or no access to it is perhaps the most significant index of the backwardness of a nation in the 21st century. As I have just pointed out, that divide was common in many if not most countries of the world till the end of the 19th century. But other countries, including Japan and China, have moved ahead at an increasing pace whereas we have just managed to crawl along.

There are many factors responsible for our failure in the field of elementary education. Hierarchical values and attitudes have been more deeply entrenched and have prevailed over a longer span of time in India than in any other country in the world. These values and attitudes have been particularly marked in the cultivation of learning which was made the exclusive preserve of a small number of communities. It was not simply a matter of there being not enough schools but of a rooted belief that learning from books was meant only for a few and not for all. The conviction about the superior aptitude of the few at the top was matched by the apathy and fatalism of the masses of people. Neither the sense of inborn superiority nor the apathy and fatalism have fully disappeared.

The hierarchical attitudes of the upper castes were carried over into the new middle class that began to emerge by the end of the 19th century. It was that class which was, and still is, responsible for the development of education in the country. While it paid lip service to the principle of equality it created and administered institutions for the education of its own children, leaving to their fate the vast masses of children from the submerged strata of society. The schools in the rural areas and even in the towns and cities were few and far between, and they were generally of poor and indifferent quality. The indifferent quality of such schools reinforced the apathy towards education of the disadvantaged classes and communities.

Despite the disappointingly slow pace of change, things have not stood still in the last sixty years. There have indeed been developments in the field of education, but those developments have been highly uneven. The literacy rate has risen, although the official reckoning of it in purely formal terms leaves much to be desired. Through all the disorder, inefficiency and venality of public life, new schools are being established and additional provisions for their funding made.

It is well to remember that the provision of free and compulsory education for all children up to the age of fourteen was made a directive principle of state policy in the Constitution of India in 1950. More recently, it has been decided to make it a fundamental right. This was done in response to the widespread expression of public concern over the poor state of education in the country. How far making what was a matter of policy into a matter of right will by itself change the horizon of opportunities and expectations is difficult to foretell. But there is undoubtedly greater awareness all around of the benefits of education and the need to make those benefits available to all irrespective of class, community and gender.

We are still in the early stages of building a secure and dependable system of universal elementary education in India. By a secure and dependable system of education, I mean one that is attentive not only to the numbers of school entrants and

school leavers but also to the kind and quality of education the schools are able to provide. There is no doubt that the number of children in school is increasing and the financial outlay on elementary education is also rising. On the other hand, our knowledge of how elementary schools actually work in different social settings is both very sketchy and very patchy. I will later stress, at an appropriate place, the need to undertake more research on a sustained basis, on the ways in which schools of different kinds operate as social institutions.

Going just by numbers in matters relating to education, particularly in a society as highly differentiated and stratified as ours, can be deceptive and misleading. Indian society is divided into many classes and communities, and it will be unrealistic to presume that those divisions will not cast their shadows on the schools where elementary education is provided. There are elementary schools in the metropolitan cities to which the educated professional classes send their children with a strong sense of how well they can prepare the children for their passage through secondary and higher education. Other schools are poorly or very poorly endowed with teachers who are ill-trained and frequently absent, and where very little teaching is done. In the broadest sense, stratification among schools reflects stratification in the wider society, and it is difficult to radically change the former without some change taking place in the latter.

Education does not eliminate social inequality. It has not done so in any country, and it will be unrealistic to expect it to do so in India in the near or even the distant future. But it can and should eliminate the more extreme forms of it and reduce its rigours by enlarging the possibilities of individual mobility. A society that encourages and promotes individual mobility is not a society that has done away with social stratification, but it is closer to the ideals of democracy than one which is both hierarchical and resistant to individual mobility.

Modern education has a certain formal organization that cannot be wished away, no matter how greatly we deplore its excesses. A certain degree of formal organization became inescapable as the demand for education became more widespread, not to say universal. In the past and until quite recently, only a few went to school while the rest received such education as they could from the home or the community or some other agency. Now, what is true of every institution is that, while it provides certain facilities, it also imposes certain constraints, and the school as an institution is no exception to this rule.

As education became more institutionalized, it also became more rule-bound. Such rules may be more rigid or more flexible, but in every case they must correspond to the aims and objectives of the institutions they seek to govern. It would be unreasonable to regulate a primary school by rules that may be appropriate to a secondary school, just as it would be inappropriate to regulate a university by rules for regulating the conduct of both teachers and students in a secondary school. The conditions of access to a primary school cannot be the same as those to a university. Those who point to the linkages between primary, secondary and higher education sometimes overlook the obvious fact

that different educational institutions are entrusted with different tasks and, hence, they cannot all be regulated by a single set of rules.

In the modern world, elementary education is the point of entry into a vast and complex institutional system that has many grades and levels. It will be generally agreed that elementary education should be available to all, and that every child, boy or girl, should find a place in an elementary school. I must repeat that this is a modern viewpoint that has made its way into the world only since the middle or even the end of the 19th century. Even at the time of independence the majority of children in the relevant age group were out of school in India. We have made some progress since then but, given our material and intellectual resources, that progress leaves much to be desired.

We adopted the principle of universal elementary education at the time of independence and wrote it into the Constitution of India. As I have already noted, it is now not just a matter of policy but also a matter of right. Making admission to elementary school universal means that there should be no discrimination in the matter of admission on the basis of caste, creed or gender, or on the basis of ability or performance. It is generally acknowledged that tests of scholastic aptitude are inappropriate and should be dispensed with in admissions to the first level of the educational system although such tests cannot be avoided for admission to a college or a university.

Although the principle of universal elementary education was adopted at the time of independence, there were not enough schools in the country at that time to which all children could be admitted. This was true not only of the remote rural areas but also of many towns and cities. I do not wish to go into the story of our failure to build new schools on the scale required in the early years of independence. We left too much in the hands of the government, and the government did not do enough.

There has been a considerable increase in the number of elementary schools in the last couple of decades although there are not enough of them even now to provide for all. The increase in the number of schools has been accompanied by a differentiation of quality and standard. Official statistics dwell on the increase in numbers as, indeed, they should; however, they tell us very little about variations in what is taught and how it is taught even at the point of entry into the educational system. A close examination of these variations is indispensable if we are to understand how disparities in ability and performance increase and intensify as students move upwards from one stage to the next in the educational system. Those, whose education in elementary school has been deficient, fare badly at higher levels of education where tests of ability and performance are indispensable. It is wrong to expect those who have been taught poorly, or not at all, in elementary school to perform adequately in tests of admission to the university, and then to attribute their failure to the social prejudices of the professors.

Differentiation and stratification within the educational system are features of all large and complex modern societies. We know a great deal about the ways in which they operate in countries such as England, France and the United States (Devine 2004; Boudon 1974; Jencks et al 1979), but very little about their actual operation in India. One can say on the basis of a general understanding of human societies that they are likely to

be more extreme in India than elsewhere. As I have said, ours is a highly stratified society, marked by extremes of inequality in the distribution of life chances among individuals and households. It will be unrealistic to expect that educational institutions in India can be insulated from the inequalities that permeate the rest of society.

I would like to emphasize that differentiation and stratification in education are present at the very point of entry into the system, at the level of the primary school itself. Educated parents have become increasingly conscious of the need to monitor the school work of their children so that their passage through the successive levels of the system is smooth and easy. Educators may inveigle against applying pressure for scholastic achievement at such an early age, but middle-class parents often have other ideas for their children. In an increasing number of urban middle-class homes the grooming for scholastic success begins even before admission to primary school.

There is now a large and expanding middle class not only in major metropolitan cities but also in smaller urban centres. There was a middle class even sixty years ago, but it was relatively small and its expansion slow. Things have changed substantially in the last couple of decades. A defining feature of the middle class today is its keen appreciation of the opportunities for upward mobility. It wants advancement for itself through education and professional employment, and it will pay any price to secure that advancement for its children. Anyone who has had anything to do with education will know what members of the emerging middle class are prepared to do to secure admission in a good school for their children right at the point of entry.

Until the time of independence, there was perhaps less anxiety among parents over the education of their children, and it was confined to a small section of the middle class whose members belonged mainly to a handful of upper castes. Today the education of children with a view to planning their future careers has become a concern with growing numbers of manual workers in the organized sector. Large public sector undertakings have schools for the children of their employees, and these schools act as important channels of upward mobility. Those who work in offices and factories want not only schools but good schools for their offspring. If a manual worker happens to work in the Bhilai Steel Plant or with a Reliance company, he may be able to secure better schooling for his children than a clerk or even a school teacher in a provincial town. By better schooling I mean here the kind of schooling that makes entry into the more coveted institutions of higher education relatively easy.

Not all manual workers are employed in the organized sector. In fact, the majority of them work outside that sector. There the prospects for the schooling of children are very different. For the vast masses of migrant workers and other workers in casual employment, living from hand to mouth and moving from one job to another, education in a good school or, for that matter, in any sort of school is not within easy reach. They lack not only the material resources but even the information and the aspiration that are spreading across all levels of the middle class and into the organized working class. Differences in resources, perceptions and aspirations correspond to unequal life chances among parents, and generate unequal life chances for their children.

There has been an increase in public concern over elementary education in the last ten or fifteen years. There is greater awareness of the price being paid for past neglect and gathering enthusiasm for doing what was not done in the early phase of independence. My sense is that the enthusiasm is driven by a certain measure of wishful thinking about what can be done to establish equality of opportunity in elementary education here and now, and in secondary and higher education in the short run. Our plans and projects are unlikely to bear fruit if we wish out of existence the reality and obduracy of social divisions in India and in particular the class divisions based on wealth, employment, occupation, income and education.

How we address issues of social policy depends in some measure on how we look at social reality. There are two contrastive perspectives on society that are commonly encountered in our country. The first I will refer to as the 'fatalistic' and the second as the 'utopian' perspective. The fatalistic perspective is based on the presumption that things are as they are because that is how they have always been and that is how they will continue to be; the utopian perspective, on the other hand, presumes that any desirable state of affairs can be brought into being provided people with the necessary goodwill are prepared to bring it into being.

The utopian and the fatalistic orientations are not characteristic of two distinct and separate sets of persons. They are often found in alternate phases in one and the same individual. Where the utopian expectations are extravagant and unrealizable, they are likely to be frustrated and followed by a fatalistic turn of mind. In that sense there is a kind of natural affinity between the utopian and the fatalistic dispositions. In contrast with the fatalistic or the utopian orientation is the pragmatic orientation which does not accept the existing reality as unchangeable. It also does not pursue programmes of change that wish the constraints of the real world out of existence.

The idea that a school system can be designed in such a way that every school will have material, pedagogical and other resources to provide education of the same quality and standard to every pupil is not a workable one from the policy point of view in a country like India. A school system, if it is properly designed, can do something to reduce the inequalities of life chances among persons. It cannot dismantle at one stroke – or even through a succession of Five-Year Plans – all the accumulated inequalities of a hierarchical society with which people have lived more or less comfortably for two thousand years.

It may be useful to consider very briefly what it takes to dismantle the entire structure of inequality in education and society. The Chinese example has some lessons for us in this regard. During the Great Proletarian Cultural Revolution of 1966-76, the Chinese did succeed to a large extent in dismantling the established hierarchies in education, but the success was achieved only by paying an enormous price in social dislocation and human suffering. Indians who look forward to the kind of revolutionary transformation the Chinese underwent do not ponder sufficiently on the costs that it entailed. And inequalities in the Chinese educational system did not disappear but only went underground to come out into the open once again.

Education can and should be put to the service of creating a better society, but our approach should be realistic. It undoubtedly contributes to the removal of many odious distinctions and it creates channels for individual mobility (Erikson and Goldthorpe 1993). But education also contributes to the reproduction of inequality, and that fact must not be lost to sight (Bourdieu and Passeron 1977). A great deal depends on the structure of the society and the political environment within which the educational system operates.

The first and most urgent priority should be to put the service of every child of the appropriate age into elementary school and to provide for a sufficient number of elementary schools that will have the basic material, social and cultural resources required for decent education. This can be done without agonizing about the quality and standard of elementary education that rich and resourceful middle-class parents driven by the ambition for upward mobility are able to buy for their own children. In regard to both education and society, the issue is not of attaining equality in every respect but of eliminating extreme and egregious forms of material deprivation and social exclusion.

We are too easily diverted by the rhetoric of equality from solvable practical problems. Here I would like to make a distinction between equality and universality, and make a strong case for the latter. Universality requires that certain basic facilities and capabilities be placed within the reach of every member of society without consideration of individual merit or need; in short, that they be made universally available. Obvious examples of what can and should be made universally available are elementary education and primary healthcare.

The educational system will generate its own inequalities in due course of time. We may succeed in regulating those inequalities up to a point, but we cannot eradicate them. This is particularly true in a world in which knowledge is advancing at an explosive rate. Even if we succeed in creating equality of opportunity in the school, the college or the university, we will fail to have equality of outcome. If we strive to maintain uniformity of outcome, we will only succeed in stifling effort, initiative and the pursuit of excellence. All we can aim to do is to see that social advantage does not translate too easily into scholastic advantage, and that is by no means an easy thing to do.

There is no educational system that is not embedded in a social system. In a society such as ours, it is inevitable that different schools will be endowed with different, not to say unequal, material and pedagogic resources. It is the obligation of the state and other public bodies to see that no school falls below a certain level, to aid and support those that have fallen behind and not pull back those that are moving ahead. The philosophy of the Levellers is not a good philosophy on which to build an educational system.

It will be agreed by all that we need to provide elementary education for all, that our record in this respect has been rather poor so far, and that we must do a great deal more to catch up with the rest of the world. But who is to take the responsibility for doing what needs to be done, that schools meeting the basic minimum requirements of pedagogy are created and maintained? It is not simply a matter of putting more money into education, it is also a matter of creating functioning institutions in which teaching and learning can

take place. The government can provide the funds, and the bureaucracy can see that the funds are properly accounted for. But can the government and its bureaucracy create and maintain the institutions that are indispensable for teaching and learning? I am not speaking now of good or bad schools from a scholastic point of view, but of the regularity and routine of the everyday activities which are essential to the life of any school as an institution.

I cannot say much from personal knowledge or experience on the health of our elementary schools as institutions in which regular activities are performed according to the clock and the calendar. There will obviously be a great deal of variation across schools in different locations in the different parts of the country. But even where the problems of funding have been attended to, we cannot take the institutional health of the school for granted. What little experience I have had of higher education has made me realize that the institutional life of the college or the university is politically volatile but academically listless. In many such places, very little goes on. Attendance is irregular; classes are not held according to the timetable; examinations are delayed or disrupted; and there is a general atmosphere of apathy and indifference among both students and teachers.

We know next to nothing about the social atmosphere in different types of elementary schools, whether it is marked by good cheer, apathy, or sheer neglect all around. Does the school appear to its pupils as something to be enjoyed or merely endured? The statistics of teacher absenteeism provide little comfort although, here again, there are bound to be very large variations between schools of different types. Statistics do not, in any case, tell the whole story. Teachers may mark themselves present but actually do little for the care of those put in their charge. I am told that there are many schools, now even in semi-urban villages, where teachers do most of their teaching outside the school as private tutors or coaches for additional payment.

What the state and its agencies cannot be expected to do in terms of social participation or regulation can legitimately be expected of the community. Indeed, it is difficult to see how an effective system of elementary schools can be established and maintained without some involvement from the local community. Wherever elementary schools have worked well, they have done so because of the support of the community.

There has been a waxing of enthusiasm for the community in recent years, partly in response to the disenchantment with the state and its agencies. I do not wish to throw cold water on this enthusiasm, but we need to take a hard look at what we call the community in India. It may turn out that, instead of being the perfect solution, the community is part of the problem. Many well-informed and knowledgeable persons, who are fully aware of the deep divisions and inequalities – of class, of caste and of gender – in Indian society as a whole, somehow manage to persuade themselves that the Indian community is free from those divisions and inequalities. This utopian vision of the community does not fit the actual reality of the Indian village very well.

Many of the leaders of the nationalist movement represented the Indian village as a 'little republic' and a haven of stability, order, harmony, self-sufficiency and self-

governance. This is the representation that we find in the writings of Mahatma Gandhi and Jayaprakash Narayan. But it did not go unchallenged. It was clinically and mercilessly demolished in a celebrated speech made by Dr B R Ambedkar in the Constituent Assembly. 'I hold that the village republics have been the ruination of India. I am therefore surprised that those who condemn provincialism and communalism should come forward as champions of the village. What is the village but a sink of localism, a den of ignorance, narrow-mindedness and communalism?' (Constituent Assembly Debates, 1989, Vol. 7, p.39).

My own fieldwork in a south Indian village where I lived in 1961-62 (Béteille 1965) convinced me that Dr Ambedkar's view of it was far closer to the reality than the view of it as a harmonious and unchanging little republic. Other community studies made by my colleagues and students in the 1960s and 1970s confirmed my belief that Dr Ambedkar's view was substantially correct (Chakravarti 1975; Bliss and Stern 1982; Madan 2002). It is now nearly sixty years since Dr Ambedkar made his statement in the Constituent Assembly, and the Indian village has undergone many changes during this period, but it is doubtful that the divisions and inequalities of gender, caste and class have disappeared without leaving any trace.

It is far from my intention to suggest that we should turn our backs on the Indian village and proceed through some other avenue if we are to promote elementary education in the country. We cannot do it, and we should not try to do it. All I am saying is that if we are to succeed in our endeavours, we must keep a close eye on the reality of the school and the community, and not allow social analysis to be displaced by ideology.

If the observations I have made appear somewhat vague and inconclusive, the fault does not lie entirely with me. In preparing this lecture, I have been handicapped by the lack of sustained critical discussion of the subject based on reliable empirical material. If such material exists, all I can say is that it is not easily available. I am aware that there is a growing body of statistical material on elementary education. That material answers a number of important questions, but it does not answer the questions that I have raised which I believe are also important.

We do not have much sustained research on the school as a social institution, as a field of social interaction with its internal strains and tensions; or of the school's relationship with the community and the wider society within which it exists. The relationship between school and society is replete with ambiguities. It is a complex and difficult subject into which social science research in India has not entered very deeply. We do not have any satisfactory typology of schools beyond classifications made in purely formal terms such as size, material resources, and source and type of funding. It is difficult to see how we can have informed public discussion of elementary education in the absence of such research.

It is not easy to explain why research in the sociology of education, and particularly, on the social situation of the school has not received the serious attention it deserves. When sociological research began to expand in India fifty years ago, the small number of scholars who were entering the field devoted their attention to other areas of enquiry, and

there were many of those to attract their attention. The modern school, including the elementary school, is an open and secular institution and, as such, is very different in its social texture from the traditional institutions based on kinship, caste and religion. The success of open and secular institutions in India will depend in no small measure on how well the school socializes its pupils for participation in forms of interaction that are very different from those to which their forefathers had been accustomed.

In the meantime, the orientation of research in sociology and related social science disciplines has changed from 'delayed-return' to 'immediate-return' research (Béteille 2006). The kind of research on the sociology of the school that I have in mind and that will explore the nature of interactions within the school is 'delayed-return research', and it is no longer popular today.

Social scientists in the universities often complain that there is no money for social science research. This is not entirely true. There is more money for research now than there was fifty years ago, but most of it is for 'immediate-return' research. Funding agencies have become result-oriented; they not only want results, they want quick, not to say immediate, results. The forms of research are maintained in terms of sample size, design of questionnaire, and so on, but the results are often trivial and lead to little new insight. This kind of research is being increasingly organized by agencies outside the universities which do not generally have a long-term commitment to the accumulation of intellectual capital. Their main obligation as they see it is the submission of project reports to the funding agencies.

'Delayed-return' research is costly, not so much in terms of money as of effort and time. It aims at the accumulation of knowledge on a long-term basis; its course is uneven and its outcome not always guaranteed. It cannot clearly anticipate the outcome in advance and whether that outcome will be of immediate practical benefit or mainly of intellectual value, or neither.

I do wish to emphasize that serious research is costly in the sense that it does not always lead to a fruitful outcome. Where it comes to a subject of such immediate practical concern as elementary education, the funding tends to flow to agencies outside the universities, and the universities are generally out of funds. Hence, research in the sociology of education leads to very little long-term accumulation of intellectual capital. Yet a deeper and more comprehensive understanding of education cannot come without a long-term investment in research, and without that understanding, public action will lack direction. The fact that research does not always lead to fruitful or practical outcomes cannot be an argument against supporting it on a long-term basis.

Advance is being made in the spread of elementary education and various parties are contributing to the advance. Greater advance requires wider participation. There is no doubt that the advance needs to be monitored through the collection and analysis of data on a more extensive basis. This kind of monitoring is necessary to enable people to know how well particular policies or programmes are working. Funding agencies, within or outside the government, would naturally like to know whether the resources being put into education are producing the expected results. What I am asking for is something

more than this, which is research that can tell us whether and to what extent long-term shifts are taking place in the relationship between the institutions of education and the communities in which they are embedded.

Long-term advances cannot take place without changes in the structure of communities and without the creation of durable institutions for learning and teaching. There are no recipes available either for changing the structure of communities or for creating durable institutions. But little progress will be made unless we get to know better how communities are organized today and how institutions actually operate within them.

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Higher Education and Economic Development India, China, and the 21st Century*

Martin Carnoy**

Abstract

In this paper, the author assesses predictions about economic development in four potentially leading economies, i.e. Brazil, Russia, India, and China, (known as the BRIC countries), focusing mainly on India and China, and in terms of one key element in the growth process – human capital, especially higher-end human capital. The author argues that in the new information economy, university educated labour is crucial to economic development. Although all of these economies have other strengths (cheap labour, large internal markets, high levels of industrialisation, and, in the case of Russia, enormous reserves of natural resources), much of the possibilities for sustained growth in the medium and longer run depend on whether they can develop and utilise high level human capital for the organisation and innovation required in today's (and tomorrow's) global information economy. This does not mean that the quality of education at lower levels of schooling is not that important. At least two of the countries, Brazil and India, still have serious problems with educational quality (and, in India, even with quantity) at lower levels of schooling. However, since one of the main features of the new global knowledge economy is the increasingly important role of the quantity and quality of higher educated labour, the author analyses these four countries' university systems and where they are headed.

Economists have focused mainly on the quantitative aspects of higher education – the number of graduates in the labour force – in assessing whether an economy is allocating resources for maximum growth. In these terms, Russia is in a favorable position, with a large stock of highly educated people available

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for its current and future labour requirement. China is expanding its higher education system the most rapidly, and India the least rapidly. Although many analysts believe that India has sufficient absolute numbers of engineers and scientists and has advantages over China in moving towards an information-based advanced service economy, Tilak (2007) and others have pointed out that, proportionately, India (and we might add, Brazil) has very few highly educated technical and service personnel. The paper explores the potentially serious problems in all the four countries concerning the quality of university education for all and the small percentage of university graduates who attended elite institutions, specialising in programs that might be considered world class. Although numbers of graduates are important, the issue of critical thinking and innovativeness, which would be fostered by college teachers who know how to develop and nurture such skills in students and higher education institutions that provide incentives for such teaching, may be even more important in the future.

Introduction

“Over the next 50 years, Brazil, Russia, India and China – the BRIC economies – could become a much larger force in the world economy. Using the latest demographic projections and a model of capital accumulation and productivity growth, we map out GDP growth, income per capita and currency movements in the BRICs economies until 2050. The results are startling. If things go right, in less than 40 years, the BRIC economies together could be larger than the G6 in US dollar terms. By 2025 they could account for over half the size of the G6. Currently they are worth less than 15%. Of the current G6, only the US and Japan may be among the six largest economies in US dollar terms in 2050.”

Wilson and Purushothaman (2003).

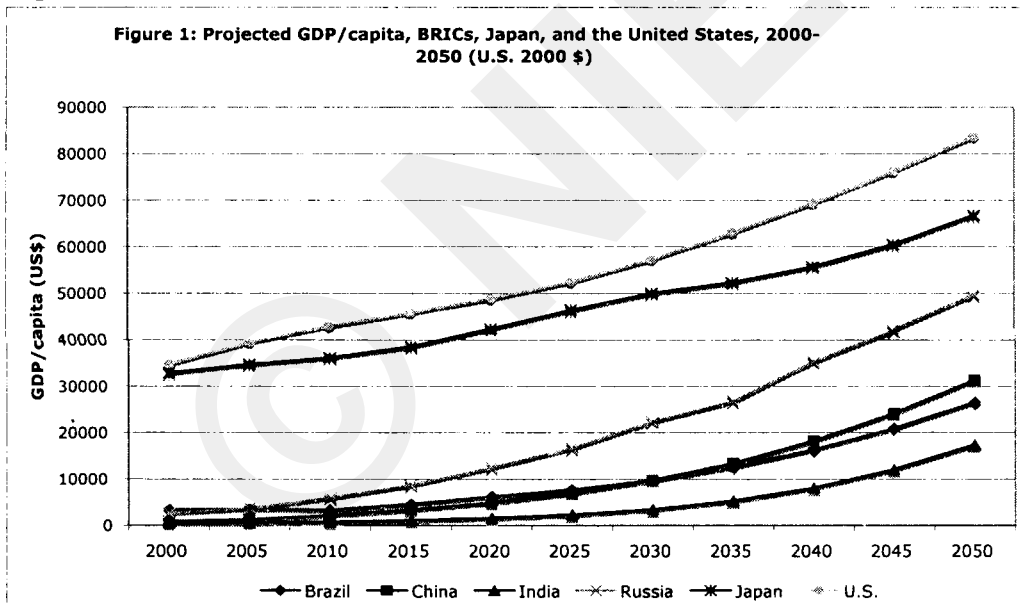
In the 1960s and 1970s, development economists often compared the future development possibilities for India and China, the world’s most populous economies, and for Brazil, the largest Latin American economy. Under the Communist regime, China had invested heavily in the health and education of its masses, and had forcibly limited population growth. Following the Soviet model, it based its economic development on heavy industry protected from international competition. The Soviet model influenced India as well, and India too, based its economic growth strategy on the development of heavy industry behind high tariff walls. Brazil followed a similar strategy of import substitution industrialisation.

In those days, Brazil’s economy was booming. Development prospects looked good, although a repressive military regime suggested political problems. India was undergoing the Green Revolution but was saddled with a highly protected, inefficient industrial economy and a high proportion of low productivity subsistence agriculture. Russia and China had made great strides in eliminating famines and in building infrastructure, but

seemed to be more concerned with ideological purity and military superiority than economic growth.

The world has changed radically since 1980, and with it the BRIC societies. Although India and China were hardly touched by the debt crisis of the early 1980s, they responded to globalisation by opening up their economies independent of any IMF pressure. Brazil and the rest of Latin America lowered tariffs and attempted to compete in the world economy under a cloud of heavy debt repayments and stringent conditions imposed by international financial institutions. The fourth BRIC economy, Russia, went through a startling political and economic transformation after 1989, suffering through a huge economic downturn, and a subsequent shift of wealth to a relatively small number of private individuals, mainly connected to former state enterprises and to the exploitation of natural resources.

