UNIT 12 SOCIAL ORGANIZATION OF KNOWLEDGE

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12.1 INTRODUCTION

Knowledge is often considered synonymous to terms like familiarity, understanding, wisdom, education, awareness etc. Since the days of the earliest civilizations like Mesopotamia, Egypt, India and China knowledge has remained a major tool of change of almost all societies. You may be aware that in the ancient times, knowledge was based upon natural environment and local knowledge. History of knowledge is full of instances of human beings managing to reduce the impact of events such as famines. You may have also noticed that in the rural areas, the traditional healers do have a special place in the life of their communities. So one may ask 'What is the social organization of knowledge'?

In this Unit, we shall discuss various aspects of knowledge as may be expressed at various levels. The whole process of organization of knowledge may be divide into three areas - knowledge creation, knowledge accumulation and knowledge dissemination/transfer. We shall particularly examine the areas of 'knowledge creation' and 'knowledge transfer'. We shall deliberately avoid 'knowledge storage' since this is beyond the scope of this Unit. This Unit will therefore be discussing both, the traditional and the modern aspects of knowledge organization.

12.2 OBJECTIVES

At the end of this Unit, you should be able to:

- Understand the meaning of ‘knowledge’;
- Know about forms of knowledge;
- Appreciate the relationship between the traditional and modern forms of knowledge; and
- Know about the National Knowledge Commission of India and its reports.
12.3 DEFINITION, MEANING AND SCOPE

Educational scholars, like all other scholars in the field of social sciences differ on the true definition of the term knowledge; however they all agree that the definition of knowledge should include:

- Familiarity gained through sight, experience, or oral report,
- Some information that is or may be known.

Educationists see some relationship between knowledge and learning. Knowledge here is seen as facts or ideas that come out of studies, investigation, observation or experience while learning largely means knowledge which is acquired through formal schooling.

Knowledge can be expressed in the form of data, scientific formulae, product specifications, manuals, universal principles, and so forth. This kind of knowledge can be readily transmitted to individual learners through formal and systematic means. This has been the dominant form of knowledge in the West. In Japan, however, this form has been seen as just the tip of the iceberg. They view knowledge as being primarily tacit, something not easily visible and expressible.

Tacit knowledge is personal and individualized and at times hard to formalize, making it difficult to communicate or share with others with convincing arguments. Subjective insights, intuitions and hunches fall into this category of knowledge. Furthermore, tacit knowledge is deep rooted in an individual’s actions and experiences, as well as in the ideals, values or emotions he or she embraces.

12.4 TYPES OF KNOWLEDGE

Explicit knowledge: This form of knowledge is capable of being expressed in words or may be numbers. It can be shared either through electronic devices or through traditional means. Explicit knowledge can be transmitted to a wider section of the society and has been the major form of Western knowledge as opposed to the Japanese understanding that knowledge is something that is not easily visible and/or can be expressed.

Tacit knowledge: This form of knowledge can be said to be highly personal and difficult to communicate or share with others. It includes such knowledge as subjective insights and intuitions. Tacit knowledge is dependent upon one’s actions and ideals, values or emotions.

Received Knowledge: Knowledge can also be seen as facts and correct information with instructors (teachers) being seen as experts who have mastered the required facts. It is the duty of the teacher to present knowledge through such devices as notes, assist the learner to commit it to memory and to test its mastery.

Subjective Knowledge: Knowledge is occasionally characterized by absence of unanimous accepted facts. You may have noticed, for example, that various scholars do not agree on some basic things such as definition of common disciplines. This has meant that learners too are encouraged to develop the present level of knowledge as per their experience and understanding. Under subjective knowledge, the opinion of the teacher is never final, since teachers act as facilitators of knowledge, guiding learners to how to achieve their fullest potential.

Procedural Knowledge: This view considers knowledge as neither factual nor made up of correct answers. It argues that no single scholar has fully understood the facts to enable him/her to force his/her opinion on others. It extends learners a chance to express
what they consider as complex problems with evidence. It assumes that the teachers are equipped and well informed to assist the learners in analyzing the challenges through different situations/alternatives. Knowledge here is made of different facts and experiences.

**Constructed Knowledge:** It views knowledge as contextual and relative, uncertain and tentative, yet capable of making positions, choices and commitments to oneself. A knowledgeable person is one who is fully aware of uncertainty but still has the courage to encourage learners towards informed opinions and reasoned judgments and commitments. It considers learning as going beyond academics to create learners with a universal view of the world.

