Reiterating Indic K(now)ledge Spaces in the Education Locus

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Abstract: *Humans are endowed with the faculty of thought that involves abstract thinking, reasoning, conceptualising, analysing etc., among which individual differences are widely prevalent; thereby making it more dynamic. This study primarily focuses on the revival of Indic knowledge in the classroom. This paper accounts for the contributions of Indian indigenous (native/original) thought towards educational theory and practice across different timelines. "When swords quenched their thirst and famine ravaged the lands, Indians still held on to their truth that there was nothing more purifying than knowledge."- Revisiting the Educational Heritage of India, Singh (2022) Set against the backdrop of Indian Knowledge Systems (October 2020) launched by the New Education Policy 2020 (characteristics of NEP), this study delves into the need for studying Indic knowledge that constitutes Yogic, Vedic and Dharmic facets. In present times, "A people without the knowledge of their past, history, origin and culture is like a tree without roots." (Marcus Garvey). Aligning with this thought, this paper expounds on the methods and possible pedagogies that academicians may adopt for better teaching Indic revival in the classroom. Presenting a contextually disciplinary topic, this paper is based on empirical (experiential) and theoretical analysis. Each one can learn; education is ingrained in human nature and all the three aspects of human personality (hand, head and heart) join together to make it complete. Sewed within the fabric of pedagogies and andragogy (It may also be interpreted that while pedagogy was concerned with more conceptual understanding and applications, andragogy dealt more with the application of knowledge to real-life situations.), it proposes a new k(now)ledge system that may be implemented by researchers/ academicians for practical experiential learning.*

Introduction

An integral feature of human thought that makes it unique is the manner in which information is acquired in a human being's life. This acquisition of new information is the aspect of cognition called learning (Surgenor, 2016).

Learning refers to the acquisition of new data or information. Learning is undoubtedly an integral process of any cognitive ability (Gibson, 2016). The concept of learning is held of great importance across different fields of science, and philosophy. The purview of learning mainly falls under the discipline of psychology. In psychology, various perspectives, orientations, and theories have sprung up in an attempt to define and conceptualise learning. However, one widely accepted definition is by Atkinson (1953) who regards learning as a relatively permanent change in behaviour, which includes both observable activity and internal processes such as thinking, attitudes and emotions. Thus, learning is considered as:

- Relatively permanent behaviour change

- Not just a visible but also manifest responses of the learner

- Modifying the learner's behaviour.

- Being dependent on previously acquired experience.

The procedure of learning is central to the appropriate and effective normal functioning of human beings. One of the main things that make human beings different from other animals is the ability to learn very complex behaviours and apply the different learned concepts to create new concepts (Science, 2011). Learning is acquired due to the prior experience one has gained. A child may learn from his/her environment consciously or unconsciously, and in the process, his/her behaviour is being modified either negatively or positively (Rosehelle, 2016).

An important context where learning is of utmost relevance is in the field of education. Education in its ideal sense refers to any act or experience that has a formative effect on the mind, character or physical ability of an individual. However, in its technical sense, education is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another. (Rather, 2004). The etymology of the word education is derived from 'educate' (Latin) which is related to the terms educate and decree which is to "bring out", bring forth what is within", "bring out potential" and decree (declaration), "to lead" (Etymonlineeom, 2016).

Education in simple language is nothing but a learning experience. However, the learning that occurs in education is by and large a deliberate and pre-designed programme with the purpose of affecting certain predetermined behavioural and cognitive changes in an individual. The main objective of education is to initiate and nurture the cognitive, societal, moral, and scholastic development of an individual and through this, at the societal level; education aims at creating a civilized, cultured society and fosters the betterment of society's moral, ethical, values, and higher economic, technical standards. Education thus has a direct concurrence with the trends in society at a larger level. In this context, education and culture go hand in hand (Rather, 2004).

Culture is the sum total of the accumulated experiences and achievements of previous generations inherited by succeeding generations as members of society (Linton, 1936). The structured process of passing on this collective pool of experiences and achievements may be called education. Hence education is not only a means of passing on cultural beliefs and ideas but it is also shaped by cultural beliefs since it is a product of culture. The system of education thus changes along with changes in culture (Culture reflects education and education reflects culture TZM Education", 2016).