Given these changes in the world economy and the new involvement of the BRICs in it, what are the prospects for these societies? Are the Goldman Sachs analysts, quoted above, correct in predicting enormous growth in the BRICs over the next 45 years? (Figure 1).



Source: Wilson and Purushothaman, 2003.

In this paper, I assess predictions about BRIC countries' economic development, focusing mainly on India and China, in terms of one key element in the growth process – human capital, especially higher-end human capital. I will argue that in the new information economy, university educated labour is crucial to economic development. Although all of these economies have other strengths (cheap labour, large internal markets, high levels of industrialisation, and, in the case of Russia, enormous reserves of natural resources), much of their possibilities for sustained growth in the medium and

longer run depend on whether they can develop and utilise high level human capital for the organisation and innovation required in today's (and tomorrow's) global information economy. This does not mean that the quality of education at lower levels of schooling is not as important. At least two of the countries, Brazil and India, still have serious problems with educational quality (and, in India, even quantity) at lower levels of schooling. However, since one of the main features of the new global knowledge economy is the increasingly important role of the quantity and quality of higher educated labour, we focus on these four countries' university systems and where they are headed.¹

It is particularly useful to assess economic development prospects comparatively. The four societies we are discussing are very different, even though they share a common characteristic of large geographic size and large populations. The variation allows us to discuss a number of different factors that might contribute positively or negatively to future economic development, and to understand better what is important in the economic development process.

I begin the paper with a discussion of why these societies' higher education policies are so important for their future. The second section compares the educational investment patterns in the four countries over the past thirty years and their current higher educational policy. The third section focuses on the main problems facing the higher education systems in each country and their implications for future economic development.

Education and Economic Growth

Individuals are interested in taking more schooling, partly because they can earn more and get better jobs, on average, with more schooling. For many, more schooling can be a source of social mobility. Similarly, nation-states and regions are interested in raising the average level of schooling in their population because they think that doing so will improve productivity, increase economic growth, raise the quality of jobs in the economy, and reduce poverty and inequality.

Some of the earliest work in the economics of education argued that a major effect of more education is to improve labour's capacity to produce. Because more highly educated workers are more literate and numerate. They should be easier to train to do more complex tasks. Further, they should have better work habits, particularly a greater awareness of time and more internalised norms that would make them more dependable.

Nations with more educated labour forces are characterised by higher output per worker, but typically these nations also have more physical capital per worker. Exactly how education increases productivity, how important it is, and in what ways it is important are difficult questions that economists have been unable to answer definitively.

¹ For earlier attempts to draw attention to the increasing importance of higher education in the new information economy, see Castells, 1991. More recently, the World Bank did an about-face, officially recognising the importance with the publication of *Higher Education in Developing Countries: Perils and Promise* (World Bank, 2000).

Controversy also surrounds the *kind* of education that contributes most to growth—general schooling, technical formal training, or on-the-job training—or what *level* of education contributes most to growth—primary, secondary, or higher education. I will argue that the case for higher education as a key factor in economic growth has grown stronger in recent years.

One of the clues that education does contribute to growth and how much it may contribute is that countries with higher levels of economic growth have labour forces with higher levels of formal schooling. Such a *macroeconomic approach* to the relation between education and economic growth emphasises the correlation between the stock of human capital and the increase in economic output per capita. This may just indicate that as individuals earn more income, they purchase more schooling for their children, just as they would buy a refrigerator or a family automobile. In that case schooling would be primarily a *consumption* good, not an *investment* good like a machine or a computer system. However, economists have been able to show that, *on average*, countries that have sustained high levels of economic growth are also those who have higher levels of literacy and have invested steadily in raising the education of their labour force.

With the shift to an information economy, globalisation, and flexible organisations of production, economists have taken these arguments about human capital in the production process a step farther. Theories of development now argue that developing nations have a better chance of catching up with the more advanced economies when they have a stock of labour who have the skills to develop new technologies themselves or to adopt and use foreign technology.

The claim that educated workers adjust more effectively to rapid change in opportunities and technology implies that in today's more rapidly changing and more competitive markets, the payoff to education should rise. The growth of science-based industries—chemicals, biotechnology, telecommunications, information systems—also means that economic development depends increasingly on highly educated and scientifically trained labour. Yet, more than simply increasing the demand for scientifically trained labour, economists argue that the new types of production reward innovation and learning-by-doing on a broader scale, even among non-scientific-ly-oriented workers.

In this kind of model, more education in the labour force increases output in two ways: (a) education adds skills to labour, increasing the capacity of labour to produce more output; and (b) education increases the worker's capacity to innovate (learn new ways of using existing technology and creating new technology) in ways that increase his or her own productivity and the productivity of other workers.

The first of these emphasises the human capital aspect of education (education improves the quality of labour as a factor of production and permits technological development); the second places human capital at the core of the economic process and assumes that the externalities generated by human capital are the source of self-sustaining economic growth process—human capital not only produces higher productivity for more educated workers but for most other labour as well.

This second model sees innovation and learning-by-doing as *endogenous* to the production process itself. It assumes that productivity increases are a self-generating process inside firms and economies (Lucas, 1988; Romer, 1990). Such learning-by-doing and innovation as part of the work process are facilitated in firms and societies that foster greater participation and decision-making by workers, since those are the firms and societies in which more educated workers will have the greatest opportunities to express their creative capacity.

The model of endogenous innovation and learning-by-doing has major implications for the economic value of education. The value of higher educated labour, particular highly skilled scientific and management labour—those who are able to create the most valuable innovations—increases relative to other levels and kinds of educated labour. More important, the economic value of education is generated by a much more complex set of relations between the potential of human capacity to produce more economic output and its realisation through organisations of work that are both geared to realise that capacity and to innovate using their human capacity. Thus, the value of education is not just a function of the jobs that workers with more education can get in the labour market. Instead, information, ideology, political power, property rights, citizenship rights in the workplace, and the willingness of organisations to innovate, all condition the economic value of education.

The fact that individuals with more education have higher earnings is another indication that education contributes to growth. The education-higher earnings connection reflects a *microeconomic approach* to the relation between education and economic growth. Greater earnings for the more educated in this approach represent higher productivity. Hence, an increase in educated labour in the economy is associated with increased economic output and higher growth rates. Higher earnings for the more educated may just represent a political reward that elites give their members—a payoff for being part of the dominant social class. However, it would be difficult to sustain an economic system over the long term if those who actually produced more were not rewarded for their higher productivity, and those who simply had political power got all the rewards. One of the reasons that state socialist systems in Eastern Europe were unable to sustain economic growth was almost certainly, in part, due to an unwillingness to reward individuals economically on the basis of their productivity and, instead, to reward the politically powerful with economic privilege. Similarly, China has found that sustained economic growth requires market incentives, including wages that more closely reflect labour productivity differences.

The positive economic payoff to individuals with more education in the form of higher earnings suggests that their economic value to the society is higher than those who have lower education. Economists estimate the payoff to more education relative to the cost of that education just like they would estimate the payoff to any investment. They calculate what the amount invested in education yields in higher earnings over the lifetime of those with more education. This *rate of return* to the investment in education is generally positive in almost every country. In Europe, rates of return to education are

about 7-8 percent, but in many developing countries, they can be much higher. In Brazil, for example, the overall rate of return to the investment in education is more than 12-14 percent. A positive rate of return to education suggests that investing in education contributes to economic growth. The higher the rate of return, the more likely that investment in education contributes to growth. And those levels of education associated with higher rates of return should be the levels in which additional investment produces the greater contribution to economic growth.

Macroeconomic Approaches to the Education-Economic Growth Relation

The first macroeconomic analyses of growth appeared at the end of the 1980s, within a convergence model framework. Traditional convergence analysis did not do a very good job of explaining wealth disparities between countries, so economists were interested in the initial conditions that could determine the long-term level towards which economies converge. At the same time, they wanted to explain why the variations in wealth were maintained when countries did not have similar initial economic conditions. The level of education of the labour force appeared to be one aspect of this conditional convergence.

Barro (1990) was the first to show that for a given level of wealth, the economic growth rate was positively related to the initial human capital level of a country, whereas for a given level of human capital, the growth rate was negatively related to the initial level of GDP per capita. Macroeconomic convergence, therefore, appears to be strongly conditioned by the initial level of education.

Azariadis and Drazen (1990) followed Barro's analysis by assuming that economic development is not a linear process, but goes through successive stages, in which the stock of physical and human capital enables a country to reach a given growth level. Their results showed that initial literacy rate plays a different role in predicting growth rates at different levels of development. Literacy is correlated with the variations of growth in the least advanced countries, but it does not seem to be related to most developed countries' growth.

Mankiw, Romer and Weil (1992), put a new spin on the analysis of education and growth by using Solow's aggregated production function with physical and human capital. The specific assumption of this study is that countries are taken to be close to their stationary state, as determined by their level of saving, their demographic growth and their investment in human capital. These different stationary states seem to explain the maintenance of development disparities.

Using the same model as Barro (1990), Barro and Lee (1994) argue that the countries where the labour force had one year of secondary level or more experienced a higher annual growth rate (around 1.34 points more). The coefficient was robust even with the introduction of additional variables (black market, political instability, and openness of the economy).

These different studies show that the variations of growth rates among countries can be explained partly by the initial level of human capital. But does a higher level of *investment* in education affect the growth path?

Besides their findings on the relation between a higher stock of human capital, Barro and Lee (1994) show that the *increase* in the number of workers who had attended secondary school in 1965-85, had a positive effect on growth. But estimates by others do not confirm this result. Using an aggregated production function, Benhabib and Spiegel (1994) and Pritchett (1996) also measure the impact of human capital investment on the economic growth rate. They use various measurements of human capital, including the number of years of education as calculated by Kyriacou (1991) or as in Barro and Lee (1994), the literacy rate and the secondary enrolment rate. Whatever the education variable chosen, the associated coefficients appear either to be insignificant, or to have a negative sign.

In short, the initial level of education (especially if it is relatively high) may be a strong correlate of later economic development (the countries which had a higher level of education in 1960 experienced stronger growth rates). However, it is much more uncertain that investment in education is followed by an increase in the economic growth rate.

In the 1990s, new econometric tools integrated a temporal dimension into cross-country estimates. These allowed for better control of omitted variables and helped modify estimates of the role of education in growth. These panel analyses² start with the results obtained by Mankiw, Romer and Weil (1992) (MRW) and show how the integration of a temporal dimension modifies the results. Knight, Loayza and Villanueva (1993) came to the following conclusion: the *level* of democratisation (massification) of access to secondary school is positively related to economic growth but the *increase* in enrolment rates during the same period is negatively related to the increase of GDP. Between 1960 and 1985, access to secondary education was strongly democratised in many developing countries, without any impact on their level of wealth. However, the impact is not homogeneous and the investment in human capital seems to be more efficient in open economies and where public infrastructures are relatively well developed.

Islam (1995) also tested the MRW's model with a temporal dimension. He showed that the coefficient associated with education was negative, and this occurred whatever the sample of countries considered. Berthelemy, Dessus and Varoudakis (1997) confirm this result: whenever human capital is put in the model as either stock or flow data, its impact on economic growth is negative.

Although most of the panel data analyses show that the investment in education does not have a positive effect on growth, Judson (1995) found a positive relation, even when she estimated her model with various panel data. McMahon (1998) also obtained significant positive links between expenditure on education, enrolment rates, and economic growth when he estimated the model on a sample of Asian countries that are known to have a strong relation between education and growth (Lau, Jamison and Louat (1991)).

² Knight, Loayza and Villanueva (1993), Islam (1995), Judson (1995), Berthelemy, Dessus and Varoudakis (1997), Bassani and Scarpetta (2001), Dessus (2001).

Despite these somewhat conflicting results, it appears that the contribution of higher levels of education to growth is consistently positive. For example, in addition to the studies cited above, in her review of a number of econometric models that test the impact of average education levels in the population on economic growth for a sample of developing countries in the Middle East and Asia, Boutrolle (2003) found that only the number of graduates of tertiary education seems to have a positive and significant relation to growth.

She also found that the effect of different levels of education varies according to the economy's level of development. Increases in the number of primary school graduates are only correlated with the growth of GDP in the least developed countries. This result confirms many analyses which show how the acquisition of literacy, numeracy, and other higher level basic skills can have a positive effect on productivity in the agricultural sector, and on the reduction of mortality and fertility rates. The generalisation of primary education seems to be an important condition for transition from the agricultural to the industrial economy.

At a more advanced stage of development, characterised by a decline in the agricultural population, migration from rural to urban areas, and rapid industrialisation, it appears that the proportion of secondary school graduates in the labour force is the main human capital indicator correlated with economic growth (Avakov, 1987; McMahan, 1998). For example, South Korea's government has always adjusted the number of secondary level graduates with the needs of the industrial sector. In the same way, in Indonesia, the industrial policy developed by Suharto was connected to increasing the number of vocational secondary graduates. Similarly, Chile's economic development policy in the 1980s and 1990s included a rapid expansion of secondary education, with particular emphasis on vocational secondary.

An increased fraction of tertiary level graduates in the labour force seems to have a different relationship to growth at different stages of economic development. At low levels of development, those economies with a relatively high fraction of university-trained people in the population or labour force appear to have lower economic growth. According to Pritchett (1996), the absence of a positive relation between the higher education graduates and economic growth is explained as a rent-seeking phenomenon, where educated people look for jobs that are not directly productive. But when the economy enters its second, industrialisation stage of development, these graduates take part in the productive dynamics of the country.

The positive role of very educated workers on gross domestic product is greatest in the developed countries. Indeed, according to models developed by Sorensen (1999) and Funke and Strulik (2000), when a country reaches an advanced development level, the role of human capital on economic growth moves from a direct impact on labour productivity to an indirect impact through increasing the capacity of the labour force as a whole to manage innovation and technical progress.

A number of studies in India and China support the notion that education plays a key role in economic development, but these studies are mostly based on production function

estimates of education's contribution to economic productivity rather than growth models. Even so, studies in the early 1970s suggested that the contribution of education to economic growth increased from 5 percent of the growth rate in the 1950s to 10 percent in the 1960s, and that later studies found these estimates much too low, raising them to 27-30 percent (Tilak, 2007).

Similarly, research on China "report[s] evidence of a significant, positive relationship between higher levels of education and GDP and GDP growth using aggregate data at the national and provincial level" (Fleischer, 2002, p. 6). Estimates by Démurger (2001) and Chen and Feng (2000) both show that the stock of higher educated population has had a statistically significant, positive, and robust relation to economic growth across provinces in the 1980s and 1990s. Wang and Yao (2002) show that in 1978-99 investment in human capital contributed somewhat more than 10 percent to overall per capita growth (Fleisher, 2002, p. 7).

To summarise, education appears to contribute to long-term growth. Countries with higher stocks of education in the past seemed to have had higher rates of economic growth 20 and 30 years later. At the same time, the research suggests that higher levels of education in the labour force were most likely to contribute to growth, especially as economies reached higher levels of development.

Microeconomic Approaches to the Education-Economic Growth Relation

Microeconomic research on the relation between earnings and education provides a second lens through which to view the education-growth issue. We would expect that the higher the rate of return to a level of education, the more likely the investment in that level would contribute to economic growth. For many years, the World Bank promulgated the view that the highest rates of return were to primary education and the lowest to university (and that this pattern was invariate over time), so nations should focus their investment on expanding and improving elementary schooling to maximise economic growth (Psacharopoulos, 1973, 1993). If that were the case, investing public funds in higher education would be a low yield strategy.

But this is not the case. Although rates of return to education vary among countries, a dominant tendency worldwide in the past thirty years has been for rates of return to investment in lower levels of schooling to fall, and for rates of return to investment in higher levels of schooling to rise (Carnoy, 1972; Carnoy, 1995). By the 1990s, in many developing countries and most developed countries, rates of return to higher education were greater than to secondary and to primary. Table 1 shows some examples of changing rates of return in developing countries. The private rates represent the return to individuals investing in various levels of education (however, they are generally not corrected for the increased income taxes that individuals pay when they earn higher incomes); the social rates represent the private returns but include both private and public costs – the latter are not borne by private individuals. The general tendency has been for rates of return to investment in higher education to rise relative to rates of return to lower

levels of schooling. Rates in the Middle East tend to be the lowest, and rates in East Asia and Latin America tend to be higher.

TABLE 1
**Private and Social Rates of Return to Education, Various Years, 1970s-1990s, by
 Country and Level of Education**
 (Percent Annually per Year of Schooling within Level)

Country	Private Rate of Return			Social Rate of Return		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Egypt 1988*	5	6	9			
Egypt 1998*	5	6	8			
Jordan 1997*	3	9	7			
Jordan 2004*	2	4	9			
Morocco 1991*	8	9	12		9	10
Morocco 1999*	5	8	9		8	9
Yemen 1997*	3	2	4			
Indonesia 1977		25	16			
Indonesia 1978				22	16	15
Indonesia 1989					11	5
Korea 1974		20	19		16	12
Korea 1979		14	19		11	12
Korea 1986		10	19		8	12
Philippines 1971	9	6	10	7	6	8
Philippines 1977			16			8
Philippines 1988	18	10	12	13	9	10
Argentina 1985	30	9	11			
Argentina 1987		14	12		12	11
Argentina 1989	10	14	15	8	7	8
Argentina 1996		16	16		12	12
Brazil 1970		25	14		24	13
Brazil 1989	37	5	28	36	5	21
Chile 1976	28	12	10	12	10	7
Chile 1985	28	11	10	12	9	7
Chile 1987		19	20		15	15
Chile 1989	10	13	21	8	11	14
Chile 1996		16	20		11	17
Colombia 1973	15	15	21			
Colombia 1989	28	15	22	20	11	14
Mexico 1984	22	15	22	19	10	13
Peru 1980				41	3	16
Peru 1990	13	7				
Peru 1997		8	12		7	11
Uruguay 1987		19	18		19	16
Uruguay 1989		10	13		8	12
Uruguay 1996		36	12		30	10

Source: Allen, 2001; CRESUR, 2004.

In addition, as we shall discuss later, social rates of return should include estimates of externalities associated with investment in individuals, externalities that result in benefits to the population as a whole not captured by higher wages accruing to individuals receiving the education. For example, Bloom, Canning, and Chan argue that investing in higher education can enhance economic development through technological catch-up. “In a knowledge economy,” they argue, “tertiary education can help economies gain ground on more technologically advanced societies, as graduates are likely to be more aware of and better able to use new technologies” (Bloom, Canning, and Chan, 2006, p. iii)

The payoff to higher education in Brazil in the 1980s conformed to this pattern. Given the increased openness of Brazil’s economy and increased emphasis on high value exports since the late 1980s, there is no reason to believe that the rates to higher education have declined since.

Rates of return to education have also been estimated for China and India. These vary considerably from study to study. Hossain’s estimates for the World Bank show lower rates of return to higher education than to primary. The 1993 private rates are estimated as 18 percent to primary school, 13 percent to secondary, and 15 percent to higher education. The social rates are 14, 13, and 11, respectively (Hossain, 1997). A second estimate of private rates of return, by Li, is based on urban hourly wages across China using data from the China Household Income Project in 1995. It shows that the private rates of return to investing in secondary plus college education increased from 5.8 percent for the cohort who got their first job before 1980, to 9.2 percent to those who got their first job in 1980-87, and 9.5 percent for the cohort with a first job in 1988-95 (Li, 2001, summarised in Fleischer, 2002, Table 3).³ Li also reports that the rate of return to investment in secondary education plus college degree in Gansu province is much higher (9.9 percent) than in Guangdong (3.6 percent). The proportion of the age cohort in Guangdong taking secondary and higher education in the 1990s was much higher than in Gansu, but, as Fleischer points out, Guangdong was a “hotbed of economic development” in the 1990s, so these results are quite surprising (Fleischer, 2002, p.11). Yet, in a more recent paper, Yang (2006) finds similar results: estimated Mincer rates of return for urban workers increased between the household surveys of 1988 and 1995, from 4 to 7 percent per year of schooling, and the rate of return per year of schooling in a particular city in each of those years were negatively correlated with the log wage in the city (Yang, 2006, Figure 2). So the payoff to schooling was higher, on average, in lower wage cities.

The problem with estimating the payoff to education in China using earnings or wages as a measure of the benefits of education—at least in the past—was that although wages or monthly earnings may have represented fairly what an individual can realise as a return to his or her investment in education, they probably underestimated the productivity increases associated with higher levels of education. According to work by Fleischer and Chen (1997) that estimates the contribution to total factor productivity of

³ Li made his estimates by taking the tenth root of the ratio of wages of college graduates to primary graduates.

the annual flow of new university graduates into the population and other variables, the mean estimated rate of return to higher education in the coastal provinces is 34 percent, and in the non-coastal provinces, 40 percent. From these results, Fleischer (2002) concludes that “[P]rovinces with higher proportions of college graduates (and higher GDP per capita) tend to have lower marginal returns (although still high in the absolute sense) than lower-income provinces with lower proportions of college graduates in their populations” (p. 6). The question is whether these rates derived from total factor productivity are “truer” estimates of the payoff to higher education than those based on income estimates. In China in the 1990s, given that most workers were still employed by the State, this may have well been the case.

Table 2 shows estimated private rates of return to education in India since the 1960s. These are much higher than in China. As in most countries, payoffs to higher education in India appear to be rising over time relative to the payoffs to lower levels of schooling, although the overall rates to college do not appear to be as high as to lower secondary school. A recent study by Asaoka (2006) suggests that private rates of return to university completion for men in urban areas in 16 states in 1993 were *positively* and significantly correlated with the state’s GDP per capita. Thus, rates of return to university completion are higher in states that are more developed, the opposite relationship from what Fleisher and Yang found in China in the 1990s. Asaoka also finds that in 1993, Mincer rates of return were higher than secondary, middle and primary school rates in all but a few Indian states (Asaoka, 2006, Table 39).

TABLE 2
Summary of Private Rates of Return Studies in India

	Primary School	Middle School	Secondary School	Upper Secondary	College BA	College Engineering
Nallagounden (1967)	23.0	13.0	10.0		8.1	
Blaug <i>et al</i> (1969)	18.7	16.1	11.9		10.4	
Kothari (1967, 1970)					14.0	25.0
Blaug (1972)	16.5	14.0	10.4		8.7	
Psacharopoulos (1973)	24.7		19.2		14.3	
Goel (1975)	10.4 ^γ	10.1	6.0		6.4	
Pandit (1976)	17.3	18.8	5.0	5.20	9.21	
Shortlidge (1974)					16.2 ^β	
Tilak (1987) ^δ	33.4	25.0	19.8	14.01	13.2	
Tilak (1987) ^ε	7.82	8.54	Negative	2.4	6.82	
Rao and Datta (1989)			5.3		5.07	
Duraisamy (2002) ^δ	7.9	7.4	17.3	9.3	11.7	14.6
Duraisamy (2002) ^ε	7.8	7.4	17.7	9.7	12.7	16.6

Source: This table is based on a similar table in Asaoka, 2006. Original sources are: Heyneman (1980, p.146); Psacharopoulos (1973, p.62); Tilak (1987, p. 52, p. 85) Duraisamy (2000, p.22); Rao and Datta (1989, p.377).

Note: γ: Over illiterates; β: Agricultural college only; δ: Unadjusted estimate; ε: Adjusted estimate.

Tilak (2003) has recently re-estimated private Mincer rates of return to various levels of education in India as a whole in 1983, 1993, and 1999, for both regular wage workers and casual wage workers. These show rates falling over time to primary, middle, and secondary schools, and rising to investment in university. The rate is consistently higher to university in each of the three years (Tilak, 2003, Table 3). Tilak estimates the private rate to higher education as 10 percent per year in 1999.

Although we were unable to find any rates of return estimates to investment in education in Russia, data show that income inequality increased sharply between 1987-89 and 1997-99 from a Gini of 0.25 to 0.43, one of the largest jumps in the transition economies (Rimashevskaja and Kislitsyna, 2004, Figure 1). This suggests that workers with higher education, who tend to have more access to high-income jobs have seen their income rise relative to those with lower levels of schooling.

Thus, the transition to the market economy in Russia has apparently created a major shift in the wages paid to workers with different capacities to take advantage of the new labor market conditions. Similar shifts have taken place in China, and with those shifts, rapidly increasing inequality of income distribution, with the Gini coefficient increasing from 0.32 in 1985-89 to 0.40 in 1996-2000 (World Bank Indicators). If this trend continues, we should expect to see rising rates of return to higher education. On the other hand, the income distributions in India and Brazil appear to have been fairly stable over the past twenty years, Brazil at a very high level of inequality (Gini equal to 0.60), and India at a relatively lower level of inequality (Gini equal to about 0.33 based on household expenditure data and about 0.43 based on household income data). Thus, rising rates of return to higher education in those countries appear to be driven by increasing relative demand for higher educated labour relative to the supply.

How is Higher Education Changing in the BRIC Economies?

The data we have just reviewed on the potential contribution of higher education to economic growth would suggest that higher education should be expanding, that individuals should be increasingly willing to invest in higher education, and that governments should be increasingly willing to support the higher education sector to insure that university faculties whose graduates are likely to create social externalities would have adequate resources to train students into those fields. Is this the case?

If we observe higher education in these four countries in the 1990s, we would find that three of them—Brazil, China, and India had low rates of enrolment as a proportion of the age cohort, and Russia had very high rates of enrolment. In 1990, only about 12 percent of the age cohort in Brazil attended higher education institutions, and in India, the proportion was less than 10 percent. China was an extreme case, with only 3-4 percent enrolled in higher education institutions, a legacy of Mao's antipathy to Chinese intellectuals, as manifested in the Cultural Revolution and reinforced in the post-Maoist leadership by the events at Tiananmen Square. At the other end of the spectrum, Russia inherited the massive investment in post-secondary education by the Soviet leadership, which had more than 40 percent of the age cohort enrolled in higher education in 1989.

The Expansion of Enrolment

In order to expand higher education enrolment significantly, countries first have had to invest in secondary education. A major difference between India and Brazil on the one hand, and the Soviet Union and China on the other, was the two communist societies' early investment in mass education. At the time of their revolutions, they inherited large and illiterate peasant populations. Yet, within a generation, a high fraction of the peasantry in each country—particularly the younger peasantry—had attained literacy and/or primary schooling. By the 1980s, more than 80 percent of Russian youth and 40 percent of Chinese youth were in secondary schools. Brazil and India lagged behind—Brazil, despite having much higher income per capita. In the 1990s, Brazil greatly expanded access to secondary schooling as part of its push for increased equity. Yet, as Table 3 shows, in 2003 India had a gross secondary enrolment rate of only about 50 percent (only 40 percent for girls).

