

What can We Learn from Universities of Ancient India?*

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Abstract: Over the last several centuries, the concept of university is undergoing dramatic change, the change being ever dynamic. Quite a few new generations of universities emerged and one notices a clear contrast between the ancient and the modern ones, including the ones set up during the medieval times. While searching for new and innovative modes of developing universities today in the twenty-first century, there is a lot that one can learn from a reading of the history of some of the ancient universities, in their nature, scope, coverage, planning, funding, spread, teacher-student relations, institution-community relations and many other aspects. Concentrating on ancient universities of India, the article draws a few important lessons relevant for development of universities in the twenty-first century.

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A university stands for humanism, for tolerance, for progress, for the adventure of ideas and the search for truth. It stands for the onward march of the human race towards ever higher objectives. If the universities discharge their duties adequately, then it is well with the nation and the people.

Jawaharlal Nehru, 1st Prime Minister of India 13 Dec 1947^[1]

(University of Allahabad).

“A university is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. Established notions of truth are challenged in the pursuit of knowledge”

(Government of India 2009, p. 9)^[2]

1 Introduction

The world has been experiencing an unprecedented growth in university education. At the end of the 13th century there were hardly 20 universities. Today there are several thousands of universities, apart from several thousands of other institutions of higher education. There is an explosion in student numbers. The growth of universities is characterized by drastic transformation of their very nature. Universities have undergone tremendous transformation in several respects over centuries. Besides contrasting the ancient and modern universities, concentrating on ancient universities of India, the article draws a few important lessons relevant for development of universities in the twenty-first century.

‘University,’ drawn from its ancient designation of a ‘Stadium Generale,’ or ‘School of Universal Learning’ is conventionally seen as an institution where scholars, interested in a wide variety of areas of study, come from all over the world and participate in the process of creation and dissemination of universal knowledge. The scholars engage in serious scholarly discussions and debates, not only on their subject but also on wider issues of historical and contemporary importance -

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social, political, economic, philosophical, cultural, scientific and technological.

Universities are the most ancient institutions; they are not borne yesterday, but they have undergone tremendous changes. In many cultures a variety of centers of higher learning were developed during ancient period (until 10th century AD) and later. They were founded based on great educational goals: universal, progressive, and human. Many ancient institutions perished, few continued. Some have an impact on later developments. There are valuable lessons we can learn from them on the conception, design and development universities.

Reviewing the growth of universities over centuries in the world, Tilak (2010) classified universities into five generations of universities, starting from the ancient universities of the ancient period such as Nalanda and Takshashila (later known as Taxila), which need to be considered as the first generation universities, to the very present generation of universities of the 21st century that include even the profit-seeking commercially oriented universities as the fifth generation, covering in between the medieval universities, set up during the 12th to the 18th centuries (e.g., Bologna, Oxford, Paris, and Moscow) as the second generation, universities which include universities starting with Humboldt University founded in Berlin in 1810 to those that existed until the middle of the 20th century as the third one, and the universities of the latter half of the 20th century, which include the universities that got transformed themselves, with a series of experimentation, into entrepreneurial universities in the late 20th century and in the new millennium as the fourth generation (e.g., Stanford, MIT, Cambridge, Tokyo and Delhi).

The world's first universities - Takshashila and Nalanda in India, the Plato's Academy in Greece, and the Ancient University of Alexandria (the mausoleum) in Egypt, to mention a few, belong to the ancient period. Very often the universities of the ancient period are forgotten when writing about the history of universities for no valid reason and discussion starts with universities of the medieval period established in Europe^[3,4].

“While people are generally aware that universities have a long history,” as Sanz and Bergon^[5] observed, “there is far less consciousness of the value of university heritage: the accumulated experience of universities as well as their material culture which have been transmitted from one generation to the next,

and the role this heritage plays today”.

