

Ideas of Society and Education in the Age of Knowledge – A Secondary Teachers' Perspective

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Abstract: *The main purpose of this paper is to explore the ideas of secondary school teachers about an ideal society and education in the twenty first century. The twenty first century societies are characterized by new knowledge fuelled by information and communication technology, as a means of economic success rather than material resources as in the past. But what possession of material resources was in the past is now replaced by ability to access and process information. This is the new divisive force in society. Various studies have shown that education has not kept pace with the changes in the environment in which it is embedded. Education has emerged as one of the prime fields of resistance to change and propagation of traditional practices. Modern theories of knowledge society acknowledge the need of each community to envision and implement their own knowledge society based on the stage of scientific and technological development, culture and traditional knowledge systems. Education, and more importantly teachers are the main drivers of implementing change in societies. This paper explores teachers, ideas of society and education in the Indian context.*

Key Words: *Knowledge society, ideas of society, ideas of education.*

1. INTRODUCTION:

Knowledge societies of the 21st century are characterised by recognition of knowledge rather than material resources as main source of economic growth and competitiveness. The first Industrial Revolution caused the substitution of human labour by machines and mass production. This was followed by the development of services and, finally, the digital revolution and advent of the virtual. The digital revolution has impacted all walks of life including production, services, and ways of doing business, commerce, health, travel, entertainment and lifestyles. The wealth created is being measured less by measurable and quantifiable work, and more on the general level of science and the progress of technology (Bindé & Matsuura, 2005). Creativity and ingenuity are the crux of today's knowledge societies.

The knowledge economy model has led to the emergence of new forms of exclusion, between and also within countries across the world. Though information is available to more and more people, there still is a large divide in its access and use across communities and social groups. Very often the potential beneficiaries, in spite of having access do not have the skills needed to use existing data.

Also, the emergent knowledge economies very often do not take into account the local realities. In India the share of the service sector in the economy is almost 50 per cent, thanks to capacity-building, policy initiatives and developments in telecommunications, IT, and software sectors. But 41.49 % of the workforce in India is still employed in agriculture (Plecher, 2020). Though the country has made considerable progress in the number of internet users (730 million or about 50% of the population), the country still lags behind in entrepreneurship (68th in global Entrepreneurship index), competitiveness (77th in World's Ease of doing business report) and Talent and security (60th in Global Resilience Index) (NASSCOM, 2020).

A pluralistic and participatory discourse of knowledge society has been adopted by UNESCO (Cummins, 2017), which is strongly related to sustainable development, social cohesion and economic stability unlike knowledge economies which are more focused on economic success. It recognizes the plurality of knowledge societies on the basis of diversity of contexts, cultures, stage of scientific progress and technological advancement (Bindé & Matsuura, 2005). The vision also includes connecting traditional knowledge to new forms of development, valued by the knowledge economy model and supported by information and communication technologies, or ICT (UNU-EGOV 2016). From a humanist viewpoint, the knowledge society consists of people working collaboratively to achieve an optimal quality of life within the framework of inclusion, peaceful coexistence, socio-economic development and environmental sustainability, through search, considering different sources, processing, analysis, adaptation, creation, innovation and application of knowledge, and applying technology (Tobon, 2018).

1.1 Education in the Knowledge society

The teaching profession must adapt accordingly so that it can act in a constructive manner within a fast-changing society (Coolahan, 2002). Hargreaves has pointed out that teaching is a paradoxical profession. Teachers are expected to build learning communities and develop capacities for innovation, flexibility and commitment to change that is essential to economic prosperity. At the same time, they are also expected to build competencies and attitudes which mitigate problems that knowledge societies create, such as excessive consumerism, loss of community, and widening gaps between rich and poor (Hargreaves, 2003). Schools are expected to educate all students for “knowledge work” in a technology driven world and also respond to the needs of family and community contexts (Darling-Hammond & McLaughlin, 1999). Teachers need to know how to design curriculum and adapt their teaching to create meaningful authentic learning experiences for learners who bring very different contexts, conceptions and expectations.