**Check Your Progress 1**

1) Define knowledge and identify its meaning and scope.

2) Mention the various types of knowledge.

**12.5 MODES OF KNOWLEDGE TRANSFER**

It needs to be mentioned that whenever something new comes up, the general tendency is to oppose it because normally we oppose change and prefer status-quo, even without fully understanding the benefits of such new ventures. This is true of human beings who often resist taking up new challenges and are opposed to their existing socio-economic and political conditions and also any new invention or finding. What this means for the transfer of knowledge is that simply making new knowledge available may not result in it being transferred and accepted by all. The process of knowledge transfer is further complicated because those who have the knowledge may be ignorant of their capacities or may be considering their knowledge as less significant and may end up not transferring the same to others. However, the following may be some of the modes of knowledge transfer:

**12.5.1 Digital Divide or Opportunity**

Digital divide or opportunity may not be readily available throughout the world even though their availability is widespread. In recent times the system of knowledge accumulation has greatly changed because of the developments in computer and information saving devices. This development has created a divide between those who can afford to access the knowledge resources and those who do not have the resources to access these resources. The divide is further increased by learning the skills which enables one to access the resources. Those who do not have the skills can be further deprived.

The low cost telecommunication system has been instrumental in helping societies to leapfrog through open distance education and through a much better market access and private sector partners abroad.
12.5.2 Migration of Individuals Across the Globe

Migration of individuals across the globe is a major mode of knowledge transfer across continents and cultures. Interregional relations have further been boosted through the use of technologies: computers, radio, and video-conferencing for open distance learning (ODL) which offers avenues for knowledge dissemination to a worldwide audiences.

12.5.3 Reinterpretation of Knowledge

Reinterpretation of knowledge was a common mode of knowledge transfer particularly during the ancient times. As a philosopher, Plato used dialogues to transfer the information accumulated in the writings and teachings of Socrates which was later passed on to future generations. Analects of Confucius, The Art of War of Sun Tzu, or the Pyramids of Egypt which have also served similar knowledge sharing functions.

12.5.4 Recorded Devices

Recorded devices such as reports of debates, resolutions of meetings, memoranda, conference proceedings, and document filing systems maintained by organizations have been used to transfer knowledge to a wider audience.

12.5.5 Easy Availability and Use of ICT Gadgets

Easy availability and use of ICT gadgets such as Internet, SMS and other communication devices have become widespread in reaching out to large sections of the modern day societies. Other ICT devices commonly used to capture and disseminate knowledge content include electronic databases, audio and video recordings, interactive tools, multimedia documents and so on.

12.6 FORMS OF KNOWLEDGE

12.6.1 Traditional Forms of Knowledge

Most of the current knowledge is drawn from traditional forms of knowledge passed over from the ancient civilizations such as ancient Greece, India, Mesopotamia, China, Egypt and similar other civilizations. It can further be argued that when each of these major civilizations came into contact with other civilizations, it led to a refined understanding of knowledge. As a member of society, you may have noted that there is a corpus of knowledge both at the level of the classical texts and the folk traditions in areas such as Medicine, Arithmetic, Agriculture, Grammar, Language, Dance, Music, Astrology etc. Those conversant with the Hindu mythology must be aware of the role played by the Shastras and Lok Paramparas.

Medicine: There exits in all societies some form of traditional medicine, for example India has one of longest and unbroken health tradition (Ayuwedic, Siddha etc.), with well skilled practitioners, textual and theoretical knowledge. Attempts have been made, both at private and government levels, to expand the use and presence of these traditional forms of knowledge to far flung areas such as U.S.A, Europe, Asia, Africa and other parts of the world. It should be noted that the Indian medical tradition is prevalent at two levels: classical and folk. The codified systems of treatment that includes Siddha, Ayurveda and Unani is practiced by trained practitioners similar to those trained at the modern medical colleges whereas ‘fork’ system of medicine (Lok parampara) which is essentially oral in character and is passed from one generation to another (like from father to son, guru to shishya). The traditional form of knowledge involves local remedies and cure for such sickness as in:

- Being able to take health care.
- Knowledge of common cures such as may be possessed by Vaidus, Nattu Vaidhyars, Bhagats.
- Traditional sayings and proverbs on health systems.
- Beliefs on such food as Pathya and Apathyam. There are foods to be preferred or avoided during specific diseases or conditions.
- There are also specialists for specific diseases such as asthma, rabies (Visha Chikitsa) and impotence.
- Traditional birth attendants who perform delivery at home.