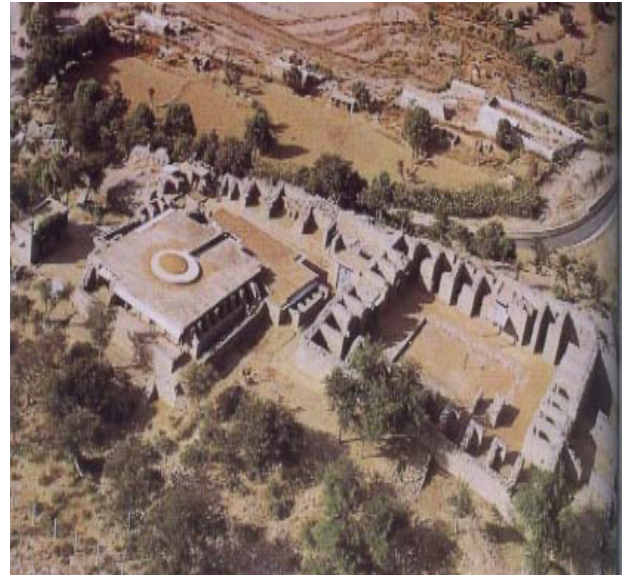
2 Ancient Indian centers for higher learning

The history of some of these ancient universities is extremely rich. Among some of the available recent studies, Apte^[6], Keay^[7], Jayagoaplan^[8] and Rao^[9] have been valuable sources of information on ancient institutions of higher learning in India. The ancient universities like Takhaashila, Nalanda, Vikramaditya and other ancient universities in ancient India were founded on some fundamental and universal principles of truth and knowledge, aimed at producing finest human beings - social thinkers, scientists, professionals, researchers, and above all, citizens of great character. University was truly perceived as a place where established notions of truth would get challenged in the pursuit of knowledge, and new ideas would germinate for the progress of humanity. It was conceived as a unique space, which covers the entire universe of knowledge. Those universities were truly universal - attracting scholars from other countries, and covering knowledge which is universal, inclusive of a variety of disciplines of study. As Keay^[6] observed, “Not only did the Brahman [ancient Indian] educators develop a system of education which survived the crumbling of empires and the changes of society but they also, through all these thousands of years, kept aglow the torch of higher learning, and numbered amongst them many great thinkers who have left their mark not only upon the learning of India, but upon the intellectual life of the world.”

Takshashila (Taxila) (6-7th century BC) that existed from 600 BC to 500 AD is the world's oldest University, with a student population of about 10,500 who came from all-over India and from other countries. It offered courses specializing in 68 subjects: Theory and practice, atomic theory, astronomy, arithmetic, mathematics logic, philosophy, politics, law, history, Buddhism, vedas, puranas, accounts, commerce, agriculture, grammar, languages, magic, music, painting, dance, poetry, smithy, performing arts, astrology, futurology, Ayurveda, medicine, surgery, carpentry, cattle breeding, crafts, documentation, warfare, military arts, archery, hunting, elephant lore, the occult and mystical sciences, and many more, and also the language and literature of many including Greek! Students came to Takshahila not only for higher studies, but also secondary education as a preparation for higher studies. Merit was the main consideration for admission of students and once admitted all students were treated equal irrespective

of social/economic class. No distinction was made by

caste or any other characteristic feature.



Some important features of Takshashila are indeed worth noting. It is believed that the great Indian epic *Mahabharatha* was first recited in Takshashila by Sage Vaishampayana^[10]. Takshashila marks the conceptualization of a full-fledged university developed in India more than 2500 years ago! It provided free education: free boarding and lodging; there were no compulsory fees, as it believed that “*knowledge [was] not to be bartered for money.*” It received immense royal patronage in the form of generous grants from the kings and enthusiastic support from community in terms of voluntary community contributions and voluntary donations.

Another equally famous ancient university in India is the Nalanda Mahavihara: (4th century BC) that existed till 15th century i.e. for 600 years. This was described by many an ‘architectural masterpiece’ and as the greatest achievement of ancient period in the field of education. Nalanda was the world’s first

residential university to both students and teachers, with extensive dormitories and accommodation. Its area was spread over a total area of 1.5 KM in length and 0.75 KM in width, and was enclosed by a lofty wall. It was having eight separate compounds, with 11 monasteries, ten temples, several lakes and parks. Besides meditation halls, there were 300 classrooms and large public lecture halls, and an astronomical centre. Nalanda was meant for higher studies; but it also provided primary and secondary education to the prospective scholars to be enrolled for higher studies. Nalanda was characterised by a high degree of student diversity, with scholars from countries like Korea, Japan, China, Tibet, Indonesia, Persia, Turkey, Mongolia, Tokhara near Japan, and other parts of the globe. In all, there were more than 10,000 students and 2-3 thousand teachers, with an ideal faculty-student ratio: 1:7-8.