Education related policies in India have always tried to strike a balance between access to equitable educational opportunities to the masses through free and compulsory school education on one hand, and quality education to meet the needs of the 21st century knowledge society on the other. Initiatives like the Sarva Shiksha Abhiyan and the RTE Act have made progress in improving the Gross Enrolment Ratio (GER). But despite enormous investments in quality improvement initiatives under SSA, NCF’s vision is still a long way from being translated into classroom practices. Classrooms are still dominated by teacher talk and instruction. The barriers may lie in a dominant cultural ethos that does not necessarily support the lofty vision presented in policy frameworks. The ideals of the NCF 2005 may remain abstract ideas, unless the wider culture is conducive to realising them (Brinkmann, 2016).

1.2 Role of Teachers in the Knowledge Society

Any systemic change in education requires a bottom-up view, rather than the top-down model often seen in traditional models of innovation where change was viewed as the transmission of information from policy makers to teachers (Darling- Hammond 1990). Teachers are not merely passive mechanisms who can bring about changes envisioned in policy documents. They have inner capabilities like perceptions, judgements, and decision-making. Beliefs and behaviours work collaboratively (Levitt, 2002) and have a powerful effect on teacher’s classroom practices. Teachers’ perspectives guide their instructional and curricular decision making and desire to adopt new pedagogies (Brand & Moore, 2011). The changes affecting teachers cannot take place without an awareness of how the teachers themselves understand the society, goals of education, learning process, curriculum and their own roles in education. For educators to engage and participate in debates on education adapted to the increased complexity, diversity and insecurity brought about by the amplified flow of people and information, it is important to understand their ideas about society and education. For teachers, researchers and policymakers to engage and participate in debates on education adapted to the changes in society, it is important to understand teachers’ ideas about society and education.

1.3 Purpose of the Study

The purpose of the study is to understand the secondary school teachers’ ideas about society and education for rapidly changing society centred around ICT fuelled knowledge creation. The study focuses on different ideas of society, roles of education, knowledge worth knowing and roles of teachers. This study aims to focus on the following research questions:

- (1) What are secondary school teachers’ ideas of society and education in the 21st century knowledge based society?
- (2) How do secondary school teachers perceive society and education in the 21st century knowledge-based society within an Indian context?

2. METHOD:

A sequential exploratory mixed method approach was used to explore teacher’s ideas and perceptions of society and education through the knowledge society lens. In the first stage, the qualitative data was collected through semi-structured interviews and analysed using thematic analysis (Braun & Clarke, 2006). This data was used to further probe the findings with the help of quantitative numeric data. The numeric data was collected using a questionnaire, and then analysed using descriptive and inferential statistics. The first stage of inductive data collection was used to deduce a clearer understanding of the dominant trends in teacher’s perceptions of society, education and their role.

2.1 Procedure and data collection

The study was carried out in two phases. The first qualitative phase explored the teachers’ conception of the Indian society in terms of its developmental phase and the knowledge worth knowing. Data was collected with the help of semi-structured interviews with tools such as pictures of knowledge and technology driven disruptive developments as prompts.

The second phase of the study used quantitative tools in two parts. Part one was designed to find teachers' perceptions of phase of development of the Indian and global society, the stages of development being Agricultural society, Industrial society, Service based society and Knowledge society. The second part used a pedagogical tool developed by Andreotti and De Souza (2008). The tool presents seven strands of different ideas of society, roles of education, knowledges worth knowing, roles of teachers and educational 'mantras' as a stimulus for discussion around educational approaches and ideals. The tool was adapted to include five strands to suit the Indian context.