TABLE 3
Gross Secondary and Tertiary Level Enrolment Rates, by Country,
1970-2003 (percent)

Country	1970		1985		2001		2003	
	Secondary	Higher	Secondary	Higher	Secondary	Higher	Secondary	Higher
Brazil	26	5	35	11	108 ^b	18	109 ^b	21
China	30	1	40	3	62	10	70	16
India			38	6	48	10	52	12
Russian Federation				45-50 ^a			93	69

Source: *World Bank Indicators* {<http://devdata.worldbank.org/dataonline/>}

Note: a) Imputed by author. B) Net enrollment rate = 75 percent (Bloom, 2006, Appendix A, Table 1)

In the past fifteen years, higher education has expanded in the BRIC economies, especially in China. Brazilian higher education now includes about 20 percent of the age cohort, up from 11 percent in the mid 1980s. The number of students in Russian post-secondary education institutions fell between 1989 to 1993-94 from about 3 million to 2.6 million, then rose rapidly to 4.7 million by the year 2000 (Drougov, 2001, Figure 1). Since the size of the age cohort did not change significantly in that period, this represents a very large increase in gross enrolment. China's gross enrolment ratio has jumped even more, from 4 to 16 percent in about eight years. India has made more modest gains in gross enrolment. It only increased from about 8 percent in 1990 to 12 percent in 2003, even though this represents 4.2 million more students attending higher education institutions (Kapur and Mehta, 2004).⁴

⁴ According to Kapur and Mehta (2004), the proportion of the age cohort in India's higher education institutions in 2002-2003 was only 7 percent. Tilak (2007) also places the proportion of the age cohort in higher education at about 8 percent in 2003. The World Bank data shown in Table 3 are therefore probably overestimated.

Given our discussion of the relation between the stock of higher educated labour and economic growth, it is interesting that China, with very small stocks of high level human capital, was able to manage very rapid growth rates throughout the 1990s. Brazil also has had rapid economic growth in the 1970s, the late 1980s, and in the 1990s, with relatively low stocks of higher educated labour. Russia, on the other hand, with its highly educated labour force, was unable to sustain economic growth in the 1970s and 1980s, and today, Russia's economic growth is almost totally explained by the fact that it is hugely rich in natural resources at a time in history when commodity prices are soaring, and unlike many resource-rich states, it has enormous human resources developed over many years of investing heavily in education.

As Belton Fleischer has suggested (Fleischer, 2002), the lesson to be learned from China's experience is not that economic growth is independent of high level human capital, but rather that China could have probably achieved even higher economic growth with a better educated labour force, and that now that China is expanding higher education, it should actually experience higher growth than in the past. Similarly, Brazil has long underinvested in higher educated human capital, and so has India. Both macro and microeconomic approaches suggest that expanding Brazilian higher education should contribute positively to economic growth. In India's case, however, it is unclear whether low investment in higher education had a negative impact on economic growth, because until the past 10 years, there were relatively few opportunities for employment of higher educated Indians in high productivity sectors, and most waited for jobs as government bureaucrats.

In any case, the proportion of Indians in tertiary education is now by far the lowest among the BRIC economies. Despite the huge numbers (9 million students) and the very large absolute number of scientists and engineers being trained every year, India technological human capital may not be that great, as Tilak (2007) points out:

India has a huge stock of science and technology manpower, consisting of scientists and engineers. But the myth of the third largest stock of scientific and technical manpower in the world stands exploded if one carefully examines the quality of the manpower and their utilisation. The stock is not so huge to match the requirements of the economy. Any standardised international comparisons of the stock of science and technology manpower would not make any tall claims tenable. For example, for every one million people, there were only about 130 scientists/engineers in India in 1990s, while in many other countries the corresponding figure is 10-30 times higher... The share of the scientific and technical manpower in the volume of the educated unemployed is high ...

(Tilak, 2007)

The Changing Financing of Higher Education

All the our of the BRIC economies at one time financed higher education almost totally with public funds, either from the central government or from state governments. In other

words, almost every student who was accepted at a higher education institution was, other than his or her earnings foregone and direct private expenses, fully subsidised by the state to attend post-secondary education. In many cases, the student also received a stipend to offset part of his or her earnings foregone.

In that financing model, higher education was defined as a pure public good, implicitly yielding high externalities (for a summary of this argument, see Bloom and Sevilla, 2004). In addition, it was argued that, like in primary and secondary education, charging fees to cover the costs of (much more expensive) higher education would produce underinvestment due to imperfect capital markets. These arguments aside, since higher education was generally accessible only to middle class families already able to invest time and money to provide their children with high quality primary and secondary education, free higher education was a measure to assuage a relatively powerful and vocal political group, the professional class/government bureaucracy that wanted to assure the social mobility of their children. Eventually, everybody (meaning lower income urban and even rural classes) bought into the model, on the assumption that ultimately their children would also benefit from this “free” good.

Today, however, all four countries have, in one way or another, either implemented cost share financing (tuition fees) in public universities, or allowed higher education to become “privatised.” The way each country has made this shift or allowed it to happen has important implications for the efficiency (providing the right incentives to students in terms of their course of study, for example) and equity aspects of the higher education system.

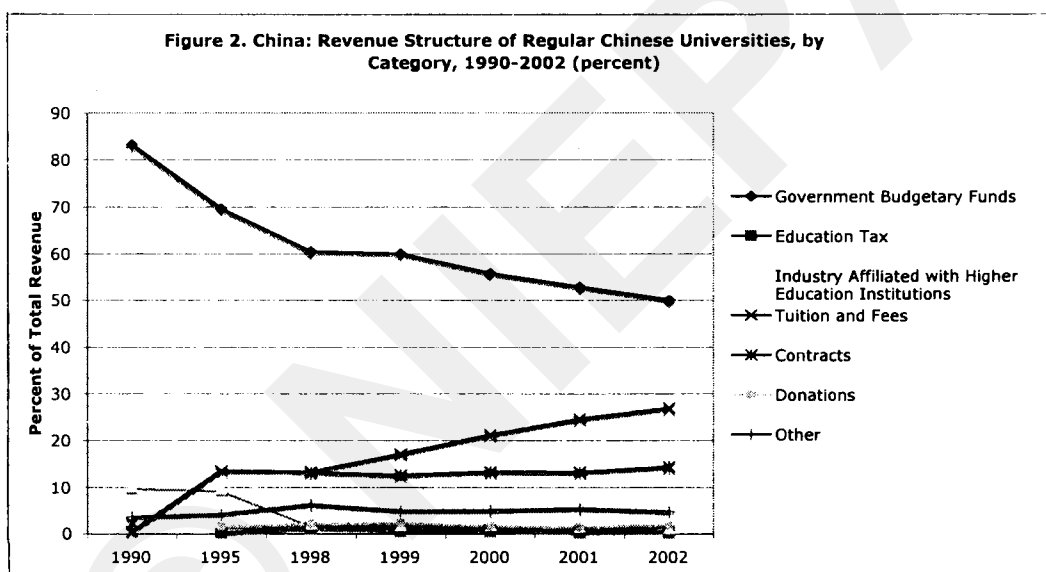
Chinese higher education has been transformed since 1997. To accomplish this transformation, China shifted to cost sharing. Wenli Li, a researcher at Beijing University’s Economics of Education Institute shows that the financing of higher education in China changed drastically since 1990, from a system that was paid for mainly by direct government contributions (83 percent of funding) and the revenues from industries affiliated with universities (about 10 percent of total funding) to a system in which almost 30 percent of funding in 2002 came from tuition and only 50 percent of funding from direct government contributions (Figure 2).⁵

The Economics of Education Institute surveyed about 15 thousand students in 18 higher education institutions (10 national and 8 local) mostly in eastern China. That study shows that tuition and other “necessary” private expenditures vary little across different social class students. The students from the lowest quintile families spent about 8600 Yuan in 2004 on necessary private expenditures (about 4800 Yuan on tuition) whereas students from the upper quintile of families spent only 2600 Yuan more (1100 more on

⁵ There are some private universities springing up to absorb the demand by families whose children do not get accepted to public universities, but for the moment, these often low quality institutions are only a small element in the total higher education picture.

tuition and about 1100 Yuan more on food, 300 more on transportation, plus another one hundred Yuan more on housing).

Since higher social class students are likely to be in Beijing and Shanghai, attend more expensive institutions, and enroll in higher cost faculties, this small variation in the private share of spending on tuition suggests that tuition differences between high cost and lower cost institutions and faculties are small. This implies that the public share of spending in higher cost institutions and faculties is higher, and therefore the public subsidies for higher-income students may be considerably higher than for lower income students.



Source: Li (2005)

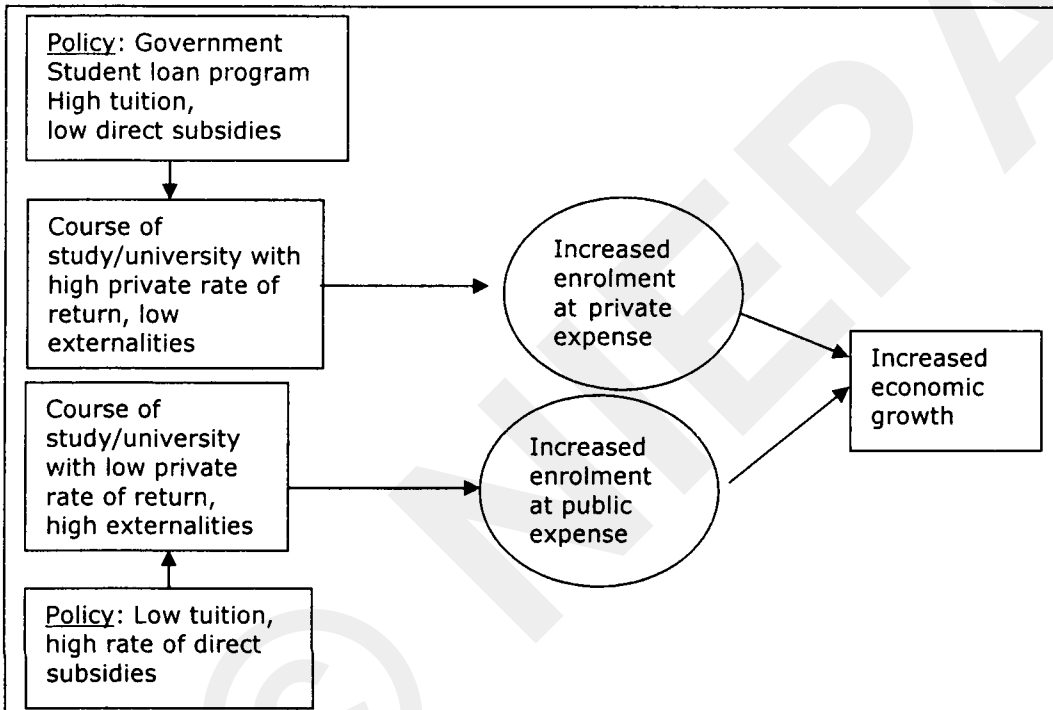
This strategy makes sense in terms of economic growth optimisation if higher income students from eastern Chinese cities and provinces are academically more able and are likely to contribute more in social benefits (externalities) than lower income, lower-scoring students entering less elite, lower cost universities. A plan of public subsidies that favours enrolment of the best and the brightest in faculties and universities that produce high externalities should contribute to greater innovation and higher economic growth. It is generally assumed that externalities to investing in very smart students in certain fields of study—such as research science or teaching—are large because the activities that these students engage in once they are working, great social benefits greater than the additional earnings they realise.

As shown in Figure 3, this may or may not be the case. If the higher income students tend to study in faculties and universities that have high private rates of return but low externalities, a student loan program would be the more cost-effective policy in terms of maximising economic growth. A scheme of market rate education loans would help

overcome barriers of entry resulting from undeveloped capital markets for educational investment, but would leave students and their families responsible for paying a substantial share of the costs of high private payoff education.

Figure 3

Optimal Finance Policies for Promoting Enrolment Increases in Various Faculties and Universities to Increase Economic Growth



Brazil has followed a completely different strategy. Rather than charging fees to the overwhelmingly middle and upper middle class students who attend the high cost public universities, the Brazilian military put in place a higher education policy in the late 1960s that promoted the expansion of private proprietary universities to absorb a growing demand for higher education among those whose entrance examination scores did not qualify them for admission to the free public universities. By 2004, 72 percent of all Brazilian higher education students attended this type of universities, most of them paying high tuition fees. On average, the students attending private universities come from lower income families than those attending public universities. In effect, then, Brazil provides incentives to higher social class students [more than 50 percent of students in (free) public universities attended private, fee-charging primary and secondary schools] to enter any field they choose (depending on their test scores and high school grades) in fully subsidised public universities, whether or not those fields are characterised by externalities. Meanwhile, other students are pushed mainly into what

they perceive to be high private rate of return fields of study, since those students have to pay fees to attend a higher education institution.

Since public spending on education in Russia went through a major decline in the early 1990s, and has not recovered, both cost sharing in public universities and the growth of enrolment in private universities have necessarily increased. Cost sharing in private universities, however, is not the same as in China, since most public universities in Russia continue to admit fully funded students based on their entrance test scores and high school grades. Then they admit a second tier of students who are willing to pay. Obviously, the fields of study that attract the most paying students are those perceived by students to have higher private returns. So students who study in fields with lower private returns but possibly higher externalities are more likely to be subsidised. Private universities have grown from zero enrolment in the mid-1990s to about 10 percent of total enrolment in 2000 (Drougov, 2001, Figure 1). Again, they tend to specialise in fields associated with higher private rates of return for which students are willing to pay.

In India, the situation is different again. The Indian government has steadily reduced the emphasis it places on higher education in its central government budget (Tilak, 2007; Kapur and Mehta, 2004). According to Kapur and Mehta, the proportion of expenditure on higher education to total expenditure on education "...ironically declined from an average of 15 percent during the 1980s to an average of 10 percent in the 1990s" (p. 9). This, they contend, has provoked a flight by the middle class to private education.

According to NSS data, the government's share in overall education expenditure has been declining steadily, from 80 percent in 1983 to 67 percent in 1999. For states like Kerala, the decline is steep, from 75 to 48 percent, while for Madhya Pradesh it is from 84 percent to 68 percent. Indeed, while private expenditure on education has risen 10.8 times in the last 16 years, that for the poor it has risen even faster, by 12.4 times. Many students who formally enrol in publicly funded colleges and universities, barely attend classes there. Instead, they pay considerable sums to the burgeoning private sector vocational IT training firms such as NIIT and the Aptech (Kapur and Mehta, 2004, p. 5).

Besides this unusual trend to enrol in public colleges and simultaneously in private vocational training programs (financed by government backed student loans), professional education, namely engineering, business, and medicine has been marked by a major increase in private providers. Kapur and Mehta (2004, pp. 5-6) used data from 19 important states in India to estimate the percentage of student places in engineering and medicine in private versus public universities. They find that private engineering colleges accounted for 15 percent of seats in 1960 and accounted for 86 percent of seats in 2003. In medicine, the increase was from 6.8 percent in 1960 to 41 percent in 2003. They also estimate that about 90 percent of the seats in business schools are private. Although the percentage of privatised places varies from state to state, with more in the South and less in Bihar and West Bengal, the general trend even in West Bengal is to cut down support for teachers in private institutions, thus reducing overall spending on higher education.

Thus, in contrast to Brazil, which allowed the expansion of private education to absorb the "overflow" from relatively well-supported and free public institutions that

serve largely middle and upper middle class students, India has allowed the public (free) higher education system to deteriorate financially after a period in which it pushed through affirmative action for scheduled castes and “democratised” the university. This, according to Kapur and Mehta, has pushed the Indian middle class, and many lower class Indians, to invest in private higher education, particularly in fields of study with relatively high private rates of return. So the public university is increasingly a place where arts and social science majors take their training. There still exist a number of elite public universities that train high quality professionals. But the public university as such is no longer a place of elite formation.

Which of these patterns of financing national higher education makes most sense? Without much further study, it is difficult to say. Critics of the Chinese higher educational reform argue that the government is oversubsidising universities in rich provinces, since the payoff to higher education appears to be higher in provinces with fewer university graduates. It could be argued that the government is also oversubsidising faculties whose graduates earn high private rates of return and undersubsidising universities and faculties whose graduates produce greater externalities but lower private rates of return. The issue is complicated because China is still in transition to a labour market where wage differentials reflect productivity differentials. The transition in some provinces and some professions is more pronounced than in others.

Critics of the Indian system argue that privatisation is driven more by government financial “exhaustion” and lack of a concrete strategy for the education sector than by any systematic reliance on market valuation of professions or a financing scheme that attempts to maximise growth. In many ways, the Russian system could be subject to the same criticism.⁶

The Brazilian higher education system seems to be stuck in a political tradition that forces it to subsidise the middle class as such rather than subsidising higher education for those that are likely to generate high economic and social externalities. Most Brazilians attending universities pay for their studies but the quality of their education is extremely low. It would be interesting to know what the private rate of return is for the 72 percent of students who attend private higher education versus the 28 percent who attend public universities.

The Russian system would seem to be at least partially efficient, subsidising the “right” fields (those that have low private returns and higher externalities for which students are not willing to pay high tuition). Yet, the system may also be inefficient because it subsidises many students who gain entrance (high test scores) to free public universities and who study in fields with low externalities and high private rates of return.

⁶ Seema Jayachandran, in commenting on this paper, pointed out that there is a severe shortage of qualified university professors to teach in the public universities because of the relatively rapid absolute growth in student enrolment, and the low salaries of university professors compared to the wages of professionals, particularly in sciences and engineering, in the private sector. Private universities often get around this problem by hiring employed professionals to teach part time.

While it is true that very bright students may generate externalities in high private rate of return occupations, though not necessarily, particularly in a society such as present day Russia's.

The Quality of Higher Education

The last issue I would like to introduce is that of "quality" in the higher educational system. One way to measure quality change over time is to estimate the amount spent per student in higher education. If we only deal with government budgets, this can be misleading if a higher fraction of students attend private universities or pay tuition to public universities, since their spending would not be counted in the public budget allocated to higher education. In Brazil, public spending per university student increased between 1980 and 2000 from about \$4,000 to \$5,500 PPP US dollars (WB Indicators). It appears that spending per student has gone up in China as well, from 13,000 Yuan in 1999 to 20,000 Yuan in 2002, with tuition fees rising from 17 percent to 27 percent of that amount [author's estimates based on Wenli Li's research (2005)]. It also appears that India increased public spending per student from about 1,000 PPP dollars in 1990 and 1995 to 1,300 PPP dollars in 2000-2001. We have no estimates for the Russian Federation. So, three of the countries seem to be investing more public funds per student in higher education. At least in those terms, the quality of higher education may be increasing there, or at least not declining..

In all four countries (as in the United States and Europe), the quality of education taken by higher education students varies enormously among institutions. There are two important questions to ask: how high is the quality of training in the top 10-20 percent of higher education institutions in each country, and how much below that level is the quality of training in the bottom quarter (or even bottom half) of the institutions in each country.

The reason it is important to know the quality level at the high end is that this benchmark tells us whether such institutions are producing leaders and innovators with the critical thinking skills needed to continue to achieve rapid growth once these countries move out of the industrial and lower level services phase of their development process. We have all read about the Indian Institutes of Technology, with their incredibly difficult admission process and high-level curriculum. Are these representative of the top flight of Indian university training across fields? How deep is such high quality training?

Does China have similar high-level training in science and engineering? What about Brazil and Russia? If so, how deep in the higher education system does it go?

The reason it is important to know about the quality at the bottom one-fourth and the bottom one-half is that a high fraction of professionals in each country get their training in such institutions. These graduates take up engineering and management jobs in production, many jobs in government, work in financial and medical services, and in teaching. If they have very poor training, they will likely produce low levels of externalities despite their education, in at least three of the countries, being partly to heavily subsidised by government funding. One reason that rates of return to higher

education may begin to decline as enrolment expands is that the quality of higher education drops off quickly as the system expands, and that it drops off quickly from levels at the bottom half that are already quite low.

What kind of changes are taking place in each country that might make us believe that quality will increase? If one believes that privatisation of the higher education system tends to improve quality, then we would expect that the quality of education in Brazil is higher today than it would have been had the government strategy been to expand public universities and to charge fees to pay for the expansion. This is not a very convincing argument given the low quality of most of Brazil's private universities. Similarly, the gradual decline in government support in India and Russia for public universities could be leading to improved quality of higher education. This needs to be investigated. Much depends on how the private tier develops. Will the present trend produce elite private research universities, or merely proprietary schools whose claim to excellence is that they cater to higher social class students?

Some of the best Chinese universities are "importing" faculty from abroad to serve as examples for local faculty in how and what to teach in various subjects. Is this practice widespread, and does it work? Open access to courseware on the MIT model is another way of influencing the quality of teaching in universities? Is that having a positive effect? Are universities changing their organisation to reflect this need to improve the quality of university faculty and courses? If so, how? University governance and departmental leadership could be crucial factors in pushing at least some universities to improve their quality.

Conclusions

What are the chances for these countries to achieve the growth predicted for them given their higher education policies? Obviously, many factors will affect growth rates, including how well the countries are governed and the strength of their organisational structures (including their juridical systems) that develop as their economies grow. Yet, higher education is also a key to realising sustained high rates of economic growth.

As we have shown, economists have focused mainly on the quantitative aspects of higher education—the *number* of graduates in the labour force—in assessing whether an economy is allocating resources for maximum growth. In these terms, Russia is in a favorable position, with a large stock of highly educated people available for its current and future labour force. China is expanding its higher education system the most rapidly, and India, the least rapidly. Although many analysts believe that India has sufficient absolute numbers of engineers and scientists and has advantages over China in moving towards an information-based advanced service economy, Tilak (2007) and others have pointed out that, proportionately, India (and we might add, Brazil) has very few highly educated technical and service personnel.

There are potentially serious problems in all the four countries concerning the quality of university education for all but the small percentage of university graduates who attend elite institutions, specialising in programs that might be considered world class. Large

numbers of graduates with university first degrees from these elite institutions get into graduate programs in the developed countries, and many never go back, especially from India and China.

Although numbers of graduates are important, the issue of critical thinking and innovativeness, which would be fostered by college teachers who know how to develop and nurture such skills in students, and higher education institutions that provide incentives for such teaching, may be even more important in the future. Are institutions moving in this direction?

Policy makers may believe that privatisation speaks to this issue, providing higher quality university education and also reducing the need for increased public funding. However, private universities and professional schools are just as likely as public universities not to develop the higher order thinking skills needed for the information economy.

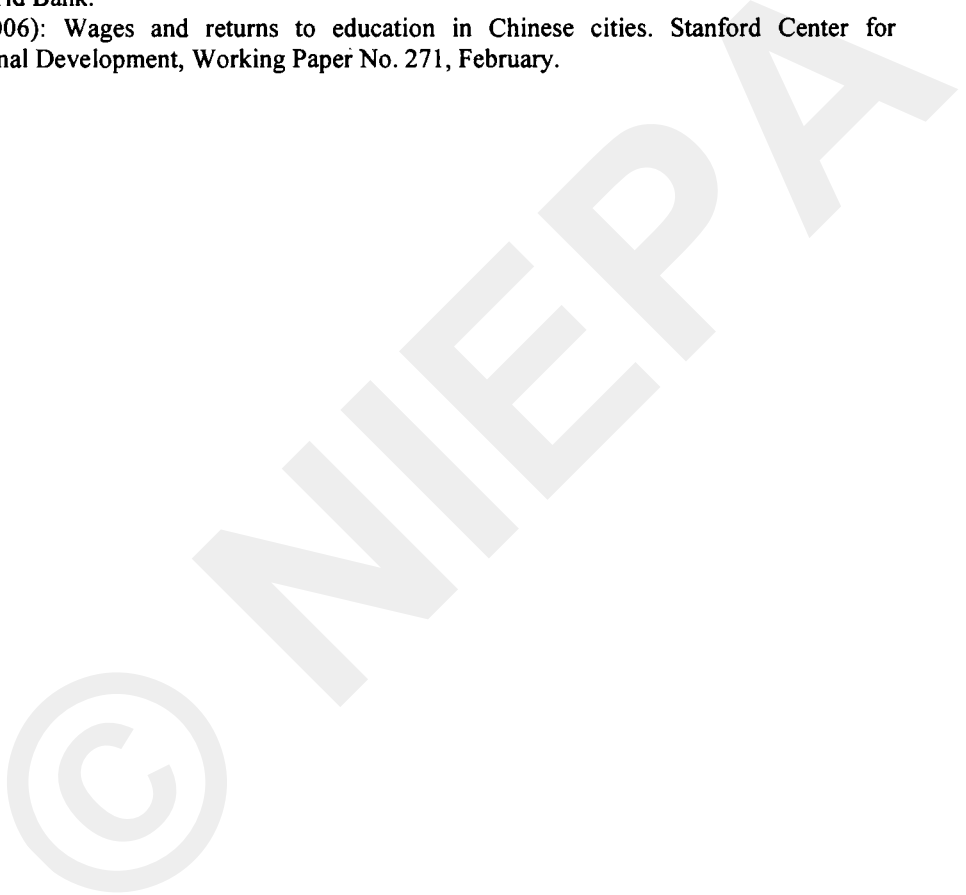
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CONTENTS

Theme Editor's Overview

Skill Development Through Vocational Education: A Stock Taking of Issues and Policy Perspective

— **B. S. Prakash**

Vocationalisation of Secondary Education: Retrospect and Prospects

— **Mohd. Akhtar Siddiqui**

Vocational Education: A Study of Jalna District in Maharashtra

— **Sangita Kamdar**

Unit Cost of Vocational and Academic Education at Higher Secondary Level in Tamil Nadu

— **P. Duraisamy**

Skills Formation for Economic Development in India: Fostering Institutional Linkages between Vocational Education and Industry

— **Aya Okada**

Demand for Higher Education and Willingness to Pay: An Econometric Analysis using Contingent Valuation Method

— **T. Lakshmanasamy**

Integrating the Non-Formal Education (NFE) agenda into the Formal Technical and Vocational Education and Training (TVET) Sector: Rekindling the Promise - Avoiding the Perils!

— **Salim Akoojee**

Labour Market Needs and Development of Technical and Vocational Education in Eritrea

— **Ravinder Rena and Binium Kahu**



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Student Loans and Financing of Higher Education in India^{*}

Jandhyala B G Tilak^{**}

Abstract

In view of the continuing and rather deepening financial crisis in higher education in many developing countries, governments are looking upon student loan programmes as a panacea to all the ills of the systems, specifically to the problem of inadequate public finances. Student loans are also viewed as an effective antidote to the regressive effects of what can at best be regarded as a 'necessary evil' of steep increases in student fees. Countries which do not have student loans programme began introducing it; and countries that already have it began revitalising it by making modest to drastic changes in it. As a result, today very few countries are left where such a programme is not in operation.

India is not an exception to this. Higher education in India has been under severe strain, with a drastic decline in public budgets for education. Government (centre and states) allocations to higher education have been declining in the recent years – in absolute terms of millions of Rupees in real prices (total and per student) and also as a relative proportion of national income and of total budgetary expenditures. Cost recovery mechanisms have been introduced, the most important among them being student fees and student loans, besides allowing the rapid growth of private education.