Nalanda was also known for its library; it has a large library complex (Dharmagnja), with three towers namely Ratnasagara, the Ratnadadhi (nine storied building) and the Ratnaranjaka - with 9 million manuscripts, meticulous copies of texts produced and preserved. The library has a collection of innumerable books and many rare ancient manuscripts (e.g., Prajnaparamita Sutra and Samajguhya)

on various subjects like grammar, logic, literature, astrology and many more.

Admissions and appointments in Nalanda were based purely on merit. The entrance examination was regarded very tough. Hardly 20% of those who take examination were successful. No preferential treatment was given to any student.



Nalanda, like many other ancient institutions, also marked for autonomy. The administration was totally autonomous. Most decisions were taken by the head of the institution the Bhikkhu, councils, and councils of teachers; and all functioned autonomously and efficiently. The management of the institutions was based on democratic principles.

Education in Nalanda was free education, with free boarding and lodging to all. Students were required, however, to go for begging to get alms, as a respected practice of measure of simple and humble living of scholars of the times. The institution was maintained essentially with endowments and donations. The rulers donated a few villages, revenues from which were used

by the Nalanda for its administration and maintenance.

As K M Panikkar (quoted in Sukhija et al^[11]) described, “The University of Nalanda was the educational center of international morale comparable in the universalism of its thought, the wide range of its studies, the international character of its community to the greatest universities of modern time like Oxford, Cambridge, Paris and Harvard.”

Other prominent institutions of higher learning of the ancient period India include Somapura Mahavira, Vikramshila, Pushpagiri, Valabhi, and Odantpuri. Somapura Mahavira was established in the late 8th century, now in Bangladesh; and it flourished till 12th century for about 400 years. It was spread over 27

acres of land. Out of this, the main building complex itself was in 21 acres. This was considered as a main learning centre for Hinduism, Buddhism and Jainism. The terracotta paintings on University walls depicts the influence of these three traditions. Vikramashila, was also established in late 8th Century and flourished till 12th century for about 400 years. In its heydays, there were over 100 teachers and 1000 students. It was in 6 college buildings, spread-out like lotus-petals, with 108 temples and the Mahabodhi temple in the centre. The campus had 6 gates. Diverse subjects were taught, and specialised coaching was imparted in Tantra, and Tibetan Buddhism. Moral values including asceticism, non-violence, and respect for begging for alms as a practice were the inculcated. It enjoyed liberal endowments made by the rulers. The institution was administered by a president and boards. Activities were organised by departments. Reports also suggest that Vikramshila used to confer degrees in a formal function, which can be called a convocation in modern nomenclature.

Pushpagiri, was established by Emperor Ashoka of Kalinga kingdom in the 3rd Century in the present state of Odisha in India and it flourished till 11th century i.e., for about 800 years. It was spread across Kolkata and Rajasthan districts, across three adjoining hills namely Lalitgiri, Ratnagiri and Udayagiri. It was having three campuses. Valabhi was another ancient university, established in 6th century in the present state of Gujarat and it flourished for 600 years till 12th century. It was famous for the quality education it gave to its students. It had at one time 6000 students 100 monasteries. All its graduates used to hold high executive posts. Described as “a great centre for learning”, it was visited by Chinese travelers - Itsing and Huiyen Tsang during the 7th century. Valabhi focused on Hinayana Buddhism. Other subjects it taught included Buddhism, Brahminical sciences, Vārtā (Business, Agriculture), political science, statesmanship, business, agriculture, administration, theology, law, economics, accountancy and Nīti (Political Science, Statesmanship). The institution was not exclusive or parochial in providing access to students. It was patronized by the rulers and it received bountiful grants from them, in addition to citizens' voluntary contributions.

Among the other ancient Indian universities, Odantapuri also known as *Uddandapura*, figures as one which was established in the 7th century and flourished till 11th century for about 400 years. Many Tibetan

scholars visited and studied here. It was having about 12,000 students.

3 What can we learn from these ancient universities?

Over the last several centuries, the concept of university is undergoing dramatic change, the change being ever dynamic. Quite a few new generations of universities emerged and one notices a clear contrast between the ancient and the modern ones, including the ones set up during the medieval times. While searching for new and innovative modes of developing universities today in the twenty-first century, there is a lot that one can learn from a serious reading of the history of some of the ancient universities, in their nature, scope, coverage, planning, funding, spread, teacher-student relations, institution-community relations and many other aspects.

