

12. NEED OF TECHNOLOGICAL UNIVERSITY IN THE STATE OF MAHARASHTRA

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The history of Education in India broadly comprises of four eras, which are as follows:

- i) Ancient Indian Education
- ii) Medieval system
- iii) Education under the British rule
- iv) Education in the post-independent period

The story of Indian Education is as old as the story of Indian civilization, right from the Vedic age, when Aryans inhabited the land of seven rivers (sapta-sindhu), settled in it, established a fourfold caste-system and fourfold goal of human life (Varnasrama Dharma). This panorama spreads to four thousand years or even more, during which period India evolved different systems of education in accordance with the changing needs of the times.

In the early vedic period, numerous teachers called Gurus, instructed a small number of disciples. In the post-Vedic period, the same system called Brahmanic system continued.

The Buddhist system of education came into ascendancy about 600 B.C.. In the Buddhist system, "Maths" were installed where monks (who were also teachers) and pupils assembled in large number. "Maths" and "Tols" were the elementary institutions of learning. Later on centres of higher education grew up in monasteries and Viharas, and these resembled residential universities of today. Nalanda had

4000 students in residence. Vikramasila, Takshasila, Odantapuri and Jagaddala were similar seats of higher learning of Buddhists. The Buddhist universities earned international reputation and pupils from all over Asia came here for higher studies.

Muslim conquest of India coincided with a dark age in Islamic education when the schools had lost their wider ideals of culture in a narrow preoccupation. Temples were replaced by mosques and obviously pathshalas by maktabas.

Educational system in the medieval period had a number of special characteristics. It was basically religious in character. It emphasized personal relations between teacher and pupil. It was individual, rather than mass education of the present times. A teacher had a small group of students, and he paid individual attention to them. Education was, in a way, a family process.

With increasing population and the changing social scenario, lots of changes have been taken place in the field of education at all stages.

Number of commissions and committees such as Radha Krishnan Commission (1948-49), Indian Education Commission (1964), Resolution on National Policy in Education (1968), National Policy on Education during the Prime Ministership of Late Rajiv

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Gandhi, etc. were appointed by the Government to expand the higher education in our country.

As far as establishment of Universities are concerned there were very few universities in India before independence (i.e. before 1947).

Now, there are total 11 traditional Universities and other Open, Deemed, Agricultural and Health Universities in Maharashtra. Those are:-

- i. Dr. B. A. T. University
- ii. S. N. D. T. University
- iii. Mumbai University
- iv. Pune University
- v. North Maharashtra University
- vi. Dr. B. A. Maharashtra University
- vii. S. R. T. University
- viii. Shivaji University
- ix. Sant Gadge Baba Amaravati University
- x. Rashtrasant Tukadoji Maharaj Nagpur University
- xi. Solapur University
- xii. Arogya Vidnyanan Vidyapeeth
- xiii. Agriculture Universities
- xiv. Open Universities
- xv. Deemed Universities

If we see the number of colleges affiliated to these universities we come to know that they are unmanageable. Considering the large number of colleges affiliated to the traditional Universities, Government of Maharashtra established separate university for medical education as well as for Agriculture Colleges.

Then question arises as to why there is no separate university for Technical Education in Maharashtra. I feel it is the need of the time.

As on today (i.e. academic year 2010 -2011) there are over 300 engineering colleges in the

state of Maharashtra with as intake capacity of more than 1,00,000. These colleges are affiliated to 11 different universities. The major role played by these universities is to conduct examinations and award degrees.

If we establish a separate Technical university in Maharashtra, we can very well plan the development of technical education to establish need based, value based education in the state. It will be possible to train the students in engineering and technology with a view to generate qualified and competent man power.

Traditional University set up:

At present the traditional universities are looking after various faculties having large member institutions. These include the arts, science, commerce, engineering, pharmacy, management institutes. The professional colleges are very few in numbers as compared to the non professional colleges. If we take an example of University, there are only engineering, pharmacy and management colleges out of colleges affiliated to the university.

Also the traditional universities are fully loaded running their own departments and managing affiliation / examination of the colleges affiliated to them.

Present Scenario:

At present, in Maharashtra State following are the number of institutions and intake capacity in different streams such as Engineering & Technology, Pharmacy, Management education, etc.

These degree institutions are affiliated to different universities in the state. (Table-1)

Problems with Traditional Universities:

Problems of engineering / pharmacy / management science associated with traditional universities are as follows :

Table 1 - Facultywise Institutions with intake capacity

Sr. No.	Faculty	Courses	Number of Institutes (approx.)	Intake Capacity (approx.)
1.	Engineering	Degree	297	71691
		Post Graduate	57	3966
2.	Pharmacy	Degree	146	7705
		Post Graduate	41	1060
3.	M.B.A./ M.M.S.S.		382	15225
4.	M.C.A.		127	5908
5.	H.M.C.T.	Degree	10	470
6.	Architecture	Degree	39	1947
		Post Graduate	13	500
Total			1112	108472

1. The present load on the traditional universities is much more; hence the problems of engineering/pharmacy/management colleges are given less priority.
2. In case of traditional universities set up, the decisions are taken on the basis of majority. As technical education faculty is not having majority, the decisions taken by others are required to be accepted even though they may not be good for the growth of technical education.
3. The present structure of syllabus for the engineering/ pharmacy/ management courses in the traditional universities is different.
4. The examination pattern of the traditional universities is different.
5. There is variation in passing rules of the traditional universities even though the students are pursuing the same degree.
6. The faculty approval norms are different in different traditional universities.
7. The students passing from the traditional universities, though possessing the same degree are facing problems of discrimination by the industries/ society on the basis of the university from which the student has passed.
8. The statutes/ordinances/regulations of the traditional universities do not match with the policies of AICTE.
9. The rules of admission in case of P. G. Courses are different in the traditional universities.
10. The examination fee pattern is entirely different in traditional universities.
11. The scheme of instructions / examination / evaluation of the traditional universities do not have uniformity.
12. The duration of the academic year / schedule of examination / declaration of results varies from university to university.