For a long period, India had a student loan programme called National Loan Scholarship Scheme. But this, like in many other countries, was associated with low recovery rates and it was virtually abandoned in the late 1980s. But the government felt the need to revamp it. Accordingly the programme was revived and restructured in the early years of the present century by entrusting the responsibility of the loans to commercial banks. Today, most of the public and

* Revised version of the paper presented in the International Workshop on Funding for Higher Education: A Comparative Perspective, organised by the National Higher Education Research Institute, Universiti Sains Malaysia, Penang, Malaysia on 29-30 May 2007. The comments and observations of the participants of the Workshop, particularly of Rosni Bakar, Bruce Chapman, Norman LaRocque and Morshidi Sirat are gratefully acknowledged. An edited version of the paper is to appear in a workshop-based book being published by Universiti Sains Malaysia.

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some private banks float loans for students. Though there are certain inherent weaknesses and practical problems associated with the student loan programme, government has high expectations and views student loan programmes as a potential and an efficient mechanism of cost recovery from the students, as an effective solution to the problem of funding higher education, and as a meaningful approach to reduce public subsidies to higher education.

The paper presents an overview of the problem of financing higher education in India, reviews the strengths and weaknesses of the present scheme of educational loans as a method of financing of higher education, in contrast to the earlier scheme, and attempts to draw lessons for India and other countries in this regard.

Introduction

India is faced with severe challenges of rapidly rising demand for higher education, rapidly shrinking public budgets, and of emerging strong national and international market forces to dominate the higher education scene. Several alternative methods of financing of higher education are under discussion, and some are already implemented, the most important among them being student fees, student loans and privatisation. Loans figure prominently in the policy discourses on funding higher education and have replaced scholarships as a mechanism of promoting equity in the system. This paper reviews the experience of India with the loan programmes – an old one called the National Loan Scholarship Scheme, and a new one, called the Educational Loan Scheme operated by commercial banks.

The following section provides a brief introduction to the current status of higher education in India, followed by a brief discussion on trends in financing of higher education in the recent years. Only a few highly selective issues are discussed in these two sections, which form the background for an analytical discussion on student loans as a method of financing of higher education. Section 3 reviews the experience of India with the two loan programmes. The paper ends with a few general observations on the nature, strengths and weaknesses of student loans. The experience of India is hoped to provide valuable lessons for India and also for other countries facing similar challenges.

Higher Education in India

Higher education has expanded remarkably well in India during the post-independence period. At the time of independence, there were 20 universities and about 500 colleges with an enrolment of less than 150,000. Today according to the latest statistics available, there were nearly 400 universities and 16 thousand colleges as in 2004-05 with a student enrolment of above 12 million and 470 thousand teachers. Public expenditure on higher education has also increased substantially during the post-independence period. At the inception of planning in the country (1950-51), India was spending Rs.172 million on higher education. In 2005-06, the government expenditure (budget estimate) alone was

of the order of Rs.107 thousand million¹ (MHRD [c] 2006). As a proportion of national income, it marks an increase from 0.18 percent to 0.33 percent during this period. Expenditure on technical education forms additional 0.11 percent in 2005-06. In terms of the size, this is one of the largest networks of higher education systems in the developing world.

TABLE 1
Growth of Higher Educational Institutions in India

Year	Colleges for			Universities**	Enrolment (million)
	General Education	Professional Education*	All		
1947-48	516	20	0.2
1950-51	370	208	578	28	0.2
1960-61	967	852	1819	45	0.6
1970-71	2285	992	3277	93	2.0
1980-81	3421	1156	4577	123	2.8
1990-91	4862	1765	6627	184	4.4
2000-01	7929	2223	10152	254	8.6
2004-05	10337	5632	16009	407	11.8

.. not available

* includes engineering, technology, architecture, medical, law, education colleges, etc.

** includes deemed universities and institutions of national importance.

Source: MHRD [b] and UGC (2005).

The higher education system that begins after completion of 12 years of schooling, normally includes three years of first degree (4-5 years in case of professional education), and two years of second degree studies (three years in case of some areas of professional education). Studies for research degrees take further 2-4 years. Institutions of higher education include central universities managed and funded by union (central) government, state universities managed and funded by state (provincial) governments, institutions deemed to be universities, institutions of national importance, under-graduate and post-graduate colleges (constituent and affiliating), etc., in addition to several research institutions. Some institutions offer general education, some offer professional and technical education, and some both. It has also been a system with a high degree of diversity, catering to the needs of different sections of the society, in terms of social and cultural needs. There are colleges exclusively for women and some mainly to meet the needs of minorities and socially backward castes (Scheduled Castes and Scheduled Tribes) of the population. While private universities are just emerging, private institutions at the college level are large in number, which include a small proportion of

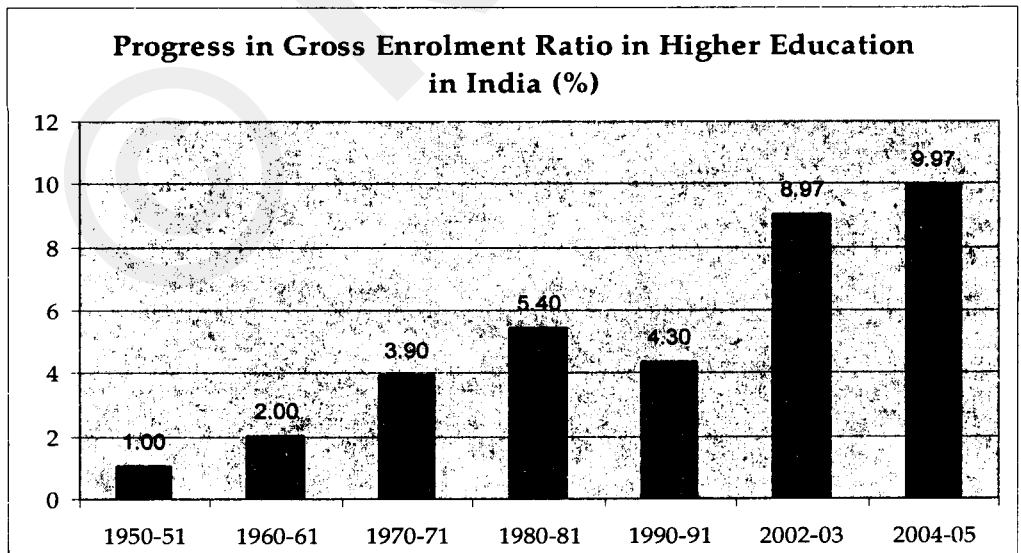
¹ The current (in 2007) exchange rate is: US\$ 1 = Rs.40 (approximate).

colleges financially supported by state, and many colleges that rather exclusively rely on student fees and are called self-financing colleges. There are some autonomous colleges also under both public and private management. The system is also characterised by the presence of some high quality institutions, such as Indian Institutes of Technology, Indian Institutes of Management, Indian Institute of Sciences, All-India Institute of Medical Sciences, several central universities, and several special universities like agricultural and technological universities, in addition to quite a few centres of excellence in central/state universities.

The quantitative growth itself is noteworthy for a newly independent and developing country like India. The quantitative explosion helped the nation in building the third largest reservoir of scientific and technical manpower, in transforming a highly elitist higher education system into a fairly democratised one, with a reasonable proportion of students being women and also a good proportion of students coming from socio-economically weaker strata of the society, helped in ensuring self-reliance in manpower needs of the nation, and contributed to development in social, economic, technological and political spheres.

However, the twelve million students in higher education constitute just ten percent of the relevant age-group population. This ratio, familiarly called the gross enrolment ratio, did increase ten-fold from about one percent at the inception of planning in the country, i.e., 1950-51 to nearly ten percent in 2004-05, i.e., a ten-time increase in fifty five-years of development planning.

Figure 1



Source: Based on MHRD [a] and [b].

While this ten-fold increase may look impressive, it is clearly recognised that this is not adequate for a developing economy aiming at a sustainable high rate of economic growth, to meet the challenges of globalisation and increasing degree of international competition, to reap gains from globalisation, to realise the vision 2020 to become an advanced country, and to build an equitable society, a humane society and a knowledge society of the 21st century. The need to expand the system of higher education in terms of quantity, quality and equity, to ensure sustainable development and more importantly inclusive development is, thus, widely recognised.²

Financing of Higher Education

However, higher education in India is in a deepening financial crisis, with escalating costs, and increasing needs of the system on the one hand, and shrinking public budgetary resources and changing public policies on the other.³ No doubt, huge public investments have been made in higher education in independent India, but the impressive growth in investments in nominal prices, is however, more than offset by increase in prices, and increase in population, more particularly student numbers in higher education. On the whole, the trends suggest that higher education had a good start during the 1950s (with real growth of 7.5 percent per annum), had its golden days during the 1960s, with the real expenditure increasing at an annual growth rate of 11 percent. However, it suffered significantly during the 1970s, with the rate of growth coming down to a meagre 3.4 percent; but shows some tendencies to recover during the 1980s. Though the growth in expenditure on higher education has been erratic during the 1980s, it had increased on the whole at a rate of 7.3 percent per annum. The 1990s heralded an era of austerity and higher education suffered the most. With the introduction of economic reforms at the beginning of the decade, the allocation of budgetary resources to higher education has indeed experienced a negative rate of growth (Tilak, 2005). Though there are some minor changes, the overall trends seem to continue in the present decade as well.

The relative priority accorded to higher education can be measured in terms of the share of higher education in GNP. Starting from a very low figure of 0.19 percent of the gross national product (GNP) in 1950-51, public investment in higher education increased five fold by 1980-81; but it constituted hardly one percent of GNP after three decades of development. Ever since, the priority given to higher education in allocation of government budgetary resources has been steadily coming down: it declined to below 0.4 percent by 2005-06, while many developed countries invest about 1.0-2.5 percent of their respective GNP (OECD, 2004).

India has adopted five-year plans as an important development strategy since 1950. The five-year plans set new directions for development—quantitative expansion, improvement in quality as well as several other dimensions of education development.

² For an overview of growth of higher education in India, see Tilak (2001, 2004b).

³ See Tilak and Varghese (1991) and Tilak (1993 and 2005) for a discussion on trends, issues and policies on financing of higher education in India.

Within the total five-year plan expenditure on education also, the share of higher education moved in a similar fashion. The share of higher education in the total education expenditure doubled from nine percent in the first five-year plan (1951-56) to 18 percent in the second five-year plan (1956-61), and increased to an all time peak of 25 percent in the fourth five-year plan (1969-74); after that it has been consistently declining. The share of higher education in the total education expenditure in the tenth five-year plan (2002-07) was estimated to be a meagre six percent, the lowest proportion in the last half a century. Thus during the first four five-year plans, increasing priority was given to higher education and in the later period, higher education was paid scant attention in terms of allocation of plan resources. This is also reflected in the share of higher education in the total (five-year) plan expenditure, which increased from 0.71 percent in the first five-year plan to 1.24 percent in the fourth five-year plan. But ever since, it has declined continuously, reaching 0.53 percent in the seventh five-year plan (1986-90), further coming down to 0.35 percent in the eighth five-year plan (1992-97), and again declining further in the ninth and tenth five-year plans.

The decline in public expenditure is more clearly marked in terms of real expenditure per student, which declined by nearly 30 percent points between 1990-91 and 2003-04.

The overall decline in public expenditure on higher education is attributed to (a) decline in resource capacity of the government, (b) neo-liberal policies introduced in the beginning of the 1990s, and (c) a strong but a wrong assumption that higher education does not matter for development (Tilak, 2003).

The two major sources of finances for higher education in India are: (a) government sector—central government, and state governments; and (b) non-governmental sector—students/parents (or families) in the form of fees, and other maintenance expenditure, and the rest of the community at large, in the form of donations, endowments etc. The relative shares of various sources in expenditure on higher education in India have changed considerably over the years. The share of the government has increased, and correspondingly that of every other source, viz., students' fees, community contributions, and other internal sources declined steeply, though in absolute terms there has been a significant increase in the contribution of these sources as well. The share of the government (central and state) increased from 49 percent in 1950-51 to 76 percent in 1986-87, the latest year for which we have some detailed data. And the share of non-governmental sector declined significantly. Students' contributions in the form of fees which used to form more than one-third of the total until the beginning of the 1960s, declined to less than half of what it was in 1950-51. The share of 'other' sources (including voluntary donations, endowments, etc.) also declined, though the decline is not as sharp as the decline in the share of the fees.

But these were the trends until the mid-1980s. It is widely noted that the trends have changed dramatically since the beginning of the 1990s, though systematic data at the national level are not available. Government contributions have declined, and the share of fees has increased at a very high rate of growth. For example, in a good number of universities, the revenues from student fees accounted for above 40 percent of the total

expenditure of the universities (Tilak and Rani, 2000). The changes in the trends owe to the new approaches adopted that not only stress reduction in public expenditure, but also increase in cost recovery mechanisms.

The two national level committees constituted by the Government of India (UGC, 1993; AICTE, 1994) on mobilisation of resources in central universities and in technical education in 1993-94, had recommended a variety of measures to mobilise non-governmental resources for higher education. The main recommendations of these committees refer to increase in student fees, introduction (in fact, restructuring) of student loans), levy of special taxes like education cess, and raising of private donations and other contributions from the corporate sector, besides, establishment of private institutions. Of these several recommendations, those relating to student fees, student loans and setting up of private institutions have received serious attention of the policy makers, planners and administrators, as the experience of the last two decades reveals (Tilak, 2004c).

We concentrate here in this paper on student loans, though the three aspects are closely inter-related, mutually reinforcing each other -- privatisation of education results in increase in student fees; increase in fee necessitates expansion of student loan programmes; availability of student loans results in further increases in fees; and further increases in fees strengthen the forces of privatisation. Even if growth in private education is not allowed, increases in fees and launching of student loan programmes mutually contribute to their rapid growth.

Student Loans in India

Student loan programme has been one of the most prominent methods that is advocated as an effective solution to the problem of financing of higher education in many countries. Further, in the overall context of growing budget constraints, and more importantly given the new economic reform policies introduced in the country, loan financing has been argued as an effective and a very desirable method of financing and it is getting slowly and steadily popular.

Student loans are advocated as a method of financing of higher education somewhat convincingly mainly because it has a strong appeal. It is viewed as an important method of cost-sharing and cost-shifting in higher education. Some of the arguments put forth in favour of student loans are: (a) public financing of higher education through tax revenues is regressive and student loans are 'equitable' (if not most equitable), as it suggests 'borrow money when you cannot pay for higher education on your own, and repay when you can,' i.e., access to higher education is not restricted by the inability to pay; (b) student loans are an 'efficient' mechanism of mobilisation of resources, as they have a huge potential of generating the badly needed financial resources from the 'direct beneficiaries' of higher education; (c) governments can save huge public budgets on higher education and reallocate the same in favour of other sectors. Other arguments are also made in this context, which are also generally made in case of private financing, such as (d) student loans, viewed as *deferred fees*, increase

access to higher education, as they are considered 'fairer' than student fees – the *upfront fees*; (e) they prevent wasteful expenditures as only the needy will take loans; and (f) student loans improve internal efficiency as students with loans would be 'diligent' and would be more serious with studies and in employment market than those without loan burden on their back. Students also become cost-conscious and know how much the society invests in their education. Thus the internal efficiency of higher education was expected to increase because of student loans.⁴ All these are questionable assumptions. A brief comment on some of these arguments is made in the concluding section of the paper.

Student loans as a method of financing of higher education is not new in India. India has had experience with two major types of student loan programmes: the National Loan Scholarship Scheme, a government-operated one which was originally introduced in 1963 but slowly disappeared by the beginning of the 1990s, and a new programme operated by the commercial banks since the beginning of the 1990s, which was comprehensively modified in 2001.

First the National Loan Scholarship Scheme.

The National Loan Scholarship Scheme⁵

A scheme of interest-free national loan scholarships was introduced in 1963, with a view to improve the access of economically weaker sections to higher education without the government really bearing the total financial burden of higher education in the long run. It was originally anticipated that student loans would help in setting up a revolving fund in 5-10 years, and the scheme would become a self-funding one in due course of time. According to the scheme, loan scholarships were made available to students starting from post-matriculation level to the completion of higher education. Loans were renewable on annual basis. The value of the loan-scholarship ranged between Rs.720 per annum (for pre-university and under-graduate courses) and Rs.1,750 per annum for doctoral and post-second degree education in professional courses such as medicine, engineering, technology etc., depending upon the nature and type of higher education. The loans were awarded on the basis of both merit and financial needs of the students. All those who secured 50 percent or above marks in qualifying examination and whose parental income did not exceed Rs.25,000 per annum (in 1987-88; earlier it was Rs.6,000) and who did not receive any other public scholarship were eligible for the loan-scholarships. Parental income was not considered in case of post-graduate studies for which merit formed the sole criterion for final selection among the eligible applicants.

The selected students were required to execute a bond with the government to abide by the terms and conditions of the scheme and to repay the loan. The bond was signed by the students and by their parents, who would stand surety for the students. The students

⁴ See among many, Barr (1988, 2004); Woodhall (1989b, 2006); World Bank (1994); Mingat et al (1985), Tilak (1997, 2004a); Johnstone (2006) and other papers in GUNI (2006).

⁵ See Tilak (1992) for an elaborate review of this scheme.

were expected to repay the loan amount in easy monthly instalments, equal to one-tenth to one-sixth of monthly income, subject to a minimum of Rs. 25 per month. The repayment was expected to start one year after the scholar would begin to earn or three years after termination of scholarship or studies, whichever was earlier. Generally, the loan amount was recoverable 8-10 years after commencement of the loan award and full recovery of the loan would take around ten years. There were certain rebates on repayment: concessions were given to particular categories of graduates, such as those who join the teaching profession or armed forces; they were given a rebate of one-tenth of the loan amount for each year of service. Loans were written off, in case of death of the student. Emigrants to foreign countries were expected to fully repay the loan amount. There were penalties for non-payment.

The scheme was funded by the central government, but administered through the state governments. The loan scholarship was actually paid through higher education institutions. In case of recovery, it was the responsibility of the central government; neither the state government nor the institutions were in the picture. But the recovered amounts were to be shared between the central and the state governments. Every year about 20,000 loan scholarships were given, and its regional distribution was based on the distribution of population. In 1989-90, an amount of about Rs. 32 million was spent on the same, compared to about Rs. 13 million in 1963-64.

The experience with the scheme was not encouraging in terms of the expected gains. The most important problem faced with the scheme in India, as in most other developed and developing countries related to non-repayment of the loans. About Rs.900 million was invested in all from 1963-64 till the beginning of the 1990s, but the rate of recovery ranged between 8-15 percent between 1977-78 and 1990-91. In some of the states the rates of recovery were below one percent. This was considered as the most serious problem of this scheme. Secondly, it met the needs of a very small fraction of students, just 20,000; and the number also remained unchanged, even though there was increasing demand for higher education and also specifically for the loan scholarships. Thirdly, as the amount of loan scholarship remained unchanged, and the living costs increased, though tuition fee did not increase much, it could not meet the financial requirements of many students adequately. The total funds allocated to the scheme were also very small in comparison with the government expenditure on higher education. Essentially, though it was conceived as a loan-scholarship, graduates treated it as a scholarship, a non-repayable one; and the government also treated in the same way and did not make special efforts to recover the loan amounts. With the zero rate of interest, the real value of money declined so fast, that the government felt it too expensive to make any special efforts to recover the un-recovered amounts. As a scholarship, it was considered inferior to the normal scholarship scheme, and as a loan it was not considered as a proper one either.

When the scheme was introduced, it was anticipated that student loans would help to establish a revolving fund in 5-10 years, so that the scheme would become self-financing in the long run and eventually higher education itself would become self-financing. It

was also advocated on the grounds that such a scheme would improve efficiency in use of resources, prevent wasteful expenditure, and students would become more serious in making educational and career choices. The experience shows that these were untenable expectations from the scheme.

Given some of the above features and trends, and more particularly the low rates of recovery, the attention paid to it slowly waned away and it was to be virtually closed. Later attempts to revive and reform it in a significant way were not successful.

The New Educational Loan Scheme

One notes that even during the 1980s, some commercial banks and philanthropic trusts were and are awarding scholarships and also loans to students for a long time. A few banks were in action in the area of loans, but they were operating on their own, without any common set of considerations and criteria. Not all public sector banks were offering the loans. Almost all loans needed security, and the amounts were small, rates of interest were high and the number of students taking loans was negligible. A research study (Seetharamu, 1997) made on one such loan programme of a public sector bank, viz., Canara Bank in Karnataka, revealed that student loan programme was not popular among the students or general public; students borrowed essentially to meet tuition fees; and students who borrowed small amounts (below Rs.25,000) formed a small proportion of the total.

As the banks began operating in a haphazard way, the Supreme Court intervened. Following the Supreme Court judgment, the government entered the scene with a view to restructure the old programme or to introduce a new comprehensive loan programme. Restructuring the old scheme was not found feasible, with the interests of the banks differing from those of the government/department of education. Finally, the Government of India in consultation with the Reserve Bank of India (RBI) and the Indian Banker's Association (IBA) framed a Comprehensive Educational Loan Scheme⁶ in 2001, with an ostensible view to ensure that no deserving student is deprived of higher education for want of finances. Subsequently, almost all the public sector banks were required to float student loans. Today a good number of public sector and other banks in India have come up with diverse schemes of educational loans. The scheme was further revised in 2004-05.⁷

Most of the banks have formulated the scheme with their own rules and regulations under various names, but largely within the framework given by the RBI and the IBA. The schemes slightly differ from bank to bank; but there are also several common features among the schemes operated by the public sector banks. Some such salient features are as follows:

⁶ See NIEPA (2004) for a discussion on the model draft prepared by the IBA in 2001.

⁷ See the "Revised Model Educational Loan Scheme -- IBA," http://www.iba.org.in/educational_loan.asp

- The scheme covers school and higher education in India and higher education abroad. It covers all type of courses including professional courses.⁸
- It is available to Indian nationals and the applicant should have secured admission in an Indian or a foreign recognised educational institution.
- Generally the loan covers the tuition fees, examination fees, library/laboratory fees, caution deposit, etc., hostel charges, purchase of books/ computers/other equipments/instruments/ uniforms, and other expenses required to complete the course, such as expenses on study tours, project work, thesis, etc., and also travel expenses for studies abroad.
- The scheme envisages loans up to Rs. 1 million (revised in 2007 from Rs.750,000) for studies in India and up to Rs. 2 million (revised from Rs. 1.5 million) for studies abroad.⁹
- For loans up to Rs. 400,000 no margin is to be charged and the rate of interest is also lowest up to this slab, which is not to exceed the Prime Lending Rates (PLR). For loans above Rs. 400,000, the banks may charge slightly higher rates, generally not to exceed PLR plus one percent. In the later case, they insist margin, as high as 10-25 percent. Recently, interest rates are deregulated by the RBI and banks are free to decide on the interest rates.
- The scheme requires the students/parents to provide security for all loans above Rs.700,000 (earlier it was Rs. 400,000); security or collaterals are not necessarily insisted on loans below this amount.
- The loans are to be repaid over a period of 5 to 7 years with a provision for a grace period of one year after completion of studies, or 6 months after getting a job, whichever is earlier.¹⁰

Many private sector banks have formulated their own conditions – some offer higher or lower amounts, charge different rates of interest and have varying conditions of repayment, security and broadly restrict the loans only to professional education. Many public and private sector banks also insist on a regular source of income for the parents of the student. The quantum of loans thus depends upon the costs of education and the repaying capacity of the students/parents.

Some of the general features and other conditions of the present educational loan schemes in India operated by public and private sector banks are summarised in Table 2.

⁸ But it is mostly availed for higher education only.

⁹ The upward revisions in the loan amounts and deregulation of interest rates were made in 2007.

¹⁰ Some banks require the repayment to commence immediately after the disbursement of loan, even when the students are still studying, and the repayment is to be made by the parents of the students. Further, some (State Bank of Hyderabad) requires loans for school and general college education to be repaid within three years from the date of disbursement of loan, while for professional/technical education, the period is five-years after completion of the studies.

There are substantial variations between several banks in terms of rates of interest, margin charged, and other aspects. Hence, the details in the table are only illustrative.

TABLE 2
General Eligibility and Other Conditions of Educational Loans in India

Fields of Study	School education, higher general and higher professional
Place of Study	India and abroad
<i>Eligibility:</i>	
Nationality	Indian
Qualifying Examination	Pass -- Second/First Division
Admission	Admission in a recognised institution
Age-Group	16-28 years
<i>Loan Amount (maximum):</i>	
Domestic	Up to Rs. 1 million
Foreign	Up to Rs. 2 million
Actual loan amount	Related to parental income and costs of education
Coverage of the Loan Amount	Tuition fee, hostel/mess charges, other fees, purchase of books, computer, travel abroad, etc.
Collateral/Guarantee	Nil for loans up to a limit Above the limit: Third-party guarantee (Parental) good employment prospects of the Degree
Processing Fee	Rs. 0-1500
Rate of Interest	
Up to Rs. 400,000	= primary lending rate (≈12-13.5%)
Above Rs. 400,000	Primary lending rate + 1% (13-16.5%)
Margin	0-15%
Repayment Period	3 years - 7 years
Grace period	Nil (repayment to commence immediately after the disbursal of loan) -- 3 months/one year after completion of studies

Source: Based on schemes operated by several banks listed in www.hindustanlink.com/careertex/educational-loans-india.htm, <http://www.education.nic.in/TechnicalEdu/eduload.asp> and individual sites of some of the banks (downloaded in May 2007).

To make the loans further attractive, income tax rebates are also offered since 1995-96 on the amounts of repayment of an education loan. Interest on loan taken by individuals for higher education to the extent it is paid is deductible.¹¹ Only loans taken for fulltime studies in any graduate or post-graduate, professional, and pure and applied science courses in higher education are eligible for deduction. The deduction is available for a maximum of eight years starting from the day the graduate starts repaying.

In the framework of loan operations of the public sector banks, education is identified as a priority sector along with 13 other sectors. Between 1990-91 and 2005-06, there has been a steady increase in the number of student loans provided by the public sector banks from 70 thousand to 641 thousand.¹² The total amount of student loans (outstanding in 2006) amounts to Rs. 108 thousand million (estimated as Rs.120,000 million in 2007). There is indeed a boom in the educational loan business.

The growth of the scheme has been rapid in the recent years. It is not only because more students are willing to take loans, but also because from the supply side, the banks find it a very attractive business. Educational loans are seen as an excellent new area for growth. The banks could see students as potential customers to be tapped for future business by starting building a strong customer relationship with the people from a very early stage. In this sense, it is a long term investment for the banks that might pay very rich dividends. Probably for the same reason, more and more new banks are entering into the business of education loans. The mushrooming of private colleges has also helped the rapid growth. While the UGC lists 26 banks which are operating the educational loan scheme, one of the recent websites lists as many as 33 public sector and private banks offering student loans.¹³ Neither of them is an exhaustive list. It is to be noted that almost every prominent bank has an educational loan portfolio. Many banks are competing with each other to aggressively market educational loans; they also organise educational loan *melas* (fairs) and educational loan awareness campaigns, as this is viewed as a vast untapped potential.

Though educational loans are considered as one of the priority sectors for loan operations by the banks, and the annual increases during the past few years seems to be substantial, in terms of absolute numbers and growth rates, the relative importance it

¹¹ Repayment of an education loan is made deductible under section 80E of the Income Tax Act. The yearly limit for deduction is Rs. 40,000 (for both the principal and the interest) since 2005. Earlier it was limited to Rs.25,000.

