

Higher Education in the Twenty First Century

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Introduction

The University of Pune is celebrating its half century and this article pays tribute to the achievements of the university which are all the more creditable as they are against a general environment which is not so friendly towards higher education. The article written in a frank and sincere vein seeks to outline the problems faced by universities today.

In the premises of the University Grants Commission in New Delhi, the following quotes of the country's first Prime Minister Jawaharlal Nehru are proudly displayed:

A university stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search of truth. It stands for onward march of the human race for still higher objectives. If the universities discharge their duties adequately, then it is well with the Nation and the People...

Nehru was expressing aspirations shared by everybody at the time of our independence, that once we become our own masters, we will set our house right and many of the ills that had beset the country during its long period of shackles would go away. That those aspirations are still unrealized after a half century of independence, is universally agreed. Although there are many achievements to be proud of, in the fields of agriculture, space, atomic energy, defence for example, the state described

in Nehru's above quote "then it is well with the nation and people" is still to be achieved.

This article will deal only with some aspects of higher education and will outline a few outstanding problems, some inherited from the British and some of our own creation. We will also suggest some possible future course of action.

State of the universities

The universities present a mixed picture today. On the one hand, the number of universities, the numbers securing university education, the variety of courses offered, the support for expensive equipment, all have gone up enormously since independence. One can read several such reassuring statistics. But the underlying feeling one has is that this growth has been at the ill-affordable expense of quality.

True, the number of universities today is four times that before 1947. But how does a typical university compare with a pre-independence university in terms of the quality of its teachers, the quality of its students, the quality of its examinations, the quality of its buildings... in short, quality per se? Or, compare any old university like Calcutta, Bombay, Allahabad, B.H.U., etc. with what it was fifty years ago. No one can deny the sharp decline in quality at all levels.

The reasons are many and oft-discussed. They can be summarized thus:

1. There is continuous external interference in the day-to-day running of a university with the result that it cannot enjoy autonomy even if it wants to.
2. Exercise of autonomy requires strength of conviction and courage of pushing forward the right policy. Today neither the authorities in administration nor the academics belonging to various faculties are in a position to operate in this mode.

3. One reason for (2) above is that the intrinsic merit, that is necessarily the backbone of courage and conviction, is lacking. If a vice-chancellor's appointment is made through political motivation rather than merit, the incumbent is always beholden to the political masters and cannot exercise independent judgement. Then there are other non-academic considerations such as the reservations policy, a parochial (son-of-the-soil) syndrome, administrative inertia that have all contributed to a decline of the faculty.
4. The view that universities must only teach and that research is secondary has deprived them of a lively and fresh academic atmosphere that comes only when teaching and research go hand in hand. The growth of the culture of autonomous research institutes and national laboratories has shifted the research element largely out of the ambit of the university sector.
5. Politicking amongst the faculty, interference from outside in the university affairs and the obvious weakening of the merit criterion for success have brought about a general decline of discipline and academic values in the student body. Indeed discipline goes out of the window when copying in the examinations is openly condoned.

It is often said in nostalgia, why do we no longer have distinguished scientists, teachers, scholars the likes of which used to prosper in the universities? Where are the intellectual giants that used to lead universities as vice-chancellors to whom the politicians would listen with respect rather than issue orders? One may recall the firm stand taken by Dr Sarvapalli Radhakrishnan as the Vice Chancellor of BHU against the sending of police within the university campus during the 1942 Freedom Movement, a stand which made the Governor of United Provinces back down. Today police presence in the same campus has become a permanent feature and the VC has to be heavily guarded.

Numbers versus needs

Although we sometimes boast about the large numbers that go in for higher education, the fact is that these large numbers are primarily responsible for decline in quality. We must ask the question: Why is a student opting for a course? Is it because he/she is academically motivated for that subject? Is it because the course is essential for the job market? Or is it because there is no other avenue open for 'value-addition'? (Like a consumer product passing through a factory, the individual also is supposed to acquire added value through education.)

The large numbers that go in for higher education and get degrees expect those degrees to be passports to jobs. Yet there is a large highly educated but unemployed youth force in the country, which clearly indicates a mismatch of supply and demand. The word 'university' has come from the word 'universe', which encompasses everything. So the presumption is that in a university there should be provision of all kinds of educational programmes. The question therefore is, whether this universality has been properly used by the universities to adapt to the changing social needs of the country.

There are of course two sides to the coin. The universities may very well introduce vocational programmes to enable students opting for them to secure a useful livelihood. But the society has to recognize those new courses as respectable and suitable. For example, a clerk's post today may require familiarity with the computer and good command over the relevant language. A conventional degree does not guarantee either of these. But a diploma that ensures that these attributes are met with will not be recognized in the employment world.

If the employers are satisfied with such a diploma, and recognize it in preference to a degree, then the pressure of numbers on a degree course will decline. Likewise, there may be several vocational outlets, like TV/video repairs, plumbing, electrical maintenance etc. that make it possible for a youth to earn a respectable living. But so long as the society continues to at-

attach a misplaced importance to the conventional degree, the students despite their natural aptitudes will throng to the conventional courses.