Education in India

The organised system of education in Indian history was followed by religious educational institutions in India prior to the advent of British rule. India is one of the oldest civilisations in the world; has a very old heritage and culture; in whose history knowledge was given a prime value. (Mookerji, 2011). Mookerji (2011) in his book *Ancient Indian Education Brahmanical and Buddhist* had given a detailed account of the contributions of Indian indigenous thought towards the educational theory and practice across different timelines. In any society's history; it can be traced that it was religion that practically dominated every sphere of its national life including social, political as well as economic principles. (Scharfe, 2002). So also in India, the system that was ensued was the one based on the Hindu religious literature imparted through the Vedas; hence called the Vedic system of education. (Jayapalan, 2000). Thus, it was the Hindu religious institution that gave ancient India its laws, social life and regulations towards economic activities. As mentioned before, the parsing of societal law, standards and ideals across generations in every culture is the original ideal of education. So, in the Indian evolution of education, Hindu thought influenced the course of education in society in ancient times. (Mookerji, 2011). They were predominantly carried out by Hindu residential schools called Gurukulas. Gurukuls were traditional Hindu residential schools of learning; typically, the teacher's house or a monastery; where education was free and knowledge across religious scriptures, philosophy, law, literature and so on.

Nevertheless, educational institutions specialised in Islamic learning were also prevalent in ancient India prior to the British system of education; called Madrasas (Sikand Y, 2004). These institutions aimed at the training of a class of experts in Islamic law (Ulema), who would go on to staff the bureaucracy of the state as judges (qazis) and muftis as well as administrators. In indicial times, the

madrasas served as the only available centres of fonual education for Muslims. The syllabus employed at the Indian Madrasas went through a process of gradual transformation over time, corresponding with the changing needs of the state. (Khan M.S 1999 as CT in Sikand, 2004) With the establishment of British rule, several modifications occurred in these centres of education; with the system of education set up by the British gaining more attention and a gradual decline in the importance and role played by the Madrasas. (Sikand)

Buddhist Education was also prevalent in ancient India with an aim to perpetuate wisdom and knowledge among all classes of people (Maheshwari V.K, 2009). All education, sacred as well as secular, was in the hands of the monks. The curriculum of the monks included what are termed Suttanta, Dhamma and Vinaya, together with Suttas and Sutta-Vihhanga. Education in the Buddhist age was predominantly characterized by oral tradition. Buddha identified three domains of learning namely, pariyatti (the theoretical foundation of dhamma), patipatti (the practice of the Dhamma through inquiry, investigation and self-experience) and pativedha (the realization of Insight Wisdom) (Mookerji, 2011). Further, even in the current times, the Buddhist system lays paramount stress upon the method of debate and discussion in education.

Thus, across Indian society, predominantly, education was furthered by religious institutions through their respective methods. The modern education system was set in by British rulers. In 1835, Lord Macauley introduced modern education in India. It was the introduction of Wood's dispatch of 1854, known as the "Magna Carta of Indian Education" that laid the foundation of the present system of education and changed the state of affairs. The main intention of it was to train local human resources to use for clerical work for running local administration. (Basu, 1989) The traditional Indian system of education gradually declined from the mainstream due to the lack of official support. English was the official language among the masses of educated Indians. Traditional occupations becoming obsolete and the popularity of modern education and government-run jobs made this modern British-implemented system of education the mainstream education. (Basu, 1989).

Despite the increasing dominance of the British system of education, there are few integral institutions propagating the respective religious thoughts. In the present context, these institutions also have recognised the need to offer basic principles of modern education.

Thus, amongst the different religious institutions; today two kinds are being regenerated. l. Purely conventional schools teaching only the religious texts, and 2. Conventional schools with a few additional modern elements. (Though their main focus is ancient shastras like Vedanta, Yoga, Nyaya, Vaisheshika and so on along with the Vedas, also have a little modern science like computers and physics. (Rangan R et al, 2008). The second kind is considered an ancient system of education in the present study. The modern system of education in the present study refers to the system of education followed in Modern India post the changes implemented after the British system was set up.

Currently, in India, there are various boards of schools in India, namely the Central Board for Secondary Education (CBSE), Council for the Indian School Certificate Examinations (CISCE), Madrasa Boards of various states, Matriculation Boards of various states, State Boards of various boards, Anglo Indian Board, and so on. Generally, the syllabi followed across the varied boards include Languages, Mathematics, and Science including Physics, Chemistry, Biology, Geography, History, General Knowledge, Information Technology / Computer Science etc. It also includes extracurricular activities consisting of physical education/sports and cultural activities like music, choreography, painting, theatre/drama and so on (Sudha Ram. K, Ananda.T, & Krishnaveni.M, 2012).

The present education system as elucidated above is the mainstream formal system of education followed across India. Though the education system in India caters to a large mass and has in general been credited for numerous innovations and human excellence in wide areas; some ideals of education that are not achieved in their true sense and have been under the eye of criticism for various reasons.