¹² The number of loan accounts may not necessarily be exactly the same as the number of students taking loans, as some students might take more than one loan (at a point of time, or at different times) for their studies, as there seems to be no restriction of such a kind. Similarly, from the amount outstanding in each year, we may not be able to calculate the exact additional loan payments made in a year, in the absence of detailed data on loan amounts recovered. Hence, the figures in Table 3 can help in making only some broad general statements on the growth of loans.

¹³ <http://www.ugc.ac.in/inside/eduloan.html>; and www.hindustanlink.com/careertex/educational-loans-india.htm

received has not been high. Amounts outstanding on educational loans account for 0.7 percent of total advances given by the banks in 2006 and two percent of the advances given to all priority sectors. Further, the amounts hundreds of millions of Rupees involved form only a very small fraction of the overall retail loans (home, car and other personal loans) disbursed by the banks. The average size of about 70 percent of the educational loans was up to Rs. 400,000 and many of them were given, according to the Indian Banks' Association, without security.

TABLE 3
Growth in Educational Loans in India, 1990-91 to 2005-06
(provided by Public Sector Banks in India)

<i>Year (as on March)</i>	<i>Loan Accounts</i>		<i>Amount Outstanding</i>	
	<i>No. ('000s)</i>	<i>Annual Growth (%)</i>	<i>Rs. million</i>	<i>Annual Growth (%)</i>
1990-91	70	-2.78	770	14.93
1991-92	69	-1.43	1060	37.66
1992-93	65	-4.35	1170	10.38
1993-94	66	0.00	1320	12.82
1994-95	70	6.06	1580	19.70
1995-96	74	5.71	1830	15.82
1996-97	114	54.05	2800	53.01
1997-98	82	-28.07	3290	17.50
1998-99	137	67.07	4500	36.78
1999-2000	80	-41.61	5430	20.67
2000-01	112	40.00	5430	0.00
2001-02	157	40.18	10280	89.32
2002-03	239	52.23	28700	179.18
2003-04	347	45.19	41790	45.61
2004-05	470	35.45	63980	53.10
2005-06	641	36.38	108040	68.87

Source: Ministry of Finance (various years).

Detailed data on the loan programmes operated by several banks are not available at the national or state levels to examine the efficacy of the loans. Except for some opinion surveys and micro level studies conducted by the media, we find hardly any strong research based analysis of the impact of the loan programme on the growth of higher education in India. Particularly important questions in this regard, that one should probe into, continue to remain unanswered: who gets the loans, i.e., what is the socio-economic and educational background of the students who take loans? What are the collateral and repayment conditions? What is the rate of recovery/repayment, besides questions on methods of recovery and other conditions and procedures adopted? How is it influencing the growth of higher education in terms of demand from various socioeconomic strata of

the society and on demand for various disciplines of study? Does it have any effect on the quality of education, or on the growth of particular disciplines of study? Lastly, how does the loan programme effect government expenditure on higher education?

Based on the available scattered information, micro level studies, research reports, and news analysis and reports, and the nature, scope and conditions of loan schemes of various banks, a few observations may be made on the efficacy of the new loan programme to answer some of these questions.

First, the educational loan programme is still not very popular, as the number of students taking loans for education suggest. In 2005-06, additionally 170 thousand students seem to have taken loans.¹⁴ The total loan accounts in 2005-06 were 641 thousand. Assuming that a student has no more than one loan account, it can be noted that hardly five percent of the currently enrolled students in higher education have taken loans.¹⁵ However, the total loan amounts seem to be sizeable. The size of the total outstanding loan amounts in 2005-06 is as big as, if not bigger than, the total government expenditure on higher education in the country in 2005-06. Or subject to the qualification mentioned in footnote 12, one can note that the loan amounts reimbursed additionally in 2005-06 alone are at least equivalent to 40 percent of the total government expenditure on education in the same year.

Secondly and quite importantly, economic backwardness does not seem to be an important criterion in granting loans by the banks. With collateral¹⁶ and similar conditions attached, the wealthier sections of the society, who might not actually need loans, might benefit from the loans, and the loans might not necessarily be used for educational purposes. The open eligibility may lead to abuse of the scheme. There is no income ceiling on students to be eligible to apply for loans. In case of all the banks, the loan amounts are subject to the repaying capacity of the parents/students. Some banks clearly insist on documentation that provides satisfactory details on student's economic capacity to repay the loans. For example, State Bank of India requires the students to submit statement of Bank account for the last six months, income tax assessment order not more than two years old and a brief statement of assets and liabilities of the borrower (and the co-borrower, usually the parents/guardians). According to another public sector bank (Punjab National Bank), the parents/guardian should have regular source of income to the extent that they are able to repay the loan in case of need or unforeseen circumstances. Generally, many banks provide loans up to a maximum amount of six times the monthly income of the parents. So the higher the parental income, higher is the loan amount the students get. Given these and other conditions regarding collateral

¹⁴ Based on the number of loan accounts in 2005-06 and 2004-05, given in Table 2. See footnote 12.

¹⁵ Some of the students who have taken loans may be in school education as well. Hence, this may be an overestimate.

¹⁶ Many banks insist on the collateral security, often in the form of immovable property, equivalent to 100 percent of the loan amount and some even higher proportions.

security, etc., majority of the students taking the loans could be from relatively better-off sections of the society.

The scheme is thus not equity-oriented. Economically and socially backward sections do not receive any preferential treatment. Very few banks offer concessions to weaker sections, e.g., lower percentage of marks as an eligibility condition for socially backward castes/tribes, if at all the percentage of marks is made a condition for general category of students. There are no provisions for lower rates of interest for socially or economically weaker sections of the society. Very few banks offer a lower rate of interest (one percent below the normal) for women students. In fact, loans may have a very serious negative effect on the demand for education of women. It is widely held that student loans would work as a 'negative dowry', and accordingly will have serious adverse effects on enrolment of girls in higher education not only in UK (Robbins Committee, 1963, p. 211), but also in countries like India where dowry is an important social phenomenon, and also in those contexts where it is not, but husbandal obligations are an accepted phenomenon. Thus, student loans could be a deterrent to women's access to higher education.

Even in general, the present scheme does not have any provision for waivers and exemptions in deserving cases, either to promote, say for example, bright graduates to join academic profession or armed forces, unlike in the earlier scheme. There are no special provisions of any kind to encourage graduates to seek employment in public sector, or even to stay within the country, rather than emigrate to developed countries. Further, it does not provide for exemption not only in case of unemployment but also in case of death of the graduates.

Contrary to the increasing practice of linking loans to the earning levels in many countries, the Indian loan programme is rigid, requiring the graduates to repay fixed amounts, irrespective of the earnings levels of the graduates. Compared to the normal average annual earnings of the graduates, the amount of monthly or annual repayment, when it is to be made within 5-7 years, might be prohibitively high.¹⁷

Since the loans are large in amounts, students obviously would like to choose study programmes in those areas which offer higher probability of employment and higher earnings, thus pushing down the demand for genuinely important scholarly disciplines of study such as social sciences, basic natural or physical sciences, and even in medicine, engineering and technology. In fact, according to the conditions and regulations of the scheme, many banks also clearly favour students who would like to pursue studies in high-employment oriented disciplines, such as Information in Communications Technology (ICT), hotel management and fashion technology. The loans also encourage

¹⁷ For example, let us assume that a graduate/post graduate earns on average in public/private sector about Rs.20,000-25,000 per month, i.e., Rs.240,000-300,000 per annum. If the graduate had taken a loan of Rs. 500,000 repayable in five-years, the graduate has to pay one-third to two-fifths of his/her annual earnings as an annual repayment. In fact, many graduates/post graduates in general/professional education may indeed earn much below Rs.20,000 per month, in which case the share payable as repayment of loan could be much higher.

students to opt for shorter duration programmes, as longer the period, higher would be the amount of loan, and higher would be the amount of interest.

The loan scheme, like in other countries assumes that strong links exist between education, employment and earnings. When education does not guarantee employment, and as repayment of loans becomes compulsory, people from relatively poorer sections will be worst affected. Also, the very nature of loans assumes the ability to repay, which would be inversely related with the economic well being. Hence, loans may adversely affect equity in and access to education, in addition to producing no significant net savings.

The scheme also does not insist on good academic performance of the students to be eligible for the loan. Any one who passed the qualifying examination and obtains admission in any recognised institution, is eligible to get loans under the scheme. In a sense the scheme is not even merit-oriented, though a few banks insist on first division in the qualifying examination of the student applicants. On the whole, business considerations seem to dominate the considerations to promote merit.

Looking at the way the scheme is being operated by many banks with aggressive marketing techniques, one may like to conclude that the new scheme ignores the human capital feature of education, and treats educational loans as any other loans, such as loans for physical capital. Banks are primarily interested in doing business, rather than being interested in promoting access of the weaker sections to higher education or to promote merit in general.

Since loans are of large amounts and rates of interest are also high, the loan burden could be high. The psychological burden of big loans have on the youth could be very damaging. Concerns about increased levels of student indebtedness have both psychological and socio-economic dimensions. Huge loan burdens on the youth may not necessarily make the students diligent and serious with studies, in stead, they may in fact contribute to growth in some avoidable social problems including mental stress and suicides. The psychological factors associated with student loans cannot be undermined. The risk and uncertainty associated with higher education would make people psychologically repulsive to loans for higher education and even make them susceptible to crime, suicides etc.

To sum up, according to the reformulated scheme of educational loans, since commercial banks operate them, the loan schemes are operated on commercial lines, caring neither for education background of the students nor for their economic background. They are merely known as education loans, but are almost like any other loans such as car loans, or housing loans, as far as banks are concerned. They have very few features that are associated with student loans programmes operated in other countries, or with the national loan scholarship programme operated in India earlier, in terms of conditions of repayment, rates of interest, period of repayment, grace period, and exemptions. Specifically economic backwardness does not form a criterion in granting loans by the banks. With collateral and similar conditions attached, the access to loans is severely restricted and the weaker sections of the society may not be able to benefit much from the loan scheme as it is being currently operated. The scheme does seem to be

promoting neither merit nor equity in the system. Yet it is increasingly becoming popular among the students – mostly among the middle and high economic strata, and it is becoming a roaring business for the banks. If one has the repaying capacity, the banks offer loans for anything and everything; so there is nothing special with regard to education on the part of the banks.

The Old and the New: A Comparison of the Two Schemes

In comparison, the National Loan Scholarship Scheme of the yester years may seem to be much better structured with better motives of educational development of the weaker sections of the society, than the present bank-operated scheme of Educational Loans in terms of their basic considerations and various other parametres. The comparisons between the two presented in Table 4 is quite revealing. The former, though relatively small in size, was more oriented to the needs of the students than the new one, which is not only responding to the increasing demand, but also actually generating demand for loans, by adopting aggressive marketing strategies by the banks and also by the government.

TABLE 4
The Old and the New Schemes of Educational Loans in India

	<i>National Loan Scholarship Scheme</i>	<i>Educational Loan Scheme</i>
Managed by	Government	Commercial Banks
Fields of Study	Post-Matriculation	School and Higher Education
Number	Fixed (20,000)	Not fixed (increasing)
Regional Distribution	Population based equitable distribution	No such principle
Place of Study	India	India and Abroad
Eligibility:		
Nationality	Indian	Indian
Qualifying Exam	Pass (with merit)	Pass
Parental Income	Ceiling on parental income (merit <i>cum</i> means)	No ceiling (open eligibility)
Loan Amount		
Domestic	Rs. 720-1750 per annum	Rs. 1 million for the course of study (maximum)
Foreign	..	Rs. 2 million for the course of study (maximum)
Coverage	To meet living costs	To meet fee and living costs

Collateral/Guarantee	Bond by the parents	Yes, varied types of security/guarantee
Rate of Interest	Zero	High (= market rates)
Repayment Period	8-10 years	3-6/7 years
Amount of Repayment	Related to income	Not related to income
Grace period	Study period + one year after employment or three year after completion of studies or termination of scholarship (whichever is earlier)	Varies from zero to six months/one year
Rebates	No income tax rebates	Income tax rebates on repayment
Exemptions/Write-offs	Graduates joining teaching profession and armed services; Also in case of death	No exemptions
Rate of Recovery	Poor	Likely to be high (But defaults are also becoming a matter of serious concern)
Principles of Operation	Service	Market principles(to promote Banking business)
Main Purpose	To improve access to higher education of the weaker sections	To reduce public subsidy to higher education

In fact, the new one is stringent in conditions, and seems more in favour of the lending institutions. The former one is associated with non-recovery of loans, while the later one seems to be alleviating this problem to a great extent, though some concerns are expressed in the recent months on the increasing number of defaults. The former aimed at promoting equity and also merit in education; the later ignores both and is skewed in favour of advantaged groups of population. The former one charged no rate of interest; the present one, charges high rates of interest, often equal to normal market rates. The present one looks at the whole issue of student loans as a banking activity, as a business activity, while the former scheme was a government scheme run with welfare as one of the motives. The government also looks at the present one as an instrument to reduce government subsidy to higher education and to reduce its role relating to social responsibility. While the former is considered as a supplement to scholarships and general public subsidy to higher education, the present one is considered as a substitute to scholarships and even to public subsidisation of higher education in the long run. These explicit and implicit considerations make a lot of difference. If recovery of loans is taken

as a measure of efficiency of a scheme, the later one fares better,¹⁸ but that cannot be an important consideration in case of educational loans.

In fact, some argue that if transparency is improved in public financing of higher education and a wider dissemination of knowledge of the costs of higher education, the costs met by the government or the level of direct and indirect subsidy that the student receives, etc., this would automatically improve the commitment of the graduates to pay back to the society (in the form of taxes and service), and hence there would be no need for a direct cost recovery mechanism like student loans. Very few seem to believe any more in such a moral persuasive measure. Instead, it seems the pests are here to stay. If the educational loans were to continue, it is important that some of the valuable attributes of the National Loan Scholarship scheme are in-built in the present scheme of Educational Loan, such as consideration for equity, exemptions/write-offs, methods of repayment, and the very principle of educational service and human welfare rather than relying mostly if not solely on market principles and considerations. For the student and or his/her parents the most important consideration regarding the educational loan is obviously the cost of loan and the terms and conditions of the loan. It has to be noted that loans involve both higher perceived and higher actual personal costs than others like grants (Colclough, 1993), which would affect the demand for education particularly of the poor families as students from lower socio-economic backgrounds would be reluctant to saddle themselves with debt burden, thus entrenching further the inequalities in access to education.¹⁹ Hence the conditions of the loan and of its repayment need to be liberalised from the point of view of the students/parents from the economically weaker sections of the society. For example, like the income-contingent loans in other countries (e.g., Australia, New Zealand and UK)²⁰ the amount of repayment has to be related to the earnings of the graduates. Government subsidisation of student loans as in Canada, USA and UK, is also necessary. But many feel that the currently operated student loan scheme cannot be modified to take into consideration the special needs of weaker sections. The scheme is essentially formulated keeping in view the better off sections of the society (NIEPA, 2001).

Instead, given the increasing concerns about the defaults, the efforts seem to be making conditions more stringent on the part of the banks, as the suggestions made by a working group of the Indian Banks' Association recently indicate. Obviously the banks, which are bereft of any social responsibility role, are interested to see that the default rates are minimized with tough and tougher conditions and/or the government promises to make up for the losses incurred by the banks. But it may have to be noted that debt

¹⁸ Tooley and West (1998) also seem to argue on the same lines, when they argue that company loans alleviate the difficulties associated with government loans in education.

¹⁹ See Overland (2001), who found that loans do not seem to help the poor in India.

²⁰ Income-contingent loans have been introduced only in six countries: Australia (1989), New Zealand (1991), South Africa (1994), UK and Thailand (2006) and Israel (to be introduced in 2008).

aversion is common, and the rates of recovery are far from satisfactory even in many advanced countries. The working group also has suggested setting up of a Rs. 2500-million Credit Guarantee Fund to provide cushion to banks on loan defaults. One half of the corpus of this Fund would be funded by the central government while the other half could be shared by the banks and the borrower.²¹ The group also recommended mandatory insurance of the students/parents and a premium to be charged for the same. All this will increase the students' costs of borrowing for education. The best way of recovery is to link it to levels of earnings of the graduates, as in many countries, and also to link it to the system of income tax collection, as in the case of Australia (Chapman, 2006). One can also think of relating loans to PAN card, so that recovery becomes easy. But this requires, however, to see that the loans are not restricted to the income tax payers.

The role of the government is important even in case of loans; loans cannot be left completely to the markets (or to the banks). After all it is not the practice anywhere. But the government seems to be in favour of complete deregulation in this context and to totally withdraw from the designing and administering the loans, leaving it to the whims and fancies of the markets altogether. Very specifically, experience from other countries also shows that government subsidisation of the loan programme is very much necessary. The role of the government is also important to ensure that expansion of the loan programmes do not fuel further rise in fees and further growth in privatisation and further inequalities in higher education.

Summary and Concluding Observations

Student loan programmes are nowadays widely prevalent in many countries of the world and have already assumed the status of an industry on their own -- 'student-loan industry.' The loan programmes have also been analytically and critically reviewed by many. Some of the international reviews have highlighted both the strengths and weaknesses of these programmes.²² Largely based on Indian experience, one can make a few observations, many of which corroborate with the findings of the international surveys.

The student loan programme is based on an inherently dangerous philosophy, on unrealistic assumptions, and it is being launched with very high ambitious expectations. The most important ambitious expectations of the governments with regard to student loan programmes are: (a) huge funds can be built up in a short time, with the repayments

²¹ For some details on the report, see Sen (2006). Further, this seems to be similar to the proposal made by the AICTE (1994) for setting up an Educational Development Bank of India (or Educational Finance Corporation of India) with a corpus fund to be contributed by the central and state governments and private sector to float loans to students and also to institutions. See AICTE (1994) and also Tilak (1999b).

²² See among many, Woodhall (1989a, 1992, 2002) and IIEP (1990-91, 2000-06), Ziderman and Albrecht (1995) and Ziderman (2006). Tilak (1997) also briefly analysed some of the international experiences.

of loans by the graduates, (b) loans, along with fees can help in making higher education systems self financing, and (c) governments can eventually withdraw from financing higher education systems. Neither it is desirable nor is it feasible to realise these ambitious expectations.

The student loan programmes are also based on several unrealistic assumptions: (a) demand for higher education will not get adversely affected; (b) poor will have enough access to loans and thereby to higher education; (c) loan amounts can be fully recovered in a reasonable period; (d) strong links exist between education and employment in the labour markets, and above all (e) well developed education credit markets exist not only in advanced countries but also in India and other developing countries and those education credit markets are perfect. All these are untenable assumptions.

Student loan as a concept is inherently defective both from philosophical as well as practical points of view. Philosophically, loan and education do not go together, as the banks do not distinguish between lending for education and lending for physical capital goods and services; and conceptually 'lending by the banks' and 'weaker sections' are also not compatible.

Student loans are based on the principles that 'he (she) who benefits from higher education must pay', and the education of those beneficiaries who have the ability to pay on their own or have ability to take loans, should not be financed by the state. While these principles have much circulation, particularly in market economies, their current application to higher education in terms of student loans is based on a very narrow view of the 'beneficiaries'. It is not only the students, but also their families, the employers, the government, and the society at large that benefit immensely from higher education. The 'externalities' associated with higher education including 'dynamic' externalities are estimated to be huge.

Basically student loans, which are regarded as a mechanism of deferred cost recovery, shift the responsibility of higher education from social domain (state responsibility) to household domain and within households from parents to the children – from present to the future. The philosophy of loans, thus, treats higher education as a highly individualised commodity, a responsibility of the student him/herself, as against its well-acknowledged public good nature. Generally, present generations make investments for the benefit of future generations. The philosophy of student loans is: let future generations invest now for their own future. The present generation need not take any responsibility of the future! The whole attitude to education that would be developed may be very harmful.

In short, student loan schemes can have very harmful effects on development of higher education – (a) quantitatively by reducing the demand for higher education, (b) equity-wise by reducing the access of the women and other weaker sections to higher education, and (c) nature and type of higher education, by affecting growth of humanities, social sciences, physical and natural sciences. It would also contribute to increase in fee levels, making higher education more inaccessible. The availability of loan facilities also encourages institutions to further escalate the fee levels both in public and private

institutions and increased fee levels will necessitate more and more loans. Thus they are both cause and effect and positively influence each other mutually in a cyclic fashion. It also promotes private higher education within the country and as it provides fees and other expenses needed for education in foreign countries and also travel, it promotes emigration of students to other countries.²³ Lastly, they also strengthen the forces of commoditisation of higher education. The philosophy of student loans does not recognise the 'social', 'public' (or quasi-public), and 'merit' good nature of higher education. It treats higher education like any private good, and education financing and, say, car financing are treated in the same way. The classical views that 'higher education is an indispensable intellectual social investment' and that it is an instrument of providing equality of opportunities, are no more valid.

To conclude, the concept of student loans in higher education is inherently weak, as it does not recognise the basic characteristic features of higher education, its philosophy is dangerous for the society, the gains claimed are elusive, the assumptions behind the mechanism are unrealistic, and empirically it is not necessarily a feasible solution to the problem of inadequate finances for higher education, nor is it an antidote to the regressive effects of steep increases in fees. It may indeed be a deterrent to the growth of higher education itself.

Without noting such inherent weaknesses, untenable assumptions and unrealistic expectations, many advocate student loan programmes as a reliable and desirable method of financing higher education. Often experiences of Australia, New Zealand, UK and other developed countries are cited in this context as successful programmes worth-emulating. One has to note that international experience is relevant but not relevant all the time for the developing countries. For example, many of these advanced countries have provided completely free higher education until very recently, their current enrolment ratios are comparatively very high, and the additional demand for higher education is small and it largely comes from not young fresh school graduates and unemployed youth, but middle-age and upper middle and upper classes, including women, who demand higher education for cultural reasons and for status, if not as a pass-time activity. In contrast, higher education has never been free in India; the current enrolment ratio is still very low; demand for higher education is essentially of young school leavers and unemployed youth, the demand is for economic development, if not economic survival, at the individual and societal levels, and a sizeable proportion of additional demand also consists of demand of social and economically weaker sections.

However, it appears that educational loans are here to stay. Given the experience of India and also of other countries, it is important to note they cannot be viewed as an efficient solution to the problem of finances in the short, medium or even long term. Student loans would not be a perfect substitute for budgetary subsidy to help the poor but

²³ Government, in fact, boasts of the numbers of students going abroad with the help of educational loans. *Hindu* (6 September 2005)
[<http://www.hindu.com/2005/09/06/stories/2005090604460200.htm>]

deserving students in higher education (Narayana, 2001). At best, it can be used in a very limited way for limited purposes but not for the whole higher education system. It has to work at periphery as a supplement to government funding of higher education. The most desirable form of financing higher education, however, remains state financing out of tax and non-tax revenues. Grants to the institutions and scholarships/bursaries to students are more effective in promoting access and equity in higher education, than any other method such as fees and loans. This is more the case in countries like India, where socioeconomic inequalities are still marked. Further, a sound system of taxation can as well allow an in-built mechanism of recovery of public investment made in higher education involved in the system of student loans.

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Equity and Education*

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Abstract

This paper focuses on the concept of equity and attempts to develop a framework for conceptually engaging with it in the sphere of education. It makes a heuristic distinction between human rights and social justice, and while locating the primary significance of equity squarely within the discourse of ethics, briefly describes some of the implications of taking a human rights perspective in education vis a vis of social justice. It draws out the difference between equity and equality and uses the distinction between means and ends, and between the formal and the substantive, to locate the importance of focusing on a process-based rather than on outcome-based approach to equity. Lastly, it distinguishes between equitable education and educational equity to clarify the ways to understand the role of equity in education, and draws attention to the fact that only by engaging with both of them can we broach the question of an equitable society. In the context of equitable society, it also raises the question of whether reforms in education will impact on society by drawing attention to the way power and hierarchies are deeply embedded in social structures. It thus brings in the issue of the extent to which educational reform is possible without addressing the hierarchies of the larger society which may, in fact, go against achieving substantively in education.

Introduction

In a country where poverty and deprivation are still widespread (conservative estimates indicate one out of four people to be still below poverty line) and surviving is a matter of daily struggle, it cannot be assumed that all sections of the population will be able to

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prioritize education to the same extent, and for several years at a stretch. The opportunity cost of going to school is so high that in many cases it means the child is not just feeding for herself, but many times for the survival of the family. Given the critical nature of education in human development, poverty cannot be used as a reason for not providing education to the masses. State and civil society have to engage in meaningful ways to achieve education for all. Though several initiatives have taken place over the last two decades to achieve this, yet, even conservative estimates reveal that more than 15 million children in the age group 6-14 years are still out of school even today ((MHRD 2006), warranting the continued push for universalizing elementary education.¹

Deprivation has thus combined with stratification making the composition of those who are out of school to include traditionally marginalized groups, such as the Dalits, Adivasis, religious minorities and “challenged” children. Critically, another group common to all of them - girls – still constitutes below 50 percent of enrolment at all stages (Mehta 2006), and regional disparities are also differently spread inter-state, intra-state, and between urban and rural areas. New “groups” such as children with HIV/AIDS, those who are the victims of civil war, juvenile delinquents and so on, are being formed continuously and, in turn, having difficulties in accessing education, further compounding the situation.

Whatever the multiple and complex causes of educational marginalization, there have been two major challenges which continue to confront education: one is enhancing the quality of education and the second is ensuring equality. Both have also been pitted against the constant need to address ‘quantity’ by providing access to increasing sections of the growing population (Naik 1975; Rao 2000). Thus the close connection between quality and equality has always been acknowledged. Increasingly, however, the commonly accepted interpretation of this connection is that one should not compromise on quality of education while ensuring equality. The other interpretation, not as well articulated, defines quality of education *in terms of* equality, so that a good quality education/ school is that which *enables equality*. By this interpretation (but not necessarily by the first), the absence of marginalized groups in a “mainstream” school and equally of the “mainstream” children in schools for the marginalized, would itself be an indicator of poor quality. Thus, while there seems to be agreement on the connection and need for quality and equality, the interpretation given to this link is critical because the first interpretation emphasises quality, while the second focuses on equity.

This paper gives us an opportunity to look at the conceptual development of equity. It attempts to clarify the ways in which equity plays out in education and their implications. It also raises the question of the extent to which reforms will create an equitable society when hierarchies and power are as deeply entrenched as they are in our society.

¹ These figures vary depending upon factors taken into account, such as enrolment, attendance, drop-outs, etc. For instance, estimates based on population projections and age-specific enrolments, calculated the figures for 6-13 age group to be in the vicinity of 60-70 million children in 2001 (Tapas Majumdar Committee Report 1999, mentioned in Jha and Jhingran 2005, p. 20).