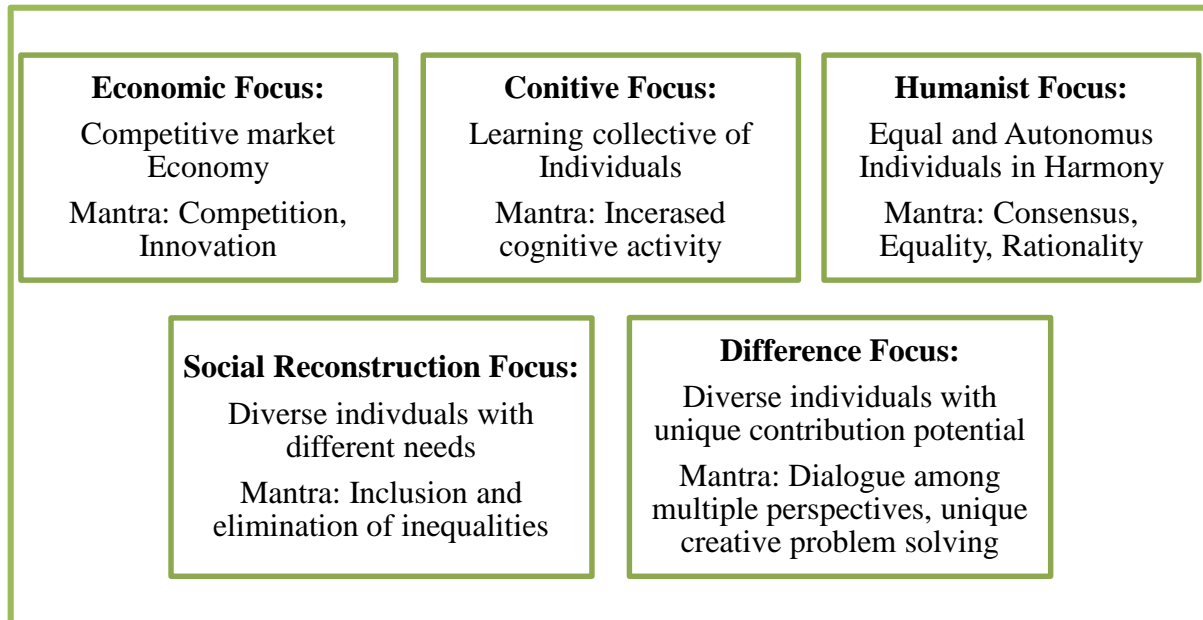


Figure 1. Pedagogical tool with societal and education strands

2.2 Data analysis

The participants' responses in interview data were recorded and transcribed. The data was then coded, labelled, analysed and combined to form themes on the basis of an inductive interpretation and theoretical inputs from literature. The themes were formed through open coding and the sub-themes were connected to the related themes through axial coding. The data collected by the quantitative pedagogical tool was analysed to find the proportion of teachers' ideas in each strand to identify the dominating strands of ideas of society and education.

2.3 Participants

The participants were Secondary school teachers from the English medium schools situated in Mumbai who were chosen by purposive sampling to ensure equal representation of the three predominant educational boards, the Central Board of Secondary Education (CBSE), Indian Certificate of Secondary Education (ICSE), and Maharashtra State Board of Secondary and Higher Secondary Education (SSC). 20 teachers from 8 schools answered the semi-structured open-ended interview for the qualitative phase. The quantitative tool was used to collect data from 178 teachers from 7 schools.

3. FINDINGS:

3.1 Qualitative data

Teachers' ideas of Indian society

The interview data showed more teachers viewed agriculture, agriculture related services, agricultural issues, environmental issues, protection for indigenous arts, crafts and other rural themes to be the most important for the Indian society. Teachers emphasizing the importance of the manufacturing, services sector, and technology related services were equal. Within the services strand there was more inclination towards vocational and technical skills like electricians, plumbers, carpenters, bakers, etc. IT and managerial jobs came next in the frequency of being mentioned as important. The preference for technical and vocational skills related jobs was mainly to mitigate the threat of unemployment. Technology was seen as a job creator by three teachers but as a source of brain drain by one. Within technology, coding was named as a job creator for the Indian context. Technology wariness was exhibited by many teachers due to its potential of creating job losses, effects on indigenous arts and craft, excessive dependence, loss of manual skills and traditional values. New ideas, innovations, new technology were the least preferred options for shaping societies and as creators of new employment opportunities.