Rote Learning

One major criticism of the aspect of learning has been its over-emphasis on rote learning.

Zachariah (1993) believes that memorisation strategies are very common among Indian undergraduate students and also cautions against over-generalising the same; as there are exceptions to this. He argues that some weeks before the examination, a typical student "begins to read the textbooks and memorize from guidebooks ready-made answers to essay or other type questions asked in several

previous public examinations. Zachariah also asserts that because exam papers contain substantial amounts of choice, students can estimate the probability of a particular question or a similar one reappearing and focus their revision accordingly.

Basu (1989) has quoted that on independence, India "inherited a system of education where ... the method of teaching was authoritarian and did not encourage students to think for themselves", but argues that the extent to which such approaches to teaching have persisted varies substantially within the higher education system. Thus, in general, some authors, such as Zachariah (1993) believe that passing examinations is the principal focus of many Indian undergraduate students. Other studies believe that in general Indian undergraduates are not encouraged to think independently. (Ninnes, Aitchison, & Kalos, 1999) Learning and teaching processes involving only rote, reproductive, and surface approaches, and lacking a critical and analytical approach is a major characteristic of the Indian education system. (Ballard, 1989; Ballard & Clanchy, 1984, 1991, 1997 However, the present study is not just limited to the undergraduate system of education; it is found to be widely prevalent at all levels including primary, secondary and higher secondary levels of education. (National Centre on Education and the Economy, 2005)

Conclusion

Hence, an analysis of learning in the context of education should consider learning beyond just rote or memorisation. Moreover, "learning as a cognitive ability involves several dynamics and underlying processes that influence every other cognitive ability." (Schutz). In order to bridge the gap between knowledge and cognition, the faculty will have to bring in clarity on various fronts: knowledge-acquired skills, experiential-learning and TBL (thinking-based learning).

To be more precise, several theories describe and analyse the myriad processes involved in human learning. Some of the prominent ones include Gagne's 'Nine Events of Instruction', Ausubel's 'idea of meaningful learning', Felder-Silverman 'Learning and Teaching Styles Model in Engineering Education', Jerome. These theories can be traced onto methods and philosophies of Vedic Education System, for instance, the ultimate pursuit of knowledge being self-realisation or '*Atma-janana*' and provide learning guidance as per each student's individual capacities. The aforesaid modern theories of Gagne, Asubel, and Felder-Silverman aren't new to the conventional Vedic Education system prevalent in India. The above theories hold a contemporary understanding of the concept of education which completely aligns with the traditional way of teaching methodology of the Vedic times. The focus of both the Vedic education and the modern theories concentrate on the holistic development of the individual keeping in mind the cognitive skills, meaningful learning, foundational discourse of the student, and helping the individual in comprehending *Para Vidya* to gradually moving towards *Apara Vidya,* i.e., understanding the generic idea of the concept towards a more specific interpretation and implementation of the text. The Vedic system ideally emphasized on building a strong bond between a teacher and a student and delved deep into comprehension of transmitting of the information that completely resonated with the foundational principles of contemporary thought and pedagogy.

These models have often advocated the relevant components of learning which include comprehension, application and use of learnt information rather than just recollection of facts. (Jordan, Carlile, & Stack, 2008). Another theory which supports human learning especially suited in the context of education is Bloom's Taxonomy. Empirical studies have validated the relevance of the revised Bloom's taxonomy in assessing learning outcomes in its ideal sense and also in its alignment with educational standards. Bloom's Taxonomy is a framework for categorising educational goals. (Anderson, L. W, 2002; Amer, A, 2006; Herman, J.L., Webb, N.M. & Zuniga, S.A., 2007; Nasstrom, G. & Henriksson, W, 2008). As per the New Education Policy 2020 (NEP), revised Bloom's taxonomy aligns with the NEP where it includes certain levels to start from a lower to higher sequence of varied cognitive skills such as:

- To remember
- To comprehend
- Application of knowledge and skills learnt
- To evaluate
- To create

Therefore, the integration of Bloom's taxonomy with NEP 2020 has shifted the focus of education from ground level memorization to high order critical thinking and analytical skills of students under the guidance of the teacher. The outcome could be seen in the due course of time.

To create that ripple effect, NEP 2020 along with the revised Bloom's framework ensure a meaningful understanding and attainment of knowledge of varied subjects ultimately making the students future ready for challenging situations. This would certainly help students and teachers bridge the gap between academia and industry keeping the bigger picture in mind by preparing the individual for life.

Hence, in the present study, Bloom's Taxonomy - the revised edition forms the essential framework for operationally analysing and blending learning between the two schooling systems; purely conventional and conventional with a few modern elements.

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