The Government of India, being the largest employer in the country can bring about a change of attitudes by setting the trend. The pressure on the conventional courses can be considerably reduced, by diverting students to 'non-conventional' courses after an aptitude test. Students who have no motivation towards a conventional degree course but are studying it because there is nothing else to do would greatly benefit by the opening of additional channels to which the universities have added their stamp of respectability.

If we look at our conventional course structure, we find that it has hardly changed over several decades despite the many rapid changes brought about in our life-styles by the advances in science and technology. Surely it is time to look at the changed circumstances and introduce some major restructuring. Do we continue to straitjacket the system in the arts-science-commerce-engineering- medicine format? The lack of interdisciplinary streams has made the format stale and sterile. A holistic view is called for.

The reservations policy

In our computer centre we once advertised for a reserved post of an expert in systems management. We received very few applications, an event not very uncommon. As none of the candidates were of the requisite level, we were thinking of advertising for the post again. Then somebody pointed out that a young man appointed on a temporary project in the centre was also entitled to apply, but had not done so. As we knew the person to be very competent we asked him, why he had not applied. Was he unaware of the advertisement?

No, he replied; he was very much aware of its existence. He was also confident that he was qualified for the job advertised. However, as the post was reserved, he felt that his selection would

not be seen as proof of his merit. In short, he did not want to get into a post which was reserved and where criteria for selection are invariably relaxed. Instead he wanted to compete for an open post where his mettle would be seriously tested.

This episode underscores the fallacy and failure of the present system of reservations. The system was originally introduced with the very good intentions to right the wrongs suffered by the backward classes for centuries. Similar affirmative action policies exist in the advanced countries. In India, however, it has not been successful in righting the wrongs and eliminating the gap between the 'haves' and the 'have-nots' in the society. Instead, owing to politicization of the issue the gap has widened.

In my opinion, the best way of narrowing and sealing the gap is through education, not just at the primary level but also at the higher levels. If the affirmative action were concentrated in special training programmes for the backward classes, with special provisions of scholarships etc. to encourage those doing well, by now we would have had a sizeable pool of expert human-power from this group. Such persons would have competed for open posts and got in on merit, instead of under the so-called stigma of a reserved post.

Indeed, the creation of reserved posts has bolstered the impression that those getting in through this stream are less qualified ones, who would not have got in through the open channel. Which is why our computer scientist was reluctant to apply under the reserved category. Indeed, nothing could be more degrading to the human mind than such a patronizing view. Yet this practice not only persists, but is actively encouraged by the Government with its frequent circulars 'to ensure that the reserved posts are filled'.

The devastating impact of the reservations policy in the higher education sector is all too apparent. Posts of lecturers to professors remain unfilled for lack of suitable candidates or else

are filled willy-nilly under such government directives. There are occasions when the posts are filled by overriding the outside experts' view that the candidate is unsuitable.

Imagine a cricket team sent out to play international matches with five out of eleven players chosen, under a government directive, compulsorily from the reserved category. If the performance of the team is below par who is to be blamed? Fortunately this stage has not been reached because the competitive state of the game requires that we send in our best team. Why should the same criteria not be applied to our universities and colleges of higher education, which also have to be judged ultimately by an international yardstick? To pursue the cricket analogy further, suppose we make special efforts to train cricketers from the reserved category so that they come up to the desired standard and then let them into the team on the basis of merit. This would do real justice to their aspirations and compensate them for the wrongs their forefathers suffered through unjust social practices. The present policy of patronizing them through cushy reservation laws really goes in the opposite direction. Likewise to improve the educational base of the disadvantaged sections of the society we must enable them to acquire true merit by giving them special opportunities for acquiring it. When, after acquiring it, they compete openly for university posts there will be no stigma attached to their selection that they got through a special channel.

In fact when we publicly complain about the poor level of our universities we are shedding crocodile tears. Because we ourselves have made the universities work under a system that does not encourage or foster merit. The remedy lies in our hands: we need to go back to the old values where merit was the overriding factor in admissions, appointments and promotions in the field of higher education. The present quota system needs to be done away with and replaced by special opportunities for training of the deprived classes so that they acquire the much needed self confidence that comes from competence and ability and not from charity or patronizing.

Merit versus democracy

The main funding body in the university sector, the University Grants Commission has to face two problems. First it has to dish out relatively meagre funds to a large number of claimants. Secondly, it has no teeth in its *modus operandi* to enforce that its funds are properly utilized.

The first problem arises because the UGC tries to be democratic in its approach: if it were not so it would invite tremendous criticism from all quarters. The second problem comes from the autonomy claimed by the universities in managing their affairs. The issues are well known and need not be elaborated further. What is the remedy?

An experiment has been initiated by the UGC by introducing the National Assessment and Accreditation Council, for evaluating and ranking the performance, facilities, etc. of institutions in the university sector. If it is able to do its job properly, we should know which universities are excellent, which are ordinary; which department is reputed for work, which is not. This will be done against the backdrop of national and international standards.