Table 1. Themes of Teacher perception of Indian Society

Themes	Frequency
Agriculture Orientation	8
Industry/Manufacturing	5
Services Orientation	5
Technology Orientation	5
Science Based Growth	3
Knowledge Orientation	2

Teachers' ideas of Education

Knowledge.

Most teachers considered the curriculum content to be satisfactory for preparing students for the next stage of education, though most considered linking content to real life examples and experiences necessary. Knowledge, for most meant static content knowledge which should be 'taught' for conceptual clarity and development of a logical thought process. Linking content to real life was important to most. Some of the phrases that teachers tended to use were:

"Conceptual knowledge, Clear concepts, 'drilling' of concepts, deep subject knowledge, in-depth specialized knowledge, exposure to real life examples like stock exchange and Mumbai Dabbawallas, multidisciplinary knowledge."

Two teachers out of 20 mentioned the importance of knowledge in the field of technology in higher education important to get employed. When probed further, they considered ICT knowledge important since most new jobs are created in that field.

Values.

Respect, especially for teachers was named as a necessary value by all the teachers interviewed. Honesty, truthfulness, discipline, resilience, patience, flexibility and responsibility towards the environment were some of the other dispositions considered important.

Skills.

Vocational and practical skills were the most common among the skills that should be possessed.

"Skill development like vocational skills, working with machines, more practical skills- so that they can put up their own small industries going ahead."

"New ideas and innovations in the mechanical and electrical fields for example will create more demand for new products in the market."

The other skills mentioned were curiosity, logical thinking, creativity, scientific temper and critical thinking.

Classroom leadership.

All the teachers interviewed put themselves in charge of the class and the curriculum with very little scope for students to take charge of their own learning. All of them exhibited concern about shortage of time to 'complete the syllabus'. Teachers largely exhibited an orientation towards controlling the classroom activities with little room for students to choose how to learn. The often-repeated phrases are given below:

"Teachers are taking all efforts to impart content knowledge but when there are so many activities, the teacher cannot ensure learning."

"Usually, the teacher demonstrates the experiment to the students, the students observe and then discuss these observations."

"When teaching mathematics, I give examples of the importance of saving and the power of compounding. For area and perimeter, I make them take measurements of actual things around them and then use the formula to calculate."

"We make it point to give a context for topics and try to create awareness."

3.2 Quantitative Phase

Teachers' ideas of Indian society

The quantitative data was used to find dominant trends in teachers' perception of the global and Indian society.

The results suggest that the global society is perceived to be predominantly a knowledge-based society followed by a service-based society. Indian society on the other hand was perceived to be a predominant mix of agriculture based and service-oriented society.