13. As the calendar of other faculties and technical education faculty do not match, students can not participate in co-curricular/extra-curricular activities of the university.
14. Due to the large number of universities there is lack of proper co-ordination between university department of Technical education of the state and AICTE.

If we look at the national level, the states leading in technical education such as *Andhra Pradesh, Tamilnadu, Karnataka, and Uttar Pradesh, West Bengal, Madhya Pradesh, Chhattisgarh, Gujarat, Rajasthan, Orissa, Harayana, etc.* have separate technological universities in the state to which all engineering colleges are affiliated.

There is a considerable uniformity in the statewide information related to Technological Universities in India.

In Maharashtra state, we don't have separate technical university.

A survey of the Technical Universities in the following states, is listed below:

1. Andhra Pradesh:

Nehru Technological University, Hyderabad

The Government of Andhra Pradesh has divided *Jawaharlal Nehru Technological University*, into four different centres for administrative reasons. They are as follows:

1. Jawaharlal Nehru Technological University (Hyderabad)
2. Jawaharlal Nehru Technological University (Kachinada)
3. Jawaharlal Nehru Technological University (Anantpur)
4. Jawaharlal Nehru Technological University (Hyderabad – only for Architecture and Fine Arts)

2. Tamil Nadu

Anna University

There is Anna University in Tamilnadu for technical education. For administrative convenience, there are 4 Anna universities in the state. Those are :

- 1) Anna University – Chennai
- 2) Anna University – Coimbatore
- 3) Anna University – Trichi
- 4) Anna University – Madurai

3. Karnataka:

Visvesvaraya Technological University, Belagavi

4. Madhya Pradesh:

Rajiv Gandhi Technical University, Bhopal

5. Uttar Pradesh:

Uttar Pradesh Technical University, Lucknow

6. Orissa:

Biju Patnaik University of Technology, Rourkela

7. Chhattisgarh:

Chhattisgarh Swami Vivekanand Technical University, Bhilai

8. Delhi:

Delhi Technological University, Delhi

Need of Technological University in Maharashtra State :

Thus, looking at the problems of engineering/pharmacy/management education in traditional universities as mentioned above and the management of technical education in the different states of the country and also

having one university for medical education, one board for the polytechnics in our state, there can be one technical university which can affiliate various colleges having following faculties :

1. Engineering
2. Pharmacy
3. Management
4. Architecture, etc.

Establishment of technological university in the state shall lead to

1. Uniform pattern of curriculum for all the students in the state.
2. Uniform examination pattern for all the students in the state.
3. Uniform examination rules.
4. Uniform passing norms for all the students in the state.
5. Uniform pattern of examination fees in the state
6. Only one academic calendar for all the students in the state.
7. Same dates for declaration of results.
8. Uniform pattern of recruitment / promotion / approval norms of faculty in the state
9. Smooth co-ordination between university and various agencies of the state.
10. Smooth co-ordination between various authorities at the state and national level.
11. No discrimination between the students on the basis of the university from which they have passed.
12. Lessening the load of the traditional universities.
13. Students will not migrate from one place to other place in the state for admission to other universities in the state.
14. Collaboration with other foreign universities will become easier.
15. Promotion to research activities, etc.

After considering the views of various states stated above, I did not notice any adverse view about the Separate Technological University in the respective states. It is observed that engineering institutions in Maharashtra State are in favour of separate technical university because of the number of advantages mentioned above.

I strongly recommend for the establishment of technological university in Maharashtra. The Association of Management of Un-aided Engineering Colleges (Mah.) has initiated the move for the establishment of a separate technological university in the state of Maharashtra. It will help in sorting out many problems related to quality of education, revision of syllabus, concentration on Research activities as mentioned above and will also reduce disparity amongst students who have passed out engineering course from various universities.

The University will have jurisdiction throughout Maharashtra and all Engineering Colleges in the State will get affiliated to it. Apart from UG programmes, all PG programmes like M.E./M. Tech., M.B.A., M.C.A., etc. will get affiliated to it.

The proposed 'Technological University' of Maharashtra will be able to supply the latest technical know-how for the Joint Venture with other organizations related to training.

Further, the Technological University Colleges Network will enable sharing of faculty expertise among colleges, collaboration among peer groups, even out digital disparity among rural and urban engineering colleges, provide infrastructure for online examination system, portrayal to different digital libraries all over the world and support many more innovative applications on the net expected in future.

The University will be able to start Nodal Training Institute for training the staff of engineering colleges similar to the staff training colleges functioning in other Universities.