During the ancient period, universities were recognized as ‘noble’ institutions; they were considered as great sacred institutions. They were highly respected and valued institutions for their contributions, which were direct and indirect contributions. Externalities were understood as immense and the institutions were implicitly recognized as ‘public goods’ or even as ‘global public goods’. They imparted moral, spiritual and universal values and universal knowledge and contributed to production of global humanity and citizenship. Pursuit of truth and knowledge and dissemination of knowledge were the main concerns of those organizations. They were not parochial and narrow-minded.

Role of the State and society was important in the development of centers of higher learning. All institutions received royal patronage and liberal grants either in terms of villages, revenue of which formed the basis for the financial base of these institutions or in cash and kind. Society also had a great respect for knowledge, accordingly for the students and teachers, whose living was supported by the community. The community regarded it as a sacred duty. Teacher is widely regarded: ‘*Acharya Devobhav*’: Teacher is God.

Voluntary donations from the community also formed the second most important source of funds. Community also liberally contributed in the form of alms to the students, when they approach, ‘begging’ for food, and a respectable practice among the students in ancient times. There was no other source. No compulsory fees were charged from the students; but students at the completion of studies offered *guru dakshina* in

gratitude to the teachers. Students were provided free education, including free boarding and lodging, besides free teaching. It was strongly felt that knowledge was not to be bartered; hence any consideration for business or trade in education was never entertained.

All ancient universities were large in size, with large campuses and huge infrastructure. They had not only plenty of classrooms and public lecture halls, but also student/faculty residences, libraries, gymnasiums, museums, grounds, parks, temples, lakes, etc. All universities were residential. As the teachers and students live in the same campus, and all led austere life. Life pattern of the teacher was expected to serve as a model for the pupils.

The ancient universities were truly 'universal' in scope and in reach. Knowledge in various disciplines and branches was the focus of these institutions. Principles of even contradictory strands of religion were taught. The subjects covered all branches of knowledge. The areas included not only religions and spiritual and secular knowledge, but also sciences, mathematics, languages, humanities, culture, arts, liberal arts, engineering, medicine, technology, etc. Holistic knowledge development seemed to be the underlying principle. Scholars from all over the world were found in the ancient universities. Students and faculty from different socioeconomic, ethnic, regional and other backgrounds and from various near and far countries came to study or teach in these institutions. They, necessarily living in the same residential areas provided a rich and vibrant learning environment.

Students were admitted essentially based on merit. There was no discrimination among students by any characteristic feature. The institutions were characterised by the dictum of universalism in their thought and approach - *Vasudhaiva Kutumbakam* (the world is one family).

All universities in the ancient period enjoyed full autonomy. There was no intervention from the rulers or from others in the society. The heads of the institutions and senior scholars were responsible for all decisions in the universities. There were also decentralized and democratic internal governance structures developed in each university.

As P N Prabhu (quoted in Sukhija et al^[11]) noted, "*Education in ancient India was free from any external control like that of the state and government or any party politics. It was the kings' duties to see that learned Pundits, pursued their studies and performed*

their duty of imparting knowledge without interference from any source what so ever."

4 Summary

To conclude, ten lessons that we should learn from these ancient universities can be noted as follows:

1. We should recognize that universities are most valuable institutions. They have unchallenged role in the creation, preservation and dissemination of knowledge; and they play a vital role in sustenance of humanity - the societies, economic progress, social advancement, and political maturity.

2. Teacher is the pillar of education edifice in any society. Teacher status needs to be elevated to a very prominent place in the entire society in terms of social prestige, and economic status.

3. The patronage of the State is crucial for the development of strong, vibrant universities that contribute to human progress.

4. Liberal public funding and free education are the best ways of developing strong universities. Voluntary community contributions can add to the public funding. Involuntary payment of tuition and other fees by students is not a desirable method of funding universities. There is also no place for 'profit' making in university development.

5. Universities should necessarily be universal in character.

6. Universities should be comprehensive offering teaching and research programmes in a wide variety of scholarly disciplines relevant for human progress. Universities should aim at holistic knowledge development.

7. Student and faculty diversity enriches the learning environment. Talents need to be drawn from various socioeconomic, cultural and ethnic strata and from far and near geographical places. Talented faculty and students are the most crucial actors in knowledge development in the university systems.

8. Integrated university systems that focus on research, teaching and community service, help in producing more rounded personalities.

9. Large universities with large campuses and huge infrastructure lead to unfettered knowledge creation and dissemination.

10. Nations should ensure a high degree of autonomy to universities for the universities to emerge strong, vibrant, creative and innovative.

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