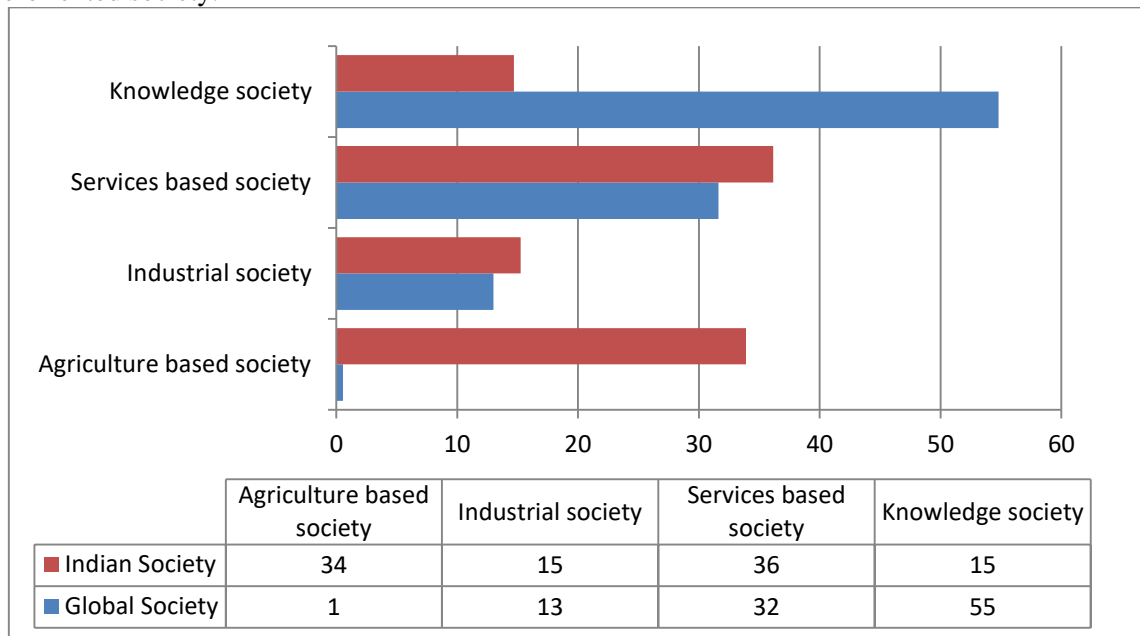


Figure 2. Table 2. Teachers' perception of stage of development of the global society and Indian society (% teachers responding)

Teachers' ideas of Education

Table 3. Teachers' ideas of society and education across in their Indian context (% teachers responding)

Strands →	Cognitive	Economic	Humanist	Social Reconstruction	Difference
Society	10	9	4	26	51
Goal of Education	8	13	14	8	57
Knowledge worth Knowing	20	2	11	17	49
Role of Teacher	19	4	21	2	55
Educational Mantra	17	20	8	3	51

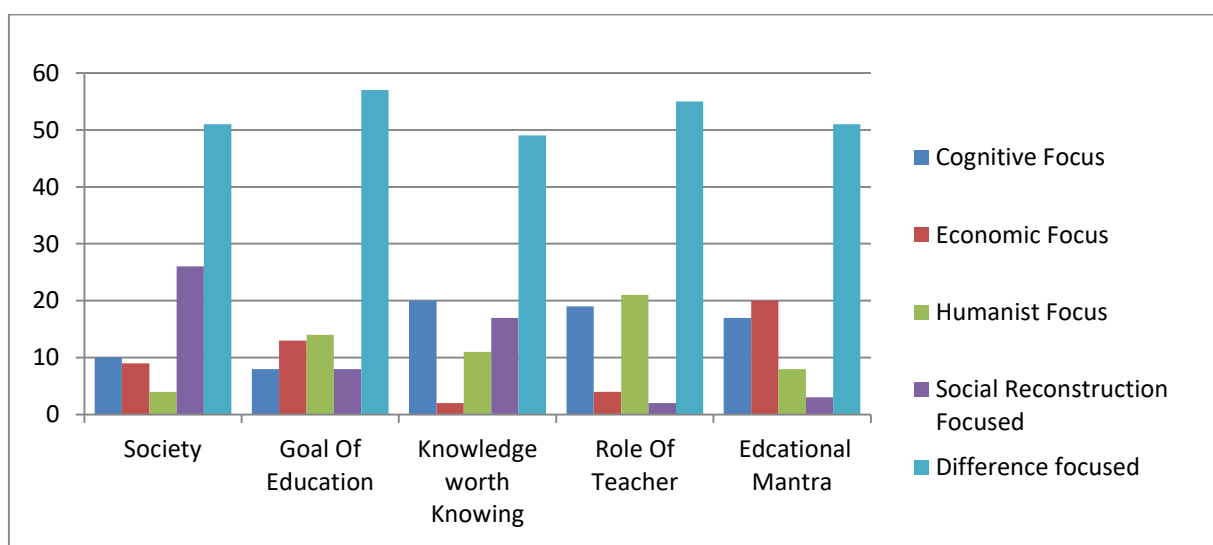


Figure 3. Strand-wise ideas of Society and Education (% Respondents)

Teachers perceived an ideal society and education to be largely difference focused, indicating a tilt towards the knowledge-based society which is a diverse and complex web of individuals who have unique contribution to the whole. The social reconstruction strand came second as a preference for ideas of society, but knowledge worth knowing showed the cognitive strand in the second place with 20% of the teachers preferring it. Economic pursuits as the crux of educational goals came second with 20% teachers preferring it. 55 % respondents perceived the role of teacher to respect and celebrate diversity, and create environments for co-constructing knowledge. 20 % respondents preferred a humanist focus strand for the role of teacher which emphasised commonalities to promote harmony, agreement and consensus.

