



Nahi Jnanena Sadrsham

“Nothing is equivalent to knowledge”

Being in the e-learning space and more generally providing services to the education domain, we decided that it would be interesting to take a look at education in ancient India. India has a long history of dedicated centers of learning and Takshashila was one of the most prominent of these.

Takshashila was a center for higher learning and from historical accounts can be roughly dated to be operational from around the 4th or 5th century BCE to the 5th century AD, a span of several centuries. Located in what is today northern Pakistan, it was at the crossroads of cultures that ranged from Indian to Greek, Persian to Bactrian. Students were generally in their teens, having completed earlier education in some form or the other. Students seem to have come from near and far, including all parts of India as well as Persia, Greece, Arabia and China. Cosmopolitan in its nature as it was, what we found most fascinating was the style and perspective of imparting education.

The Curriculum - From Archery to Codes

The subjects that were studied included astronomy, philosophy, grammar, ayurveda, agriculture, surgery, politics, archery, warfare, commerce, music, dance, hunting and law Vedas (ancient Indian religious texts).

And, for those so inclined, there was a course on ciphers – codes and decoding those codes. Which is not surprising since codes were pivotal in war as well as in peacetime (for the king’s intelligence services).

A Freewheeling Approach

One of the immediate differences that strikes one when looking at the different accounts of the teaching is the open-ended approach taken to the imparting of education. There was no necessarily fixed set of courses prescribed for a particular subject. Much was dependent on the teacher. The teacher would determine by regular discussion how the student was progressing; and once the teacher was confident that the student had mastered the subject, the student would be declared to have completed the course. This meant that different students would often complete the same course in different periods of time. The average course period was usually a few years, though study periods for some courses ranged from a few months to over 10 years.

Exams Optional

It is interesting to note the attitude towards examinations. No formal examinations were conducted and were not part of the prescribed curriculum. Individual teachers could adapt several testing methods if they so wished, but generally tests and exams were not considered critical to the learning process. Instead, the mastery of each unit of study was considered the essential process. The mastery would be judged individually by the teacher.

An interesting story is illustrative of the principle of learning as viewed in these earlier times. A student of medicine, upon completion of his studies, was asked by his guru (teacher) to walk around the nearby forest enclave and come back with a plant that had no medicinal value. Upon returning, the student said that he could not find one. The guru decided that he had indeed mastered his material!

Crownfunding & Crowdfunding

The source of funding is also interesting – it came in the form of grants from the king, direct funds from the rich, often merchants, as well as contributions from the society at large. The students that could afford to pay the fees did so, the ones who could work for their teachers in lieu of the fees. The poor were not denied access to education.

Distinguished in Medicine

One of the great achievements of Takshashila was in medicine. Famed across India and outside India, students came especially to study medicine. Perhaps there is no better example of this fame in the medicinal sciences than the presence of Charaka, one of the great medical practitioners of Ayurvedic treatment, as a student and possibly teacher at Takshashila.

The kings of the day would often seek medical attention at Takshashila; and, historical anecdote has it that Alexander's army sought help for snakebite treatments from the ayurvedic practitioners at the university.

Surgery was also taught, though we do not have details of which specific areas of surgery were practiced. Anatomy, physiology, etiology, embryology, digestion, metabolism, and immunity were all part of what was studied and offered.

Research was carried on by the teachers and students according to defined protocols and the practical was never far from the theory. Herbal gardens dedicated to ayurvedic treatment are said to have stretched for miles and a student could literally walk around and study. That is something that we could use more of in universities today!

Today

Today, Takskashila is a UNESCO World Heritage Site and also has an engineering college near the original site of the old university. If you are interested in seeing what remains of the ancient Takshashila university, you can google images of "ancient Taxila university."

I hope you enjoyed this article. Please feel free to email me any comments at rpahwa@base77.com.

Thanks, Rajesh Pahwa

(This article is based on sources that include Wikipedia, Encyclopedia Britannica, and http://www.amaidi.org/pdf/History_of_Indian_Education.pdf, <http://www.sciforums.com/Education-System-In-Ancient-India-t-16676.html>) (Image courtesy of Waqas Usman via Wikipedia)