Equality and Equity: Formal and Substantive Equality

There is a conflation of the terms equality and equity and they are often used interchangeably in common parlance as well as in academic literature. In order to bring out the nuances, we start by trying to understand the nature of equality through a simple statement: “All humans are equal”. Clearly, this statement does not mean that they are so in *every* respect but that they are equal in *relevant* respects and are to be treated as such in those respects. However, by the very same reason, this does not rule out treating them differently in those respects where they are, in fact, unequal. Such distinctions are important, particularly when equality is considered as a moral and social ideal (Benn 1967, p. 39). The distinctions are critical to the sector of education.

The above statement on equality of all humans can be modified to state: “Everyone is equal in the eyes of the law.” Equality can thus also be seen as a legal standard, a formal or *de jure* concept, which may draw upon distinctions of “relevant” aspects. Strictly speaking, it may not be necessary from this perspective to take into cognizance socio-historical and other causes which have led to inequalities, unless a case is made for them as being “relevant”. A focus on equality thus implies that different people are to be treated “the same” by some specified “agency” (in the above example, the legal system) and according to some specific, “relevant” aspect or parameter.

However, controversies arise precisely in the perceptions of inequalities that exist among people due to differing ideas on what is considered “relevant”. Since entitlements in a society are usually set forth in more general terms, such as “all human beings are born free and equal in dignity and rights” (*Universal Declaration of Rights* adopted by the UN General Assembly in 1948), or “equality before law” or “equality of opportunity”, these are also open to contestation about what equality means and what is to be done when there are evident inequalities or when there is a conflict, as for instance, when the “opportunities” available to one person are compromised by the opportunities available to another. Such contestations, while having their genesis in society, tend to end up in the interpretative domain, including in the judicial system, for redressal.

To clarify the concept of equality a little further, the discussion needs to address two questions (Burchardt 2006):

- Firstly, equality between whom?
- Secondly, equality of what?

The answers to these questions will clarify the conceptual shift from equality to equity.

Equality between whom?

The rationale for answering the question, ‘equality between whom’, has its basis in two relevant features: firstly, the inequality should be beyond individual control and secondly, it should have a historical source (Burchardt 2006). In India, the answer to this question is focused on two encompassing groups: gender and social groups (the latter including

Dalits, Adivasis, minorities, the challenged). The law grants them equality. But since these groups have been *historically/traditionally* discriminated against and because membership of these groups is beyond *individual* control and choice, when inequalities are perceived between these groups for which existing law is inadequate, the concept of equity is invoked to ensure the redressal of such inequalities. Thus, although the law guarantees equality, it is also recognized that to make equality a reality, *we need to invoke a concept of fairness which shifts the terminology from equality to equity.*

Equity in law, according to the dictionary, is the resort to general principles of fairness and justice whenever existing law is inadequate.² In order for some people to realize equality of status, additional efforts have to be made which will remove existing barriers to equality and enable them to access opportunities so that there is a greater distributive justice. Equity, in this sense, includes all the means or approaches to achieve the goal of equality. It also includes actions, attitudes, and assumptions that provide such opportunities. Regardless of the complex ways in which equity is defined, having understood that inequities arise due to many deep-rooted causes and are shared by groups of people, there is now sufficient consensus that while outcomes are a way of assessing equity, the focus should be on its processual aspect. By this yardstick, equality can be seen as a goal that society aspires for and works toward, with constant negotiation among members in the society on what it means in specific situations.

Implications of focusing on equality rather than equity

Why is it important to make this distinction between equality and equity? Other than the reasons mentioned above which have to do with enabling access by focusing on equity, when we say everyone is “equal” (in common parlance as much as before the eyes of the law), the underlying danger is that they will be treated *according to the standards of one group*, usually the dominant one, which makes other marginalised groups further disadvantaged because of the inherent group differences. If default standards or so called “neutral rules” are always those of the advantaged groups, then achieving equality becomes difficult, if not impossible.³ Sometimes an excessive focus on universalization

² For example, when a hen is lost by a peasant in a car accident caused by someone else, a court of law may only ensure payment of the market price of the hen to the farmer. However, a court of equity (or invoking equity principles) can gain the peasant a sum closer to the “real” value of the hen since it would consider that it is a source of income from eggs and this too has been lost to the peasant.

³ For instance, if women are to be treated equal to men in the workplace, then it is the male standards by which they will be evaluated and these will not take into account the fact that they are still the primary caregivers in the family. Unless the gendered structure of family roles are themselves radically changed, many women think that they must be given additional special rights to enable their equality in the workplace. This position while clearly consistent with fairness, problematizes it *vis-a-vis* impartiality.

may actually have adverse affects because it doesn't really take cognizance of such differences⁴ as we shall see in the next section.

Hence, any framework built to eliminate discrimination must take into account that although *de jure* or formal equality is important, one must also ensure *de facto* or substantive equality which would be a more powerful one for realizing the rights of marginalized groups.⁵ For example, *de facto* equality of the sexes may be defined as “women hav[ing] equal entitlement to rights, benefits and results as men but that there may have to be differential or preferential treatment for women in order for them to enjoy their entitlement to equality” (CEDAW⁶). Focusing on putting in place mechanisms and processes for improving access to resources, and removing barriers to them, is in the purview of equity. Equity, in this sense, is what enables substantive equality.

In discourses within the social sector, such as in education, an approach focusing on equality would be limited to equality of status while an approach focussing on equity would be more inclusive and bring in the equality of opportunity. It emphasizes that equality is possible in only relevant aspects and when situations arise whereby there is a gap between different groups in those aspects, then this “equity gap” is not justifiable and must be redressed. Such an approach also allows an understanding of equitable education as distinct from educational equity.

Equality of what?

Assuming that this “equity gap” exists in certain specified domains, as for instance in education, then it brings us to the second question ‘Equality of what?’ This can be addressed along three dimensions, viz., equality of opportunity, equality of process and equality of outcome (Burchardt 2006).

Of these, equality of opportunity is the most complex and open to interpretation. If we assume that it depends upon talent and effort, then equality of opportunity tends more towards the meritocracy position in which case there is a lack of acceptance of the role

⁴ Millennium Development Goals are in this category since they are “distribution neutral” and therefore do not directly address inequality. “Progress is measured by aggregating and averaging change at a national level and thus even as they are being achieved, many poor people get left behind” (UNDP, 2005, p. 51).

⁵ The Indian Constitution, according to Justice B P Jeevan Reddy, which guarantees formal equality before law in Article 14, interestingly also envisages substantial equality between individuals in Articles 15(1) and 16 (1) as well as measures to bring about substantial equality between groups in Articles 15 (4) and 16(4). In addition, he says, the Indian Constitution is one of the few which not just provides equality before the law but also equal protection of the laws, unlike the American Constitution, for example, which speaks only of the latter (Cunningham, Galanter and Menon 1997, p. 1595).

⁶ The Convention for Elimination of All Forms of Discrimination Against Women (CEDAW) is a treaty adopted by the UN General Assembly in 1976 and ratified by India in 1993. It is an international Bill of Rights of Women advocating equality between men and women. It obliges member states who have ratified it to act against inequality with affirmative action.

played by institutions in systematically creating (and depriving) opportunities to select groups. However, efforts can be made to equalise opportunities through addressing institutional barriers as, for instance, by providing resources (and *additional* resources) to some sections of the population. It operates in education at the formal level by including aspects like the provision of schools, uniforms, textbooks and bicycles to girls and other groups.

Equality of process is the most difficult to ensure but it is the one with maximum long-term effect. Rather than focusing on the distribution of particular resources, it is concerned mainly with the relations and interactions people have and generate between and among themselves, and between people and institutions ((Burchardt 2006, p.10). In education, it is concerned very closely with pedagogical practices with a focus on more process-based learning of children.

Equality of outcome is the most popular and convenient but also the crudest form along which to measure equality and is not well-supported philosophically ((Burchardt 2006, p.10).⁷ Particularly when outcomes are defined in terms of “results”, then outcome evaluation analysis tends to be flat and reveals less in and of themselves.⁸ Equity, however, is usually defined in terms of outcome – in the proportional participation of certain groups in various sectors. This, however, is an indicatory function, a measure of participation, and can be seen as comprising the concept of educational equity which is elaborated upon later.

Another reason for de-emphasizing outcomes is because there is an acknowledgement that even with substantive equality of opportunity, there will be a difference in outcomes on account of variety of grounds, not the least being the assertion of individual choice, the pursuit of talents which has nothing to do with capability, and may be even differential capacity to work. Thus, for instance, “whilst the actual activities and states of being of individuals are observable, the activities and so on that the individuals could do, but are choosing *not* to do, are unobservable” ((Burchardt 2006, p. 17, emphasis in original).⁹ Since elementary education is considered a “basic” activity, it is presumed that differences in outcomes are caused by differences of substantive access to opportunities rather than differences in choice.

⁷ For instance, outcomes are seen to not reveal anything about why or how something has occurred or what is preventing them from being achieved. For this kind of understanding, we need to do further micro-studies to flesh out the reasons for the outcomes, whatever they may be. Further, it risks ignoring differences in need, values, preferences, agency and responsibilities (Burchardt 2006, 10).

⁸ The other problem with focusing on equality of outcome is its measurement or evaluation. For instance, assuming that sharing of power is taken to be one such outcome, it is ambiguous how this can be evaluated without incorporating process itself, especially as empowerment of girls is defined as a process, not a product.

⁹ It is difficult, for instance, to evaluate whether the case of one woman being employed while another not, is due to differences in substantive opportunities available to them or due to differences in personal choices they have made.

One of the ways of using outcomes in a more profound way is define them in terms of consequences, as Sen (1985) does with “capabilities” in his capability approach. It makes for a richer understanding of what barriers prevent people from achieving certain goals or fulfilling needs.¹⁰

In the next section, an attempt is made to expand this shift between equality and equity by exploring how it plays out in the concept of “human rights and social justice”.

Human Rights and Social Justice: From Equality to Equity in Education

Several specific reasons are invoked to focus on equity, some of which are as follows (World Bank, 2006):

- If we do not focus on equity, the long term development of the country on almost every index will be compromised. Health, education and economic growth will stagnate or even decline in the long run if equity issues are not addressed.
- In a functioning democracy, polity and civil society are constantly under threat when benefits accrue or are perceived to accrue to only certain groups, and there is a perpetuation of the ideas and world views of a few privileged groups at the expense of other groups.
- The accompanying inequalities get reproduced over several generations leading to a trajectory of hopelessness, underachievement and what has been called “inequality traps”. These tend to be quite stable over time as they are successfully perpetuated by the elite and internalized by the marginalized.
- Society consistently skews its resources in such a way as to systematically favour those who are wealthy and/or politically influential and limits the scope of upward mobility for certain groups.
- Several stereotypes and prejudices combine to further prevent genuine engagement with “the other”, however broadly conceived.

Additionally, a society which has various kinds of inequities may conceal deeper problems. For instance, “meritocracy” positions in society get strengthened by which people believe that opportunities in a society should be available on the basis of talent and efforts. Such positions “fail to take into account the cumulative effects of advantage on the talents one has been able to develop” (Burchardt 2006, p. 4) and are represented by arguments such as “selecting the best person for the job” and “using resources effectively”.

Most importantly, these viewpoints have also allowed the perceived “failure” of other individuals to be divorced from the socio-historical groups they belong to, i.e they fail to take into account the cumulative effects of disadvantage on the talents one has been

¹⁰ Capability focuses on “the freedom people have to do and be rather than exclusively on their mental states or on the goods they have at their disposal” (Sen 1985; Robeyns 2002). Sen’s capability framework is able to keep context in mind. It incorporates process, differences in need, preferences, values, structural constraints and the like.

unable to develop. Such viewpoints thus have ignored the systemic and institutional roots of inequities.

While we can enter into the discourse on equity from several disciplines such as economics or politics, in this section we use ethics. This gives us the entry point into further understanding equity – through the discourse of human rights and social justice. Both are interlinked and often not clearly differentiated, as manifested in the use of the phrase “human rights and social justice”. Indeed, they do go together. However, separating them for heuristic purposes shows their different emphases and thus implications in education.

Human rights basically focus on those aspects which are guaranteed to an individual by virtue of being human – thus the emphasis is on the individual and how each one must be allowed to develop their individual potential. Although the interpretation of specific human rights may differ from case to case, or example to example, they are generally understood as “the minimum standards to which every individual is entitled” (Burchardt 2006). Human rights perspectives thus advocate and guarantee the *equality of individuals regardless* of group membership.¹¹ The imperative to universalize elementary education, for instance, can be seen as arising from this perspective. Within it, there is an emphasis on poverty and deprivation and it thus invokes human rights to make a case for minimum standards of living, education, and so on. In practice, for some political philosophers, this perspective is based on ideas stemming from humanitarian aid which involves a transfer of resources and its equalization (Chandoke 2006).

Human rights are thus unconditional and guarantee the same minimum entitlement. *From this perspective, there is nothing wrong with inequalities which exist between and among people after having taken care of providing a minimum level.* “Everyone has the same minimum entitlement, but there is nothing objectionable, from the point of view of human rights, in inequalities between individuals above that threshold level” (Burchardt 2006, p. 6).¹²

Perspectives rooted in social justice, on the other hand, look more at individuals as members of groups and recognize the fact that individuals belong to different socio-economic groups, with specific historical and other relations between them. According to this perspective, such membership should not be a preventive factor in the development of human potential. Discourses on equity in education for marginalized groups stem from this perspective – equity as distributive justice. There is thus a moral and ethical imperative that is at the basis of social justice. It compels the nation-state as well as civil society to ensure that diverse needs of different groups are met because some characteristics which people possess such as sex, disability, racial and caste membership and the like are beyond individual choice and control and these should not prevent their

¹¹ Right to life can be seen as an example of this.

¹² Burchardt (2006) gives the following example to illustrate this: Everyone has the right to life as the minimum entitlement guaranteed under the European Convention on Human Rights, and the existence of large inequalities in life expectancy for different social groups are seen as being consistent with the state having met its obligations under the ECHR.

access to resources of the society. Taking the perspective of social justice therefore acknowledges the inequality of people because of group membership.

For our present purposes (and based on the two factors mentioned above, firstly, the inequality should be beyond individual control and secondly, it should have been so historically), we can thus isolate three basic or main causes¹³ for the existence of group inequalities (Chandoke 2006), which are economic, social and socio-economic. The discourse on human rights is focused largely on the first level (economic) where certain rights are guaranteed to those suffering from poverty and extreme deprivation as human beings and therefore as individuals.¹⁴ Social justice is concerned mainly with the other two groups. As Chandoke (2006) points out, this perspective allows for remedial actions such as land reforms, income-generating schemes and the like, which will redress the social inequalities of the second group. Most significantly, according to her, when such social inequalities combine with poverty then this perspective also allows for additional and specific measures such as protective discrimination to redress the socio-economic inequalities. *Such measures are also consistent with the notion of substantive equality, whereby unequal or preferential treatment may be required in order to achieve equality.*

Such a perspective combines ethical individualism (whereby individuals are valued for themselves rather than as members of a group), with methodological pluralism (which recognizes that individuals influence and are influenced by larger social structures) and thus affirms human rights without compromising on social justice.

Typology of Equity: Gender Equity, Social Equity and Educational Equity

From the discussion in the above section, we can make some general observations on equity: that the term equity is used when we want to differentiate between inequalities that exist between groups rather than individuals; when such inequalities are of socio-historical origin or have causes beyond individual control, such as being born with a disability; it focuses on process-oriented approaches rather than terminal assessments for the removal of barriers and creation of opportunities; its discourse includes all mechanisms allowing differential treatment for achieving equality; it aims at achieving distributive justice.

The manner in which disadvantages emerge from gender and social hierarchies and reinforce inequalities in the domain of education, are consistent enough to generate a basic typology of equity for our present purposes along the major parameters - gender and social groups - before seeing how equity is engaged in the domain of education.

¹³ The selection of economic, social and socio-economic as main causes may seem arbitrary in this case. However, “[T]here are diversities of many kinds. It is not unreasonable to think that if we try to take note of all the diversities, we might end up in a total mess of empirical confusion. The demands of practice indicate discretion and suggest that we disregard some diversities while concentrating on the more important ones” (Sen 1992, p. 117).

¹⁴ For instance, specific needs of all individuals who live below the poverty line have to be met regardless of which marginalized social group they may belong to.

Given our understanding of equity, we can now see that gender equity and social equity may be seen as the two main types of equity.¹⁵ Gender equity refers to the degree of participation¹⁶ of both men and women in activities of society. Usually when we ask whether gender equity has been achieved, we mean to focus on those differences that exist between men and women as two groups rather than as individuals; that have their origins outside the context of individual agency; focus on those mechanisms, policies and practices which remove systemic barriers to their access to opportunities within society to develop themselves fully; and those mechanisms which allow for differential treatment for them as a group to create opportunities which they would otherwise not have access to, such as free education for the girl child in government schools.

Similarly, social equity refers to the participation of members of all social groups in society. Thus, when we ask about social equity we mean to ask whether all social groups (including people of different castes, tribes, religions and the disabled) have equal access to opportunities to develop themselves in various spheres along the lines of reasoning used above.¹⁷

Educational equity then is an outcome based assessment like the above, and indicates the degree of participation of all marginalized groups in the sphere or domain of education i.e. the participation of girls, Dalits, Adivasis, minorities, and the challenged in education. When children from all social groups and both sexes participate in education, this is a measure of educational equity. It is thus gender and social equity operating in the domain of education. In keeping with the description of equity mentioned above, we would look at everything in terms of groups, not individuals. Although educational equity has been sometimes used interchangeably in the literature with equitable education, looking at the proportional participation of children from marginalized groups in schools is in the domain of educational equity according to the framework outlined in this paper.

Education and Equity: Equitable Education, Educational Equity and Education for an Equitable Society

Equity operates in education in at least three ways: (a) by enabling equality of opportunity for *all* children, including those from educationally marginalized groups

¹⁵ Strictly speaking, a sociologically more nuanced understanding of equity would give us gender equity as well as social equity (referring to caste groups), religious equity (referring to all religions), and cultural equity (referring to “ethnic” categories such as Adivasis). Additionally we would need to add a category of equity for differentially challenged groups.

¹⁶ We have deliberately not problematized the concept of participation in this section, preferring to take a simple view of it, without getting drawn into other discussions not directly related to this one.

¹⁷ The focus on equity in the manner described above again has the benefit of de-emphasizing outcome-based evaluations, especially in societies which suffer from deeper inequities which need to be redressed.

within the sphere of education itself. Initiatives for this fall under ‘equitable education’, i.e. education for equity with an emphasis on diversity; (b) by enabling participation of children from all marginalized groups (including girls, Adivasis, Dalits, challenged, minorities, rural poor) in that equitable education. This falls under ‘educational equity’, i.e. equity in education with an emphasis on “relevant” diversity; and (c) by education in turn enabling equal opportunity in other fields such as the job market. This falls under ‘education for equitable society’.

The CABE Committee (2005) defines equitable education in terms of quality, thus referring to equitable quality of education as “providing all children access to, participation in and completion of elementary education with the prescribed courses of study...” In this definition, equitable means of equal or comparable quality. Equitable education thus is concerned with *every* child’s education, not just those from the marginalized groups. It recognizes that all children may be marginalized for various reasons within the school or classroom situation. It must be stressed that all children in the classroom, regardless of group membership, “may feel alienated due to non-relevant curriculum and teacher-centred pedagogy” (Jha 2002, p.179). *Equitable education thus has the power to (directly) affect the educational experience of all children, not just those of the marginalized groups. In effect, it would look at the quality of the educational experience of children as individuals, not as members of groups.* Thus, even those children who do not come from educationally marginalized communities could feel marginalization due to factors restricted to education itself, such as curriculum and pedagogy. Educational equity, on the other hand, would refer to participation of certain marginalized *groups* in education at levels of access, process and outcome.

For instance, inequitable quality of education may include teaching styles that prevent all children from actively participating in the classroom, leaving some children bored and others inattentive. Curriculum may be in favour of some subjects over others, pedagogical styles may overemphasize a lecture mode at the expense of experience or team learning. Text books may not be appropriate to the child’s own intellectual level, emphasizing abstract concepts at an age when they find it easier to deal with the concrete – all these may leave some children groping for meaningfulness. Language used by the teacher may be gendered or even simply different from the language used by the child at home; examination questions may be framed in ways that make no sense to the children’s worldviews and so on (Jha 2002). All these result in an inequitable education since *regardless* of group membership, some children even from the “mainstream” communities may be left out due to irrelevant curriculum and curricular inequities, unimaginative teaching and other inadequacies in curriculum transaction etc.

How can we further understand how equity works in equitable education? Nambissan has analysed “equity in education” along three dimensions, viz., access, process and outcome (Nambissan 1996, p. 1016). Using these same dimensions, we can see that in “equitable education”, these play out in the following way: the provision of educational infrastructure must be such that it enables children of all backgrounds to access education through a school system that factors in diversity. For some people,

equitable education may be a sound basis, for asking for common schools based on the neighbourhood school concept. For others it may be through providing equitable quality education in government schools, and still for others, it may be important that the children from poorer sections of society be allowed access into private schools as has happened with the recent Delhi ruling to private schools to reserve 25 percent of their seats for such children.

Process in equitable education retains all children through adequate pedagogical practices which factor in diversity in conscious ways – for example, by the use of two or more languages in teaching, individualized curriculum, focus on interests of children which may not coincide with the rest and so on. When these pedagogical practices are conceptualized and constructed such that all children's educational experience is enhanced by them – for instance, by child-friendly, activity-based teaching, appropriate language(s) as medium of instruction, context-specific learning, and the like – then this would go a long way towards ensuring that no child is marginalized. Having now located the larger discourses among which equity is situated, it can be seen that in terms of curriculum transaction and pedagogical practices, equitable education does not mean treating all children the same; it means treating some children *differently* in order to treat them *fairly* (ACSA, 1). This is because there is a recognition that the entry point for children is *not* on a level playing field.

Outcomes in equitable education is simplistically a completion of the course of study. It can be broadened to include the outcome or performance of children. These are a reflection of how testing is conceptualized to make evaluations germane to the child and encourage them to draw upon their own understanding. Learning outcomes need to factor the contexts children live and learn in, rather than focusing on terminal outcomes, such as ability to read and write which may itself not be a skill so easy to attain for first generation learners. Coming to the same place every day, remaining there for several hours at a stretch, exclusively interacting with peers may all be equally important achievements for children to learn.

Similarly, we can map how the three dimensions of access, process and outcome play out in educational equity. For instance, if the educational infrastructure provided is of the quality that attracts children from the marginalized groups, then this can be seen to be access in educational equity.¹⁸ It is quite possible, for instance, that seen from this perspective, ashram schools, bridge schools, EGS schools and even *madarsas* and the like, may be justified as means of reaching educational equity. However, without clear linkages to a shared educational experience, such as common or neighbourhood school, these initiatives will provide equity of a superficial kind since they are more in the form of specialized schools for children with special needs and go against the larger and more fundamental discourses of inclusive education. Unless there are concrete linkages to so-

¹⁸ Nambissan (1996, p. 1016) quotes an example from Mencher's study of Pariyan children who were inhibited from accessing education since they had to walk through the upper caste sections of the village in order to reach the school. This would be seen as a socially inaccessible school.

called mainstream schools, these schools will provide education of a dubitable kind to both children going to them as well as children in mainstream schools since they encourage the segregation of experience for children both from the “mainstream” as well as the “marginalized”.

Process in educational equity would look at ways in which children from marginalized groups would be retained through special attention in classrooms, such as using the language most familiar to the children’s mother tongue as the medium of instruction, using examples which are relevant to their experience and world views. Outcomes would look at the group learning outcomes of children from marginalized sections, keeping in mind that these may not be restricted to literacy and numeracy.

This brings us to the last way in which equity engages with education: education for equitable society. When the quality of education is of a kind that enables genuine (or substantive) access to *other opportunities* in society such as jobs, livelihood, shelter, leisure, arts and culture, etc, then this refers to education for equitable society.

Drawing upon Amartya Sen’s distinction between endowments and entitlements, we can say that education is both an *end* in itself - an entitlement - as well as a *means* to achieve equity - an endowment. We can also see how the capability framework he has developed can be used to enhance our understanding of equitable society. Sen’s capability framework “advocates that in making evaluations of well-being and policies, we focus on *what people can do and be*, instead of exclusively on their mental states or on the goods they have at their disposal” (Robeyns 2002, emphasis mine). Thus, for Sen ‘substantive freedom’ and ‘capability’ are used interchangeably.

The questions that thus must be addressed in this context are: What are the components of this equitable quality of education and how do we promote it? What is the relation between a diverse education system and equity? Are homogenizing or universalizing systems a solution to inequities? How do we address the issue of language and its role in equity? The scope of such questions is too large to be addressed here except to note the following.

It is clear that inequitable systems of education (which in turn were characterized by educational inequities) along the lines which traditionally existed in India cannot lead to the formation of an equitable society. However, providing an equitable education does not, in and of itself, result in social, gender and other kinds of educational equity either. Nor is there any guarantee that having achieved educational equity, an equitable society is inevitable, or even possible, as we briefly describe it in the last section on social change.

But since education itself is one of the means by which equity is possible in other domains (an entitlement which enables access to endowments), we can posit at this point that an equitable education is a necessary condition for both educational equity and equitable society. Further, it is a moot question whether educational equity even at the level of number of children enrolled may be achieved, without revamping of the pedagogical practices to ensure that equitable education. Thus equitable education can be seen as that kind of education which ensures educational equity, making the close and

uncompromising linkage between quality and equity that was mentioned in the beginning of this paper. Such a perspective directly links quality with equity by unconditionally including the participation of children from marginalized groups in the educational experience of children from more privileged groups and vice versa. Segregated schools thus compromise on quality when the educational experiences of children are isolated and exclusionist. They encourage the “ghetto-ization” of educational experience which breeds other kinds of problems in society. If universalization of elementary education is achieved at the cost of inclusive education i.e. if ‘hierarchies of access’ (Ramachandran 2002) are maintained, then this will have serious implications for the larger society.

Conclusion: Equitable Society – The Possibility of Social Change

In the previous section we dealt with factors within the educational system itself in terms of access, process and outcome through types of schools and the larger schooling system, pedagogical practices and issues, and outcomes in terms of the actual participation of marginalized groups. There are some factors, particularly at the policy level, which have enabled educational equity, such as the midday meal plans that have nothing to do with education per se but have impacted on bringing more poor children in to schools. Similarly, with the abolishment of child labour. Thus the linkages of education with the larger society are clear. In this section the question addressed pertains to the relation between education and equitable society. This brings in structural issues directly into the discussion and also raises the question of the limits of educational reform. If for instance, the needs of the working culture shape and influence the quality of education (Apple 1995, Bowles and Gintis 1976), then it appears that educational reform will always be limited by the economic structures which determine relations in the society. Although a case is increasingly made for stronger linkages between the so called “real” world of work and education, there is also a parallel understanding that this is a short term view with accompanying short-term benefits, and that education must instead be viewed as an end in itself.

Another aspect central to the understanding of social actions/movements seeking to change their status relative to the rest of the society is the concept of power. No discussion on equity would be complete without factoring this in, since this is an important ground for preventing or enabling social change. The traditional conceptualization of power as the ability to exert power *over* people, resources and structures has broadened into newer conceptions of power as one which is fluid, relational and connected to discourses and knowledge (Parpart 2004). Both these conceptualizations need to be factored into the discussions on equity in education and the possibility of equitable society, as this would allow us to examine whether, and to what extent, reforms in education actually are effective when seen against the structures of the larger society.