4. DISCUSSION:

The results from the interviews and the responses from the pedagogical tool address the two research questions. The quantitative data explored the teachers' ideas about an ideal society and education, whereas during interviews teachers' narratives also revealed some of the actual teaching practices in the classroom.

4.1 Ideas of Society

With 51% teachers choosing the difference focussed strand which indicated knowledge-based society, it can be said that teachers largely viewed society as a diverse and complex web of individuals, who with their unique contribution, co-construct and create new ways of being, seeing, knowing and relating together. However, the dominant views of Indian society were services and agricultural sector oriented according to the first part of the quantitative data. The interview data also had similar findings, with agriculture and services being the most preferred orientation of the Indian society

4.2 Ideas of Education

Teachers largely exhibited satisfaction with the topics and content prescribed by all the boards except for the amount prescribed as syllabus for any academic year. Teachers were seen to be largely in control of the classroom learning, and exhibited a presentation-based approach with a deductive learning style assumed by the students. Results of the quantitative questionnaire showed that teachers viewed the ideal kind of knowledge to be co-constructed by diverse set of learners through collaboration. However, the interview data revealed that what actually transpires in the classroom is adherence to the prescribed syllabus content through a transmission model. The teachers were keen to relate their topics to real life examples, but there too the inclination was more towards a passive learning style than an active project or problem-based approach. Respect for the teacher appeared in the narrative of all the teachers interviewed. None of them mentioned a need for collaborative atmosphere where the learners respect each other's views, backgrounds, and capacities, indicating that the teachers saw themselves in a dominating position in the classroom.

Teachers emphasized the necessity of including technical and vocational skills in school education primarily because they saw it as means to secure employment, and secondly as a way of active learning. Thinking skills which were important to teachers were logical reasoning, scientific temper, curiosity and critical thinking. However, none exhibited an awareness of the importance of integrating these skills, either technical or cognitive, in their classroom teaching with the exception of logical thinking and critical thinking.

5. CONCLUSION:

In summary, the paper has tried to explore teachers' ideas of society and education in the twenty-first century knowledge society in the Indian context. Indian society is largely perceived to be an agricultural and service-based society. Within that, the most ideal form is perceived to be a society where difference in individuals is respected, celebrated, and harnessed to create new knowledge and meaning. But the education that actually transpires in classrooms takes the form of a traditional didactic teacher-centred transmission model of static knowledge and facts, rather than that of a more inductive, collaborative and creative nature. The above findings point towards a dichotomy in teacher perceptions and practices for an education in the knowledge society. The fabric of the knowledge society is dependent on individuals who are equipped with the know-how to solve problems in new, ingenious ways and are able to adapt to ever changing environments. Teachers are channels through which these future citizens of the knowledge society will acquire those skills. It is therefore important that teachers be accorded all reinforcement needed to fulfil their role in the society. Teachers think and act from their cultural background, from the context of an institutional organization, and from a professional culture which they confront in their work. Research also suggests there is congruence between teachers' beliefs and their teaching practices, and they should be actively involved in the review of their teaching beliefs and learn from them (Moreno, 2018). Fostering research, reflection and self-criticism of beliefs and educational practice in teachers can help build a more complete vision and awareness of situations and understanding of their roles. Teacher development and mentoring programmes at the pre-service and in-service stages should also be designed to allow reflective practices. The change in perceptions and practices of teachers will also need the support and congruence from

a change in the whole culture of education from all stakeholders including policy makers, school leaders, parents and society.

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