It is too early to say how far this experiment, well motivated though it is, will succeed. It is voluntary, in the sense that no institution is obliged to get itself assessed. However, if the ranking is linked with grants of funds, the idea may catch on faster. This will also give the UGC a handle to decide where to invest its modest funds. The success of the entire operation depends on transparency, political will and a clear emphasis on merit. If it succeeds, then a university will feel the urge to get itself evaluated so that a good rating will help it secure funds.

Another merit-driven operation might be as follows. The erstwhile Science Advisory Council to the Prime Minister, the late Rajiv Gandhi had suggested a small cess on the budgets of the major science agencies (DAE, DRDO, DST, DOS and DSIR) which could be channelled towards the upliftment of

university R&D. It will be seen that even a small 3% cess will generate resources that will bring about a sea change in the field of higher education. Provided, of course that it is used to reward and encourage merit and creativity rather than as largesse to be distributed democratically.

New technologies and networking

Let me leave the social issue and move on to another related to science and technology. If one has to point out a single major constructive achievement of this century it is in the field of communications. With the advent of the space programme and communications satellites, the growth of photonics and optical fibre technology and the phenomenal rise in the computer technology, the modes of communications have enormously expanded in efficacy and power. The internet has already shown us how information transfer can proceed fast, painlessly and at relatively low cost. Keeping these aspects in mind the following scenarios emerge for the future of higher education.

1. In an extension of the open-university system one can have an interactive classroom where pupils singly or in groups, scattered in different places listen to lectures, lecture demonstrations and panel discussions while interacting with the resource persons.
2. In the era of shrinking library budgets and escalating prices of books and journals, the networking of resource libraries with electronic transfer of information can supply the needed browsing facility to the student and the teacher as well as the facility to access the book or journal remotely.
3. The electronic mail will gradually replace the conventional 'hard copy snail mail'. It also allows two or more persons to 'converse' on their computers, to access databases in different parts of the world, to operate telescopes remotely, etc. By saving physical travel and money it can make a future educational system much more efficient and cost effective.

The episode of Lord Ganesha drinking milk brought home to us the remarkable swiftness with which information can travel across the world. Indeed the miracle was not in the Ganesha idol sucking in milk from a spoon, it was in the way the news spread across the world! If misinformation can propagate so fast, why not real information? Indeed the whole sphere of higher education has to adjust itself to such rapid information transfer. No country planning for the future of its education can afford to ignore this potential. For a country like India with its far-flung difficult-to-access areas this will be a boon. It will indeed be a tragedy if our planners fail to cash in on this mode.

4. Technology provides new instruments especially in scientific disciplines. The astronomers have their telescopes, the nuclear and particle physicists have accelerators, for example. In each discipline there are sophisticated facilities. Unfortunately they cost a lot and providing an expensive facility to each and every university becomes economically unfeasible. Moreover, at a typical university the number of users of a facility may not be large enough to keep it optimally busy. Thus there is a waste of facility through its lying idle. The experience to date on this count, has not been very encouraging either, with examples of expensive equipment lying unused in the unopened crate. How do you solve this problem? The answer lies in sharing.

Even in advanced countries with greater prosperity, the shrinkage of available funds and the utilization factor have forced universities into a sharing mode, with expensive facilities like telescopes or accelerators shared by many institutions. A similar culture needs to be popularized in India. A beginning has been made by introducing the inter-university centres, in areas inadequately covered by universities. This mode has to address and circumvent a resistance from the universities themselves for whom it is intended. They tend to see it as a diversion of funds, which would otherwise have come to them. Actual demonstration of its success would be more effective than any argument

put forward in favour of such a mode. As such it very much depends on the few IUCs created so far to show how effective the 'shared mode' can be.

Concluding remarks

- * The common fallacy of dissociating research from higher education has led to a deterioration of academic standards in our universities as well as to starving of our national research institutes of research human-power. Research and development should go hand in hand with teaching. Unless the students see research and scholarship in action around them they will not be motivated towards academic pursuits. Unless the research institutes have an interface at least with post-graduate students, they will remain starved of new blood.
- * Likewise it is a fallacy that like primary education, everybody must go in for a degree to succeed in life. Society has to recognize that successful careers can be made without a bachelor's degree and opportunities for vocational training should be created to take the pressure of numbers off the universities.
- * It is also necessary to introduce serious monitoring of funds given by the various agencies to universities, side by side with an assessment and accreditation carried out by the NAAC.
- * With financial support being limited it is necessary to use merit as the criterion for fund allocation. It is also necessary to review the present reservation policy to make it more effective and tuned to the aim for which it was introduced.
- * With limited funds and more and more expensive research facilities the university sector has to get used to the shared mode in which one major centralized facility is used by several universities. In this direction the IUC-experiment should be watched for future emulation.

- ★ Finally, new technologies are here to offer hitherto unimagined facilities for disseminating higher education. With powerful tools of communication now available, higher education can take off in a different mode with interactive classroom teaching spread over remote areas and with electronic access to distant libraries and databases. We need to use such resources imaginatively as we march into the twenty first century. It is only then that the truism expressed by Nehru mentioned in the beginning of this article, will be achieved.