Secondly, while these structures would include institutional structures like caste, class, family, job market, and the like, some of these structures also include the discursive ones. Perhaps part of the limited success of the education “war” with regard to equity has

been that the focus has been on the traditional conceptualization of power, while relegating the latter conception of power related to discourses and knowledge to some peripheral space which plays no significant role. In fact, the opposite is true – discourses and knowledge systems occupy and change the deep space of personal and group imagination, since they articulate images of the self and society and thus are equally, if not more, important in effecting change.

Thirdly, it is important to see how power is inextricably woven with hierarchy (in addition to structures and discourses), and thus whether, and to what extent, the larger society will act to enable substantive change for the marginalized. Kumar asks, “Why should the community with its caste-based and gendered power structure act in concert to educate the poor?” (Kumar et al 2001, p.565). In fact, although it sounds processually sound, we need to deconstruct the nature of power in order to understand how vested interests can and probably will prevent change from occurring when based in community initiatives. “Experiences of rural social mobilization and dalit upsurges in recent years confirm the idea that the community is often an upholder of a casteist and sexist position” (Kumar et al 2001, p. 565).

Lastly, questions have been raised about the extent to which power structures underlying democratic but market-driven societies will permit educational equity through appropriate reforms in education. After all, such a capitalist system *depends* on hierarchies prevalent in the work environment in order to produce and generate profit. Thus, there is a built-in contradiction that although “education is more democratic than most other institutions...[it] helps reproduce unequal relations in society” (Carnoy 1983, p. 400). We need to engage with this question much more deeply than is possible in this paper.

There is a need to understand several things concerning equitable society: firstly, an educational praxis devoted to changing systems by programmatic approaches to reforming education has limitations and may not be sustained without integrating elements of the discursive aspect. Secondly, we need to understand the nature of these limitations in a hierarchical society whose vested interests get severely compromised by the success of educational reform. Thirdly, the relation between the state and the market in the sphere of education must be understood. Fourthly, educational reform must address its limitations when seen in the context of the work environment. Thus, it must engage with the sociology of the work place in order to understand the boundaries of educational praxis. Understanding educational reform at this level automatically and substantively engages with empowerment. Without such an understanding of it, universalisation of education may at best be simply a numbers game, divorced from the larger social realities in which it is embedded. Worse, it may continue to propagate bias, prejudice and social stereotypes which education is in fact meant to eradicate.

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INDIAN JOURNAL OF AGRICULTURAL ECONOMICS (Organ of the Indian Society of Agricultural Economics)		
Vol. 62	APRIL-JUNE 2007	No. 2
CONTENTS		
ARTICLES		
Impact of Agricultural Trade Liberalisation: Farmers' Indebtedness and Suicides in Kerala		<i>P.D. Jeromi</i>
Technical Efficiency of Major Food and Cash Crops in Karnataka (India)		<i>M.J. Bhende and K.P. Kalirajan</i>
Chronic Poverty in Tribal Areas: Evidence from Southwestern Madhya Pradesh		<i>D.C. Sah</i>
RESEARCH NOTES		
Economics of Change in Cropping Pattern in Relation to Credit: A Micro Level Study in West Bengal		<i>Subrata Kumar Roy</i>
Estimation of Economic Efficiency of Sugar Industry in Uttar Pradesh: A Frontier Production Function Approach		<i>N.P. Singh, Paramatma Singh and Suresh Pal</i>
How Sustainable is the Total Factor Productivity of Oilseeds in India?		<i>B.S. Chandel</i>
Impact of Dairy Farming on Livelihood of Participating Women under Grameen Bank in a Selected Area of Rangpur District in Bangladesh		<i>Md. Rais Uddin Mian, Jannatul Fatema and Md. Habibur Rahman</i>
Economics of Using Mist and Fan System During Summer and in-house Shelter During Winter for Alleviating Environmental Stress in Dairy Animals		<i>Anjali Aggarwal and Mahendra Singh</i>
REVIEW ARTICLE		
Looking at Agriculture without the Grassroots		<i>V.M. Rao</i>
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RESEARCH NOTES/COMMUNICATIONS

Role of Organizational Justice in Determining Work Outcomes of International and Local Academic Staff A Case Study

Junaidah Hashim^{*}
Arif Hassan^{*}

Abstract

The study aimed to analyze the differences between local and international academic staff perception of organizational justice in an international Islamic institution of higher learning that employs a sizeable number of expatriates. It also explored the role of organizational justice in shaping teaching faculty's attitude (job satisfaction and commitment) and behavioral intention (turnover intention). The study was exploratory in nature and was conducted based on a small sample of respondents in one specific work setting (IIUM) employing standardized tools to measure the study variables. Descriptive statistics, intercorrelations, t-test, and multiple regression analysis were used to analyze the data. No significant difference was found between local and international staff perception of organizational justice, job satisfaction, organizational commitment, and turnover intention. However, different facets of organizational justice predicted the work outcomes in the two groups. The result indicated significant impact of interactional and distributive justice in promoting expatriates' organizational commitment and/or intention to stay with the organization. For the locals, distributive and procedural justice were strong contributors to their commitment and job satisfaction.

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This is perhaps the first study of its kind conducted in an Islamic work environment. The study should add to the literature on international human resource management. Organizations that employ expatriates and knowledge workers should benefit from the findings of this study.

Introduction

Organizational justice research over the last four decades has highlighted the importance of perceptions of justice for work behaviour and motivation (Loi, Hang-yue and Foley, 2006; Colquitte, Conlon, Wesson, Porter and Ng, 2001). However, the extent to which these findings can be generalized to Islamic organizations is still not being explored. There is growing evidence now that employees from different socio-cultural backgrounds with different expectations and value systems may also differ in the way they perceive and react to their organizational environment. Recent research has demonstrated that employees in Taiwan (Farh, Earley and Lin, 1997), Hong Kong (Lam, Schaubroeck and Aryee, 2002), the People's Republic of China (PRC) (Begley, Lee, Fang, and Li, 2002), Britain (Fischer and Smith, 2006), former Eastern Germany (Fischer and Smith, 2006) and the USA (Tyler, Lind and Huo, 2000) are influenced differently by justice perceptions, depending on their value orientation. However, the nature and direction of the effect is debated (Smith, Bond and Kagitcibasi, 2006). The present study aimed to examine perception of organizational justice and its relationship with organizational outcomes in an Islamic organization, that is, International Islamic University Malaysia. Taking two groups of teaching staff, namely, local and international, the study proposed to see if there are any differences in their perception of organizational justice and if so how do they impact their organizational commitment, job satisfaction, and turnover intentions.

International Islamic University Malaysia (IIUM)

International Islamic University of Malaysia (IIUM) was established in 1983. Jointly sponsored by the Malaysian government, Organization of Islamic Conference (OIC) and Muslim governments, the university envisioned to cater to the needs of students specially from Muslim countries and communities. It has been successfully operating since then with a growth in faculties, staff as well as students' size over the years. Currently, it has over 15000 students from nearly 100 countries and a total of 1633 academic staff which includes 1328 local (81%) and 305 (19%) international staff. The university aspires to become a leading international institution of higher education at the global level. Its mission statement includes among other ideals, to exemplify as an international community of dedicated intellectuals, scholars, professionals, officers and workers who are motivated by the Islamic world-view and code of ethics as an integral part of their work culture.

The terms of employment in IIUM for local and international staff are different. While the local staff is mostly appointed on permanent basis, the internationals are given

contractual appointment of 1-3 years duration. As a result, the performance expectation and the resultant perception of reward may vary between the two groups. Moreover, the international staff belongs to many countries and the diverse cultural backgrounds may influence their perception of interpersonal treatment given to them by the university administration. This may affect their attitude and work behavior.

It is important to examine how the IIUM's mission has been translated into the organizational practices, particularly in human resource management practices. In such diverse workforce environment, how IIUM ensure fair treatment to every employees. Fernandes and Awamleh (2006) examined the differences in organizational justice perception and its role in work performance and job satisfaction among local and expatriate employees in UAE. They reported that the two groups exhibited fairly dissimilar levels of organizational commitment and job satisfaction as a result of different treatment given to them by the employers.

Organizational Justice

Organizational justice comprises three different components, namely, distributive, procedural and interactional justice (McDowall and Fletcher, 2004). Distributive justice refers to the concerns expressed by employees with regards to the distribution of resources and outcomes, such as work loads, salary levels and promotions (Fernandes and Awamleh, 2006). On the other hand, procedural justice is the perceived fairness of procedures which are used to determine the outcome decisions. These procedures should be consistent, bias-free and take into account the concerns of all parties and be morally acceptable (Fernandes and Awamleh, 2006). Interactional justice is concerned with the way individuals are treated in the organization which may include courtesy and civic manners (McDowall and Fletcher, 2004).

It is common to have different and inconsistent procedures, including compensation, performance appraisals, career mobility and other treatment when dealing with employees of diverse nationalities and backgrounds. In certain cases, organizational justice does not appear to impact job performance but it does correlate with job satisfaction. Based on their studies on local and international workers in UAE, Fernandes and Awamleh, (2006) argued that perhaps due to the fear of termination of contract or non-renewal of contract, lack of justice does not influence the performance of contractual workers but it does reflect on their job satisfaction level. It is thus crucial to create a positive work environment, and reduce the perception of lack of justice as it contributes to employees' job satisfaction, motivation and work commitment.

Past research has demonstrated that procedural justice has positive relationship with organizational commitment (Cohen-Charash and Spector, 2001; Colquitte et al., 2001; Wong, Ngo, and Wong,, 2002). The degree of fair treatment some employees received relative to others has been postulated to influence their motivation and performance which may include their intention to leave or stay with the organization (Hassan and Chandaran, 2005; Williams, Pitre and Zainuba, 2002). Hassan (2002) in his study asserts

that procedural justice is an important determinant of employees' attitudinal and behavioral outcomes, such as satisfaction, commitment and turnover intentions.

Organizational Commitment

Blau and Boal (1987) defined organizational commitment as a psychological state in which an employee identifies with a particular organization and its goals and desires to maintain membership with the organization. Organizational commitment has three components, namely affective, continuance and normative commitment (Loi, Hang-yue, and Foley, 2006, 1990). Affective commitment refers to an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved with, and enjoys membership of the organization (Loi, Hang-yue, and Foley, 2006, 1990). The continuance component refers to commitment based on the costs that the employee associates with leaving the organization. The normative component relates to the employee's feeling of obligation to remain with the organization.

Law (2005) found that affective commitment is the most salient component of commitment in predicting turnover, but an interaction of continuance and affective commitment is also significant. Affective commitment has been found to be associated with job satisfaction but correlate negatively with turnover intention or actual turnover (Konovsky and Cropanzano, 1991; Lok and Crawford, 2001; Wong, Ngo and Wong, 2002). Researchers have argued that the importance of the organization commitment construct is derived from its relationship with work-related behaviors, such as absenteeism, turnover, job satisfaction, performance and leader-subordinate relations (Finegan, 2000).

Job Satisfaction

Job satisfaction is usually defined as an affective or emotional response toward one's job. According to Locke (1976) job satisfaction is a positive emotional state resulting from the appraisal of one's job or job experiences. It results from employees' perception of their jobs and the degree to which there is a good fit between the individual and the organization. Studies have reported strong relationship of job satisfaction and organizational commitment (Winterton, 2004) and organizational justice (McDowall and Fletcher, 2004).

Turnover Intention

Turnover is a major problem for many organizations today because it is extremely costly for the employer especially jobs which offer high education and extensive on-the-job training (Dick, et al., 2004; Yavas and Bodur, 1999). Intention to leave is one of the strongest predictors and immediate precursor of employee turnover (Dick et al., 2004; Loi, Hang-yue, and Foley, 2006).

Existing literature suggests that employees' organizational commitment and intention to leave are two important predictors of employee turnover (Chiu and Francesco, 2003;

Loi, Hang-yue and Foley, 2006). Most conceptual models of voluntary turnover assume that job dissatisfaction is the root cause of employee turnover. When the overall job satisfaction level is sufficiently low, the person will develop a behavioral intention to quit his or her job and find alternative employment. This relationship has been long established (Chiu and Francesco, 2003). Birdseye and Hills, (1995) reported that expatriates working in an unfamiliar environment with different political, cultural and economic conditions often deal with both job-related and personal problems. These problems can create stress and dissatisfaction that may eventually lead to turnover. Affective commitment has consistently been shown to be negatively predictive of turnover and turnover intention (Loi, Hang-yue, and Foley, 2006; Chiu and Francesco, 2003; Winterton, 2004). There are mixed results in relation to the linkage between justice and turnover intention. In response to low distributive justice, employees choose to quit their job so as to end the inequity (Loi, Hang-yue and Foley, 2006). Other studies concluded that procedural justice was negatively related to turnover since procedural justice reflected organizational norms of decision making (Cohen-Charash and Spector, 2001; Loi, Hang-yue and Foley, 2006).

Thus the literature reviewed so far shows clearly that organizational justice is one of the determinants of job satisfaction and organizational commitment and lack of them may generate turnover intention among employees in various organizations and industries.

Methodology

The study is based on a sample consisting of 110 teaching staff of IIUM which included 38 (35%) internationals and 72 (65%) locals. In terms of gender distribution, 59% were males, 46% had worked in the university for more than five years, and 59 percent of them were above 30 years in age. The respondents were purposively selected to represent each of the six faculties in the university. In all, the sample consisted of 5.42% of the total local and 12.45% of the total international teaching staff of the university.

Following instruments were employed to measure the study variables. These instruments have been extensively used in organizational studies and have demonstrated robust reliability and validity indices (Hassan and Chandaran, 2005).

Interactional Justice: Interactional justice was measured by a 7-item scale developed by Niehoff and Moorman (1993). The items measured the degree to which concerns for employees rights are shown by the management in decision-making, and that employees are given adequate justification and explanation pertaining to the outcome of any decision.

Distributive Justice: The Distributive Justice Index developed by Price and Mueller (1986) was adapted to measure the perception of distributive justice construct. The 5-item scale measures the degree to which rewards received by the employees are perceived to be related to performance inputs. Each item asks for the degree to which the respondent believes that he or she is fairly rewarded on the basis of some comparison with responsibilities, education and training, effort, stresses and strains of the job, and performance.

Procedural Justice: Perception of procedural justice was measured by a 15-item scale developed by Niehoff and Moorman (1993). The items measure the degree to which the decision-making process ensure accurate and unbiased gathering of information, institution of employees' voice and appeal process, consistency, accuracy, correctability, representativeness, and ethicality.

Job Satisfaction: A 14-item scale based on Hackman and Oldham's (1975) Job Diagnostic Survey was used to measure job satisfaction. The scale measure five facets of job, namely, job security, pay, social, supervisory, and growth satisfaction.

Organizational Commitment: Organizational commitment was measured by a 12-item short version of the organizational commitment questionnaire developed by Mowday, Steers and Porter (1979). Satisfactory reliability and validity evidence has been provided by Steers (1977).

Turnover Intention: This variable is operationally defined as thinking of quitting intent to search for a new job, and intent to quit (Hom and Griffeth, 1991). The three-item scale used in this study to measure this outcome variable is taken from the Michigan Organizational Assessment Questionnaire (Cammann et al., 1979).

Responses were solicited on a 7-point scale (1 = strongly disagree; 7 = strongly agree). Table 1 shows reliability values of the scales, descriptive statistics and intercorrelations among the study variables.

Results

Table 1 presents the descriptive statistics and intercorrelations among study variables. Mean values of the three facets of organizational justice show moderate ratings on the 7-point scale. Among the three forms of organizational justice, procedural justice obtained the highest endorsement, followed by distributive and interactional justice in that order. Organizational commitment obtained higher score (Mean = 5.57) than job satisfaction (Mean = 5.00) and the intent to turnover was given low rating (Mean = 2.95)

Table 1
Mean, SD, Intercorrelations and Alpha of Study Variables

	Alpha	Mean	SD	1	2	3	4	5	6
1. IJ	.85	4.57	1.03	-					
2. DJ	.95	4.72	1.30	.78**	-				
3. PJ	.96	5.21	1.26	.81**	.79**	-			
4. OC	.90	5.57	1.09	.50**	.31**	.39**	-		
5. ITT	.86	2.95	1.75	-.28*	-.09	-.19*	-.48**	-	
6. JS	.93	5.00	1.04	.75**	.66**	.76**	.62**	-.34**	-

** p < .001, * p < .05.

IJ = Interactional Justice; DJ = Distributive Justice; PJ = Procedural Justice; OC = Organizational Commitment; ITT = Intent to Turnover; JS = Job Satisfaction.

Inter-correlations indicated that all three facets of organizational justice were significantly and positively correlated. Also they were positively correlated with organizational commitment and job satisfaction, and negatively with intent to turnover.

Table 2 shows mean differences between local and international staffs on organizational justice, organizational commitment, job satisfaction and intent to turnover.

Test of mean differences between the two groups did not yield any significant results on any of the variables. Mean scores though indicated that between the two groups locals gave a marginally higher ratings to interactional and procedural justice. On the other hand, internationals' mean score was slightly higher on distributive justice. On job satisfaction and turnover intention mean scores of locals were slightly higher. The scores on organizational commitment were almost comparable for the two groups.

TABLE 2

Test of Mean Differences between Locals and Internationals on Organizational Justice, Organizational Commitment, Job Satisfaction, and Intent to Turnover

	Groups	Mean	SD	t-value	Significance
Interac. Jstc	Local	4.80	1.02	0.65	NS*
	International	4.66	1.08		
Dist. Jstc	Local	4.67	1.28	0.46	NS
	International	4.80	1.35		
Proc. Jstc	Local	5.26	1.29	0.50	NS
	International	5.13	1.22		
Org. Com	Local	5.56	0.95	0.05	NS
	International	5.58	1.33		
Job Sat	Local	5.11	0.93	1.39	NS
	International	4.80	1.21		
ITT	Local	3.03	1.82	0.68	NS
	International	2.80	1.63		

*NS = Not significant

To predict the organizational commitment, multiple regression analysis has been attempted. Tables 3 and Table 4 present multiple regression results predicting organizational commitment, job satisfaction, and intent to turnover from organizational justice factors for the local and international groups respectively.

Table 3 shows the impact of organizational justice variables on the three dependent measures for the local sample. As shown in Table 3, the regression models predicting organizational commitment and job satisfaction were significant. However, it was not the case with intent to turnover. Variables in the equation predicting organizational commitment and job satisfaction explained 31 percent and 62 percent variance

respectively. The equation shows significant relationship of interactional justice with organizational commitment and procedural justice with job satisfaction.

TABLE 3
Multiple Regression Predicting Organizational Outcomes from Organizational Justice Factors (Local Employees, N = 72)

<i>Predictors</i>	<i>Org. Commitment</i>	<i>Job Satisfaction</i>	<i>Intent to Turnover</i>
	<u>St. β</u>	<u>St. β</u>	<u>St. β</u>
Inter. Justice	.52**	.12	-.09
Distr. Justice	.09	.01	-.24
Proc. Justice	.15	.78**	-.25

Adj. R^2 .31, $F = 11.37$, $p < .00$; Adj. R^2 .62, $F = 50.91$, $p < .00$; Adj. R^2 .08, $F = .81$, p NS

Table 4 shows that all the three organizational justice factors entered into equations predicting internationals' level of job satisfaction, commitment, and turnover intention. The analysis shows significant positive linkages of interactional and distributive justice with organizational commitment. Interactional justice also turned out to be a significant contributor to job satisfaction. Intention to turnover was negatively associated with interactional and distributive justice. In all, the three independent variables explained 25 percent of variance in organizational commitment, 62 percent in job satisfaction, and 26 percent in intent to turnover.

TABLE 4
Multiple Regression Predicting Organizational Outcomes from Organizational Justice Factors (International Employees, N = 38)

<i>Predictors</i>	<i>Org. Commitment</i>	<i>Job Satisfaction</i>	<i>Intent to Turnover</i>
	<u>St. β</u>	<u>St. β</u>	<u>St. β</u>
Inter. Justice	.93**	.74**	-.96**
Distr. Justice	.68**	.14	-.67**
Proc. Justice	.08	.22	-.08

Adj. R^2 .5, $F = 5.20$, $p < .00$; Adj. R^2 .62, $F = 21.15$, $p < .00$; Adj. R^2 .26, $F = 5.38$, $p < .00$

Discussion and Conclusions

In conclusion, we may note that the international employees and the local employees of the university showed moderate levels of organizational justice perception, organization commitment, and job satisfaction. There was no significant difference between the two groups on any variables included in the study. Intercorrelations among the independent

and dependent measures showed positive correlations of organizational commitment and job satisfaction with all the three organizational justice factors, namely, interactional justice, distributive justice, and procedural justice. Organizational commitment was positively correlated with job satisfaction, and negatively with turnover intention. These relationships were in line with previous findings. Past researches have demonstrated that procedural justice has positive relationship with organizational commitment (Cohen-Charash and Spector, 2001; Colquitte et al., 2001; Hassan, 2002; Wong, Ngo, and Wong, 2002). Organizational commitment is positively associated with job satisfaction and negatively correlated with turnover intention or actual turnover (Konovsky and Cropanzano, 1991; Meyer, Allen, and Smith, 1993; Lok and Crawford, 2001).

One of our expectations in this study was that there would be a difference in perception toward organizational justice between the local and international employees of the university. This is because the differences in their terms of employment related to tenure, compensation, performance appraisals, and promotion opportunities for the two groups. The findings, however, indicated no significant difference between the locals and internationals in any of the justice perception as well as in their organizational commitment, job satisfaction, and intention to turnover. Perhaps the result can be related to the dominant culture of the university that promotes one corporate identity based on Islamic ideals and values. As all the international employees are Muslims, the organizational culture of the university is able to smooth over the differences between local and international staff and promote similar understanding about the university.

Nonetheless, the regression results predicting the three work outcome variables yielded different sets of findings. In case of local employees, only interactional justice was important determinant of organizational commitment whereas for international group, distributive justice was also important. Procedural justice was not a significant predictor of organizational commitment for both the groups which is rather intriguing. It is argued that interactional justice is more personal than procedural justice which is more concerned with organizational processes. Therefore, when it comes to organizational commitment, which is a measure of emotional attachment with the workplace, perhaps interactional justice assumes greater significance. Interestingly, while procedural justice was significantly related to job satisfaction of local employees, it was not the case with the other group. For the international staff, interactional justice was more important than any other justice concerns. Interactional and distributive justices were also significant negative predictors of intention to turnover in case of international employees.


Findings of the study provide some insight into the attitude and behavior of highly educated academic staff of a university which has strong culture based on Islamic ideals and values. The result indicated utmost importance of interactional and distributive justice in promoting expatriates' organizational commitment and/or intention to stay with the organization. For the locals, distributive and procedural justices were strong contributors to their commitment and job satisfaction. These findings can be useful to organizations employing international employees, particularly the knowledge workers. However, the exploratory study is based on a small sample size. Further studies are

suggested on larger sample size and employees drawn from other institutions of higher learning operating in Malaysia to validate the findings.

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Vol.26	April – June 2007	No.2
CONTENTS		
Articles		
1. Effects of Lending Policies of Formal and Informal Micro-Finance Institutions on Access to Agricultural Credit in Nigeria - G.O. Onogwu and C.J.Arene		177
2. Impact of Watersheds Development on Dryland Farming in KBK Districts of Orissa - B.K. Panda, R.K. Panda and P. Sarangi		189
3. Adarsh Gaon Yojana – Way Towards Gandhi's Dream Village: Self-Sufficient, Prosperous and Peaceful - Shahaji Phand and H.P.S. Arya		207
4. Interactions between Field Workers and their Clients and Superiors in the NGOs (Non-Governmental Organisations) in Bangladesh - Mokbul Morshed Ahmad		227
5. Impact of Technology Adoption on Social Change in Eastern Uttar Pradesh - ND Shukla, RP Mishra and KC Shukla		253
6. Distribution Pattern of Land and Livestock among Different Socio-Economic Groups in the Rural Areas of Himachal Pradesh: A Comparative Analysis - Sarbjeet Singh		273
7. Factors Constraining Horticultural Development in Panchmahals District of Gujarat - V.Lenin, B.G. Bagle and D.G. Dhandar		293
Book Reviews		
1. Ground Water Management in India by M. Dinesh Kumar - P. Durga Prasad		307
2. Farmer's Suicide – Facts & Possible Policy Interventions by Meeta and Rajivlochan - Gyanmudra		307
3. Anonymous 2005. Shaping the future of Water for Agriculture – A Sourcebook for Investment in Agricultural Water Management - V.Suresh Babu		310
4. Watershed Management – Principles, Parameters and Programmes by N.D. Mani 2005 - V.Suresh Babu		312
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BOOK REVIEWS

Dell'OLIO, M. and Donk, TONY: *Models of Teaching by Jeanine*. Sage Publications. 2007. xv + 483. \$74.95.

Classroom teaching-learning process is one of the vital components which affect directly the learning outcomes. It is genuinely argued by educationists, psychologists and pedagogists to focus on child-centered education. This demands that teachers have to facilitate through innovative teaching practices to achieve this focus. Models of teaching do address theoretical* frame to connecting student learning with standards. This is the theme of this publication. The authors have tried to achieve this focus. This publication has been divided into three broad parts.

Part I examines what we teach and why, wherein standards have been spelt out as a matter of policy as well as the backdrop of the standards-based reform movement. This reform movement is discussed in the context of both national and local levels. Further, these standards have been discussed by describing the relevant topics, viz. philosophies of curriculum and instruction, and the role of assessment.

Part II deals with models of teaching step by step. This is being so because it is written in textbook format. Some of the models discussed are: Direct Instruction, Concept Attainment, The Inductive Model, Reciprocal Teaching, Question-Answer Relationship, Jigsaw Role Playing, Inquiry-Based Learning, Synectics and Advanced Organisers.

Each type of model is illustrated with a citation of case studies. Each chapter is concluded with summary, putting it together, student study site and references.

Third Part of the book deals with development of curriculum that addresses content standards. It addresses what should be taught, to whom, when, organized in what fashion, using what strategies, what personnel, what resources, which assessments and evaluations, and includes a professional, student-centered rationale for reach decision.

In addition, last chapter (14 chapter) outlines the process for both single-subject and inter-disciplinary curriculum design. This part addresses the need for general education teachers to modify instruction for students with special needs. This section provides a perspective on classroom teacher's responsibilities and describes the process of collaborating with special educators. It also provides suggestions for modifying instruction for learning disabled students and modifying teacher language for native English speakers, techniques for working with English language learners, and ways of enriching the curriculum for gifted students. The authors examine five theories of curriculum and instruction – academic rationalism, cognitive processing, curriculum as technology (which is different from information technology), self-actualization and social reconstructivism with a critique on each theory, outlining the formats of assessment for students – formative and summative assessment, the process of teaching-learning i examined by devoting separate chapter on each of 10 models of teaching (Chapter 4-13).

Each model of teaching is formatted by stages (steps) – teacher actions, student's response and notes. Examples and illustrations have been provided for better comprehension and understanding the conceptual frame of a particular model of teaching. Two detailed case studies (problem areas in a particular subject) are quoted for each model. This style of presentation is interactive – a dialogue between subject teacher and students. This provides clarity and step-wise explanation. Each teaching model has been discussed and examined, linking it with theories of learning and its brief background quoting the lead authors and researchers who developed and contributed to the literature of each model. Thereafter, each model of teaching is explained from the standpoint of content standards, and benchmarks. Why one should choose a particular model is responded at the end of the text of the chapter. In this way, the author's attempt has been to present before the readers 10 classic and contemporary models of teaching that address student needs as well as the particular demands of subject-area content. The authors have also attempted to distinguish between the concept of curriculum and instruction. A separate chapter (Chapter 14) has been devoted to discuss the process of curriculum development. Self-assessing questions have been framed to assess and evaluate teacher-effectiveness.

A significant component – student-centered rationale for curricular and instructional decisions to modify curriculum has been added at the end of Chapter 14 so as to understand as to why teacher education programmes as well as curriculum development and its review could become a regular process.

It is a good textbook for teacher-educators as well as for teachers who are facing evolutionary changes in the pedagogy of classroom instruction and how this classroom instruction could be supplemented by ICT – web-based student study site. [www.sagepub.com/delloliostudy]. The inter study site provides practice tests, flash cards, a lesson plan template, suggested assignments, links to state content and technology standards, field experience guides etc.

The publishers have also Instructor's Resource CD which offers PowerPoint slides, an electronic test bank, web-resources, a teaching guide for the case studies, lesson plan template instructions and much more. Both the authors are professors of education at Hope College in Holland, Michigan, USA, with background of school teaching. Obviously the context and citations of case studies have been drawn from America. In developing countries like India, in recent years, particularly after NPE of 1986, school effectiveness and quality improvement programmes in school education have been a major concern. Teacher-education programmes need special focus to meet this challenge. The teaching-learning process has to go a long way to emulate the good and innovative practices which have been field-tested in other countries. This publication is a good case for useful contemporary reference.

Brazeley, Brinda Rymbai: *Development and Problems of Higher Education in Barak Valley and Karbi Anglong Areas of Assam*. New Delhi, Regency Publications, 2006, pp. IX + 316 (ISBN - 81-89233-25-4); Price Rs. 600.00, US \$ 40 (Hard Cover).

The book forms the substance of a doctoral thesis in education and covers a regional study on the state of affairs of higher education in Assam during the period 1935 to 2001. The study covers the development and problems of higher education in all the three districts of Barak valley and one hill district of Karbi Anglong. It covers all the general colleges and Assam University located at Daorgakona (Silchar). In the Foreword, Prof A. Hania points out that the growth of higher education has been without doubt one of the most remarkable in today's globalized world, though it has been affected with various problems and difficulties inspite of rapid advancement.

About the tasks before the university, Dr. John Matthai, the then Vice Chancellor of the University of Bombay at the time of the inauguration of the centenary celebrations of the University of Bombay on February 4, 1957, said that it was the business of the university not only to convey the true concept of democracy to their students, but also to prepare them for the great transformation that is taking place in the country. It is important that our university should be able to train and prepare the youth for facing the responsibilities involved in the process of transformation (The Hindu, February 6, 2007). The UNESCO's draft proposal on higher education in 21st century envisages quality of higher education as a multidimensional concept and institutions of higher education must play a role in identifying and addressing the issues that affect the well being of communities, nations and global society. Universities have to redefine the mission and establish priorities as per need of the society (p-2).

Back home, H. N. Das (2006) stressed the needs of technical education in Assam. The facilities for technical and vocational education have not expanded much. Tremendous growth has been forecasted in the field of biotechnology. Assam has a great variety of flora. Based on such resources achievement in the field of agriculture, medicine, horticulture and floriculture should be possible. Planning for such units should be started. A special Task Force may be set up for this purpose (Yojana, December 2006).

Barak Valley has three districts, Cachar, Karim Ganj and Haila Kandi. The valley is a natural extension of the Bengal plains with socio-economic milieu similar to that of Bengal. Karbi Anglong is one of the two hill districts of Assam having an autonomous council under the sixth schedule of the Constitution of India, with headquarter at Diphu. The Karbis are scheduled tribes. The area of Barak Valley and Karbi Anlong are still lagging behind regarding higher education, and this needs to be looked into.

Assam, one of the richest state in the North East region did not have any college till the end of 19th century. The first college, Cotton College, was established in 1901. By 2001, Assam had 247 colleges under Guwahati University, Dibrugarh University and

Assam University. The first university in Assam, Guwahati University was set up in 1948. It is a teaching, residential and affiliating university. The university was mainly responsible for the development of higher education in the entire state. Prior to the establishment of Guwahati University, the college in the state was affiliated to the Calcutta University. College education in Barak Valley and Karbi Angalong region started with the establishment of Gurucharan College in Silchar in 1935. The second college was set up in Karim Ganj in 1946. Since 1947, there has been tremendous growth in the spread of higher education. By 2001, there were 45 general and professional colleges in the area. Another significant development is the establishment of Assam University as a teaching-cum-affiliating university. All the colleges in Barak Valley, Karbi Anglong and North Cachar came under the jurisdiction of Assam University. Out of the 45 colleges, 20 colleges are affiliated to Assam University and 25 colleges, called permitted colleges, are waiting for permanent affiliation from the university. The permitted colleges were set up recently.

Among the review of studies, mention may be made of two studies pertaining to Assam. Chakravarty (1971) conducted a study on the history of education in Assam from 1825-1919. He found that colleges in Assam faced a lot of problems, starting with infrastructure, administration, management and the most important of all finance. Thus the condition of college education was far from satisfactory. The professional and technical education was extremely inadequate. Another study by Nath (1974) deals with the results of some selected colleges of Guwahati University. The study revealed that the subjects like Economics, English and Geography contributed significantly in pulling down the college level to below average.

The objective of the investigation was to trace the development of higher education in Barak Valley and Karbi Anglong areas of Assam, to study the present system of administration and financing of higher education; and to study the problems faced by institution of higher education, teachers and students with respect to administration, finance and related matters. The study was conducted in 15 colleges and 10 departments and Assam University. The data was collected from teachers and students of the college and university through interviews and questionnaire. The analysis is based on the responses from teachers and students from colleges and university and interview with principals and university officials.

The study revealed that Arts Faculty is prominent in the area. There are few colleges having science and commerce faculty. The colleges have their own buildings, but they are congested as the enrolment has increased over the years. The hostel facilities are not adequate. The main complaint is that the library is not big enough, not well knit and proper reading / writing tables are not provided. Majority of colleges do not make use of teaching aids. More than half of the colleges do not have adequate furniture. The play grounds are small. Many colleges felt that the curriculum set by the university does not cater to the needs of the local students and more stress should be laid on vocational subjects.

The Principals face major administrative problems regarding students, recruitment of teachers, office staff, especially students strike, boycotting examinations, agitation etc. The grants received are not timely, especially the government grants. Most of the colleges want to introduce computer education, but they are unable to do so, due to lack of grants. There are also problems pertaining to infrastructure, library maintenance, budgeting, extension, hostel facilities, laboratory equipment and building etc. Many teachers had problems regarding infrastructure, library and college building. It needs extension, renovation and change. The teachers of private colleges have shown dissatisfaction over their salary. They felt that their work load was too much. The main problem the teachers face regarding students is that they do not attend classes.

Most of the students had problems in understanding the topic taught by the teacher. They find the lecture classes long and monotonous. Majority of them prefer the semester system of examination, as their work load will be less and the evaluation system is broken up into internal and external assessment.

In Assam University, most of the teachers find the curriculum suitable. The head of the departments would like to extend their department and prefer to have good furniture and teaching aids. Many departments have to share their buildings with other departments. The students felt that the university was not large enough to suffice their needs. Science departments do not have adequate equipment. Very few departments have library facilities and students do not get adequate books. Very few heads of departments faced administrative problems. Over the years, enrolment of students has increased manifold. In 1994-95 there were 330 students in 6 departments, and in 1999-2000, there were 1222 students in 24 departments. Most of the teachers and students are satisfied with the evaluation system. The heads of departments have commented on financial problems such as general finance crunch and library budget. However, the overall financial position of the university is sound. The Assam University's core is to build higher education towards excellence. This can be done with the help of committed and dedicated faculty and hardworking students. Therefore, care has to be taken so that enrolment is increased and the standard of higher education is maintained, since the university is a culmination of the long standing aspiration of the people of Barak Valley. There is emphasis on increase in the enrolment in education. In Eleventh Plan, there is a proposal to increase the percentage of each cohort going to higher education from 10 per cent at present to 15 per cent at the end of 11th plan.

The study concluded that to enhance higher education in the area, one trend is to reconstruct the courses in such a way that these are more professional and job-oriented. Certain applied courses like horticulture, fisheries, electronics etc. may be introduced in some colleges. The wastage in university examination in Arts is very high due to not making grade in the examination as compared to science and commerce. It is desirable in Barak Valley and Karbi Anglong area, the colleges are multifunctional with diversified curriculum to cater not only to academic needs but also the practical needs of the students. The state government should take initiative in providing financial assistance and administrative support to the colleges so that they are run efficiently. For the university

campus, the Silchar - Hailakandi road which passes through campus needs improvement and with better transport facilities, as communication is very important for development. Regarding further research, the author suggests that a comparative study can be made regarding higher education between Barak Valley and Karbi Anglong areas with that of other areas within or outside the state.

In short, this regional study will induce researchers to undertake micro level and in-depth studies of a region in a state to highlight its problems with a view to improving the functioning of the institutions in that area. It can also have implications in other areas as well. Dr. (Mrs.) Brenda Rymbai Bazeley has done a good job and deserves gratitude of the reader for the endeavour. The book will be of interest to teachers and students of education as well as educational administrators and planners.

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The Management of University-Industry Partnerships in Eastern Asia: Report of an IIEP/ESMU Distance Education Course, July 2-5, 2002. Michaela Martin, UNESCO: International Institute for Educational Planning, 2003, p.148.

The world economy, with intensive use of knowledge and high technologies, is rapidly being transformed into knowledge-intensive one. The economies of the world now are not just investment-driven but also innovation-driven in their various forms – technological, products or services. University-industry co-operation is being considered in many countries of the world, including East Asia, as a policy for developing the innovation system and widening interactions between the knowledge production, diffusion and utilization. Such co-operation will immensely benefit the higher-education system because it will enhance research output, generate employment within the system as well as provide opportunities for access to industries and most importantly cut down the reliance on government funding.

The IIEP/ESMU had taken a pioneering project to delve into the challenges, and take ideas on future visions of university-industry partnership through initiating a distance education course. The IIEP/ESMU tried to cater to a very wide range of activities – it developed educational tool in the form of distance education course; made a common pool for universities to share their experience by developing website for online discussion which developed into a documentation bank; tried to enhance in-house orientation of universities towards the management of university-industry partnerships; and finally with the publication of the report in the form of book it had tried to develop a framed approach towards university-industry partnership.

The book shares the assignments undertaken by the participants, who represented 15 East Asian Universities, during the course. The first section of the book gives a general

outline of the course and the process of participating in it. The purpose of using distance education course as the delivery mechanism was to enhance the skills of individual participants, capacity-building of the universities through group participation from each university, developing international perspective by exchange of information with participants from other regions and building database through regular interaction with the course team. The second section makes a step-by-step record of each of the five modules of the course viz., strategic management, management of interfaces, financial management, staff management and developing action-project to strengthen co-operation with industry. It tries to seek answers to the various facets of university-industry partnership by stating the questions to participants and then accounting their vision by referring to individual case-studies, makes commentaries on the case-studies and finally makes a general synthesis of the assignments of all participating universities. The last section of the book carries an in-depth evaluation by the participants in regard to the (i) attainment of course objectives; (ii) the course organization, design and content; and (iii) communication strategy adopted by the course. This section throws light on the participant's expectations. It contains their comments on difficulties faced as well as the intellectual gains while participating in the course. The purpose of including the evaluation as a part of the course was to use this information for revising the instructional design of the distance education course.

The book is well structured; tries to amass most of the information that was collected from the assignments submitted by the participating universities. Through the enumeration of the various modules of the course, the book makes the reader aware of the general system operating in the university-industry partnership. Though there are some differences in the economic environment of institutions, depending on the economic development of the countries as well as the area in which these institutions are placed, 'universities in higher income countries have broader range of opportunities than those in lower income countries. The universities that are located in a metropolitan area mention that they have access to large public or private enterprises' (p.37). It has therefore tried to represent experience from diverse developmental contexts by collecting empirical evidences. The methodology adopted has been very helpful in bringing out some good research findings by using the snowballing technique. Taking cue of the findings, the book makes suggestions for better co-operation.

There are evidences of very high-level of interfaces but most of the universities lack a specific policy to handle such interfaces. There is much emphasis on local regional development and universities cater themselves to the needs of small and medium-size enterprises. The trend of enlargement of the scope for interfaces seems to be driven primarily by privatization process but universities own objective to contribute to societal development are not lacking in the initiatives. Some of the universities' effort to develop incubator structures and science parks would have become more enterprising if they seek active partnership with local authorities. In the financial management of partnership, lack of funds, lack of skills, lack of proactive programmes, lack of transparency and highly centralized structure are impeding the management. There are some material incentives

for researchers in place but due to lack of proper policy, conflict of interest may arise. These areas need to be addressed well because without proper financial management, projects may fail to give good returns. Partnerships with universities are at different degrees of development, some universities are well advanced and some are crossing the seed-stage. The universities are in full support for increase in collaboration but they rarely seek international partnerships and therefore, must search for fruitful opportunities in the international market.

The report highlights the way partnerships are facilitated and constrained in distinct institutional contexts. Based on the study, it helps to understand the significance of policy coherence between organizational levels within an institution, the importance of seeking a balance between financial and intellectual research imperatives, the necessity of promoting a strategic balance between the forms of partnership that are allowed and encouraged to develop, and the need for flexible regulation within institutions to provide incentives without being heavy-handed or constricting. However, its purpose of including experience from diverse developmental situations has not been fully successful. In putting up case studies, it incorporates universities residing in only three countries –the Philippines, Republic of Korea, and Malaysia through universities of several other countries like Cambodia, China, Indonesia, Thailand and Vietnam, were participants in the course. Their participation was not wholly excluded as IIEP had made careful reading of all the assignments, yet a few more examples from other countries would have further enriched the experience. For example, China, which is the leading economy among East Asian countries, and Cambodia, which is very low in economic development, perspectives of participating universities from these countries could have been also included. Definitely, economy plays an important role in university-industry partnerships. Economic, political and technological climate all play as factors to the growth or decline of partnerships.

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McEwan, ELAINE K. and McEwan, PATRICK J.: *Making Sense of Research, (What is good, What is not; and How to Tell the Difference)*. Corwin Press INC. A Sage Publication; (2003); California; pp. 174; Price \$32.9595, ISBN 07619 77082 (Paperback).

It is one of those books that need to be read with patience and care. In an age when research guides and informs all our choices and judgments, we have to be careful about discerning the import of a research, particularly about the nature and purpose of the agency behind conducting it and the methodology followed and why, particularly when the authors have clearly distinguished between academic and policy research. To an

extent the present book meets part of the requirements that are needed in serious discussions among researchers and opinion makers. One has to be extra careful when research findings of a study are supposed to be guiding policy decisions.

Although most of us already know the problems faced by the policy makers vis-à-vis research findings, and yet we often come across a few who do not hesitate to feel inclined to be guided by the results they have read in prestigious journals. We are unsure of the findings, the methodology and also of the reasons why a research may be allowed to inform our decisions; and, yet there is something so fascinating about its findings that willy-nilly a few fall for it without any serious examination of the pros and cons of their suitability for the purpose it is intended to be adopted. The present publication tries to help as a guide in making policy decisions based on the research findings. The subtitle of the book (*What's Good, What's Not? and How to Tell the Difference?*) summarizes the purpose behind writing and publishing the present book.

The authors discuss in great detail the dilemma a decision maker faces while examining the findings of a research, which purportedly could resolve his problem if certain findings were adopted as part of the policy decision. Plenty of examples have been given to illustrate the point and share the dilemma decision-makers face. For example, research is usually defined as “careful, patient, systematic, diligent inquiry or examination in some field of knowledge undertaken to establish facts or principles”, but is research really so? Everyday we find the veracity or applicability of research being doubted or proved wrong. Be it medical, scientific or socio-political domains the findings seldom stand the test of time because one research finding contradicts the others that follow. For example, there is enough material already available to suggest that class-size and academic achievement have no causal relationship, yet we assume the opposite and make policies. Under the circumstances, the authors present their critique of educational research and say that their book will help the following class of academics and policy makers:

1. Concerned and conscientious teachers who recognize that their efforts are not bringing about the desired results and want to be more effective in their classrooms.
2. Principals who feel increasing pressures to bring students to mastery of national, state, or local achievement standards and are frustrated by the often haphazard way in which program decisions are made.
3. Teams of teachers and administrators who are charting school improvement initiatives and need the tools to make quality decisions.
4. District administrators who are faced with large-scale budgetary and curricular decisions and need direction in the allocation of resources.
5. University professors who want their students to become well-informed and knowledgeable consumers of research; and
6. Educational consumers and policy makers, such as parents, school board members, or legislators who want to base their decisions on sound research.

Comparing eight chapters, the book guides the readers ably through the morass of research and its findings. While for an Indian reader, the description or the discussion might not appear novel or even relevant (because the universities have so trivialized educational research that it has lost all meaning and the government policies are mostly based on politico-ideological grounds via their favorite academics), but for the Americans and others the book does offer some useful suggestions. The first chapter of the book presents five broad grounds on which to examine a given research finding:

1. The causal question: Does it work?
2. The process question: How does it work?
3. The cost question: Is it worthwhile?
4. The usability question: Will it work for me?
5. The evaluation question: Is it working for me?

While the reader should discover the real answers him/herself, the authors, after giving plenty of case studies and analyzing the major findings thereof, do make a suggestion or two for guidance. They show their preference for a randomized sampling in research and meta-analysis of research findings.

On the whole it is an interesting book and should be read by educational scholars and policy makers alike. But then it may also be remembered that what is written here is only good enough for the area it deals with and is not universally applicable to all branches of research. For instance, it is hardly relevant for any reflective research or philosophical research. We must not forget that the two authors work in the Department of Economics.

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Postlethwaite, T.N. (2004): *Monitoring Educational Achievement*. UNESCO International Institute for Educational Planning, Paris; pp. 140, ISBN 92805 12758.

The present publication is part of the series, meant primarily for two types of clientele: (1) those who are engaged in educational planning and administration, and (2) those who are less specialized. The series started way back in 1967 on practices and concepts of educational planning but in the course of time has undergone several changes. The concept of educational planning itself has changed overtime. For example, the scope of educational planning has been broadened. In addition to the formal system, it is now being applied to all other important educational efforts in the non-formal setting. The planners and administrators have become more “aware of the importance of implementation strategies and of the role of different regulatory mechanisms in this respect: the choice of financing methods, the examination and certification procedures or various other regulation and incentive structures”.

The present booklet records in its opening section that it is aimed “at explaining what monitoring learning achievement means; how to recognize a good study from a not-so-good study.”

The Preface of the book carries a very interesting introduction to the subject and in the meantime discusses an assumption, which incidentally has lost all credibility. Hitherto a ‘good’ school was defined in terms of its inputs and it was assumed that schools with highest levels of inputs would generate better outcomes than schools with lower levels of resources. “This assumption has been seriously challenged”. This means there are three implications: (1) School inputs have a diminishing rate of return; (2) The second lesson is that for a given level of resources, schools do not have the same level of efficiency; and (3) Assessing school quality by its outcomes is a new approach to designing educational policies.

The only constraint is that educational achievements are evaluated in terms of cognitive performances, such as reading or marks in mathematics or physics. The critics, however, maintain that the tests being used are very narrow in focus and ignore a large share of acquired competencies. While the argument advanced is largely acceptable but it should not be taken as a ground for discarding the present methods and goals of evaluation. Since educational evaluations are part of the strategies adopted by the advanced countries, the present book proposes to “help developing countries to enter the process of monitoring educational achievement in a more systematic way in order to guide properly national educational policies.”

The first chapter **Introduction** starts with the history of national sample surveys—the first one conducted in Scotland sometime in 1932. Since then advanced countries have moved ahead on the path of collecting dependable data on the trends of achievement in a uniform, scientific manner. Divided in six chapters, the first chapter is titled: Why do countries undertake national assessments or participate in international assessments? The author gives two main reasons for the same: (1) To identify the strengths and weaknesses in the systems at a particular point; and (2) To track changes in the system overtime.

While pupil achievement remains the main focus of such national assessments, there are other areas too that interest the governments like gender differences, location differences or levels of poverty etc which too have a direct bearing on pupil achievement and therefore evince considerable national interest. Several governments find these issues too of major concern. The author goes on to detail other areas for assessment too, which ought to interest the governments. The interest in learning and achievement in science and mathematics attract universally but the question of migrant population (such as in Delhi or Mumbai) and the achievements of their children should also interest governments. The governments should take care to see whether or not they have the competency levels for the construction of questionnaire, enough number of qualified statisticians to prepare proper samples and enough qualified people to collect data etc.

The second chapter presents two national studies, one from Vietnam and the other from Kenya. These studies should work as guides for future work. A few findings in these studies were found to be very interesting.

The third chapter details three international studies viz. SACMEQ, PISA and IEA. These are far more sophisticated in design and collection of data than the ones cited in the earlier chapter.

The next chapter deals with 'Criticism of assessment studies and responses to criticism.' The major criticism of these studies relate to questions like:

1. If tests are based on a curriculum that is general to all countries, will this not result in the international curriculum on all countries?
2. Have all competencies been measured in the international tests? Do they also include measures of children's self-esteem or of learning to live together?
3. Are students that are not used to multiple-choice questions at a disadvantage in tests that include such questions? etc.

Responses, to individual questions suggest that if care is taken to meet some of these difficulties, academic issues could be easily sorted out.

Chapter V deals with "technical standards for sample survey work in monitoring educational achievement." The author suggests ten points that may be looked into in order to judge the technical standards of the research. For example, the readers should ask whether or not the aims of the study been stated explicitly; was the defined population of the study appropriate; was the sampling well conducted and the standard errors within acceptable limits; were the tests well-constructed and pre-tested? etc.

Chapter VI is the last part of the publication and it talks of some implications for educational planners. It deals with general issues like whether or not the country undertaking such research has adequate staff, whether or not a few results are malleable enough for easy change, whether or not political considerations have been taken into account; and lastly whether a country report is also to precede international report?

On the whole, it is a very competently written book. It is recommended to all those levels of educational planners that must of necessity deal with the area of assessment and decision-making.

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Alma MALDONADO, Yingxia CAO, Philip G ALTBACH, Daniel C. LEVY and Hong ZHU: *Private Higher Education: An International Bibliography*. 2004; pp. 267 [and] Pamela N. MARCUCCI and D. Bruce JOHNSTONE: *International Higher Education Finance: An Annotated Bibliography*. 2006, pp. 180. Both published by Boston College Center for International Higher Education, Chestnut Hill, USA (paperback).

The Center for International Higher Education in the Boston College is one of the major centres of research in higher education in USA. But its contributions are not confined to USA. Its research publications are of considerable significance and are found to be very useful not only by researchers around the world, but also policy makers in developing


and the developed countries. The contribution of Philip Altbach in terms of diversity of publications the Center brings out is indeed significant. The Program for Research on Private Higher Education at the University of Albany (PROPHE), which is an important international network dedicated to building knowledge base on private higher education in the world managed by Daniel Levy, joined the Center for International Higher Education in bringing out a very useful bibliography on private higher education, an area which is growing fast both in research and in practice. The international bibliography includes a good essay on the trends in research in private higher education by Alma Maldonado-Maldonado, in addition to providing bibliographic references to more than 1000 books and articles and nearly 600 dissertations on private higher education. The entries of books, articles and reports, and also the dissertations, are arranged by geographical regions. There are also useful cross reference indexes by theme and author. Research on private higher education focused on economic and financial issues, religious aspects, management, policy and planning and public-private partnerships. The volume of literature and the geographical regions covered are indeed exhaustive.

Centre for Comparative and Global Studies in Education at the State University of New York at Buffalo had taken up a major research programme called the International Comparative Higher Education Finance and Accessibility Project, under which valuable research was conducted on financing higher education under the overall direction of Bruce Johnstone. The Center for International Higher Education jointly with the Center for Comparative and Global Studies has published the other book, the annotated bibliography on higher education finance. Section 1 consisting of more than 140 pages has a good listing of research studies arranged alphabetically by the name of the author along with a succinct annotation of each study. Annotation is an added attraction of this bibliography. The bibliography includes several formally printed articles, reports and books and also material available on web. The area is so vast that any attempt to be comprehensive may not be feasible. Hence, Marcucci and Johnstone are understandably selective; but have covered geographically many regions of the world, though much of the print material refers to the ones published in Europe and North America. It also largely concentrated on the recent period – last two decades.

Both bibliographies under review will serve as excellent resource material and researchers will find them extremely useful.

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	THE INDIAN JOURNAL OF INDUSTRIAL RELATIONS		
CONTENTS	VOLUME 43	NUMBER 1	JULY 2007
ARTICLES	<p>Human Resource Development Climate in Dubai Organisations <i>M. Srimannarayana</i></p> <p>Value Institutionalization Enhances Commitment: Perspective of Culture in Indian Organisations <i>Pooja Purang and Anuradha Sharma</i></p> <p>Human Resource Management, Individual Behaviour and Organisational Effectiveness: A Study in Indian Organisations <i>Soumendu Biswas, Kailash B.L. Srivastava and Vijai N. Giri</i></p> <p>Motivational Climate in Selected Institutions of ICT Education and Training: An Empirical Study <i>Ravindra Jain, Rajat Chatterjee and Sarita Jain</i></p> <p>Adolescents' Knowledge and Awareness about Issues Related to Sexuality and HIV/AIDS <i>Meenakshi Nayar, Neelam Bhatnagar and Shipra Arora</i></p>		
COMMUNICATIONS	<p>Indianising Indian Management : A Framework <i>Ishwar Dayal</i></p> <p>Impact of Modern Technology on Organisational Processes <i>Koustab Ghosh</i></p> <p>Improving the Quality of Corporate Governance in India <i>J.P. Singh</i></p>		
BOOK REVIEWS	<p>The Scourge of Unemployment in India And Psychological Health (Lal Bahadur Singh) <i>Kamlesh Jain</i></p> <p>Human Resource Management (R. Wayne Mondy and Robert M. Noe) <i>Chandan Kumar Sahoo</i></p> <p>Passion : The Untold Story of LG Electronics India (Yasho V. Verma) <i>Ishwar Dayal</i></p>		
INDEX OF ARTICLES	<p>Index of Articles (Based on SRC Library)</p>		
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