**Folk Traditions**

Folk traditions have their origin among the common people's practices, customs, or stories and are spread or passed down orally, often with considerable variation between individuals and period. These traditions are more often common in rural areas with peasant cultures. A common characteristic is that it is accepted in the community, and is passed orally and is ever-changing. Folk traditions are aided by such tools as may include poetic devices such as rhymes and alliteration. Folk traditions are part of knowledge transferring system. Folk traditions are today showing dynamism and continue to develop with some support from governments as was the case when the government of India took up a study of the knowledge and use of natural resources by the tribal communities in 1980s. The report showed that tribal communities in India have working knowledge of thousands of plant species which can be used for medicinal purposes.

It is worth identifying the close relationship between folk and classical traditions. This relationship is captured by the theory of composition of matter (Panchamahabhoota) and the theory of causation of disease (Tridosha). A further relationship is noticed between the technical terminologies such as Pitta, Kapha, Ushna, Laghu, Guru, Sheeta, and Guna. The classical texts such as Charaka-Samhitha states that - "Oushadihi naarna roopabhyaam, jananthe hyajapaa vane, avipaashchaiva gopaashcha ye cha Anye vanavaasinaha" - "the goat herds, shepherds, cowherds and other forest dwellers know the drugs by name and form.

Folk traditions represent a more economically efficient way to transfer and obtain knowledge of all kinds. Economists such as Thomas Sowell have observed that decision-making is time consuming as compared cultural traditions which offers a rich, low-cost, consensually authenticated way to economize on the resources required to make decisions independently.

We need to note that some traditions may be relevant only for some specific issues such as may be to highlight or enhance the importance of a certain institution.

**Traditional Knowledge Through Proverbs**

Nearly every one has some proverbial knowledge. Proverbs has been used down the ages by a cross section of cultures. In West Africa, for example, proverbs are said to be "... the palm oil with which words are eaten". That which a proverb explains in one sentence may be written down in large paragraphs; hence proverbs provide a simpler and intelligent way of passing over some message. These proverbs' may be touching on food habits, treatment and personal etiquette.

**Traditional Understanding of Seasonal Changes**

Ayurvedic scholars are of the teaching that it is Agni within us that is charged with digestion of food received from outside. During summer, for example, our digestive system becomes week while it becomes stronger in winter. The knowledge of seasonal variations and different food requirements has meant that in summer, the body readily accepts liquids and light foods that are easy to digest.
12.6.2 Modern Forms of Knowledge

It is wrong to view knowledge as that part of information contained in books or the facts they have learned in schools. Teaching is not merely transmitting knowledge (information) from the source (a brain or a textbook) to the learner’s brain. This view is wrong because the learner cannot be seen as a cup that must be filled with information. In modern times, knowledge means more than just the collection of information. It is ‘information’ presented through a good structure for easy location and access.

An individual’s knowledge is based upon his/her ability to organize and link the acquired information together. It is the duty of teachers to facilitate the process of learning while the learner’s duty is to construct knowledge. This means that each learner has a unique way of organizing the acquired information. Generally, knowledge construction involves four steps of:

- All knowledge is based upon existing knowledge
- Secondly, each knowledge must be well-organized
- Learning involves mental activity, which requires learners to be well motivated
- Learning depends upon reflection as a powerful tool for learning.

A brief illustration of the above four steps is presented below.

**All knowledge is Based upon Existing Knowledge**

Much of our understanding about modern education is derived from the works of John Dewey who advocated that education should be based upon the experience of the society and individuals (his *theory of experience*). According to Dewey’s understanding, humans are sensitive to (or are affected by) experience. In this case, each person learns more from experience than do many other animals who rely primarily on pre-wired instinct. Education has a critical role of providing people with the skills to live a useful life in the society. Dewey further noted that what is learnt may both be positive or negative; hence each experience is stored and carried on into the future experiences. Dewey further observes that ‘past experiences interacts with the present’ to influence the present experience. In this regard, current experiences should be understood as a function of the past (stored experiences) interacting with the present experience to create an individual’s experience. This explains reasons for people holding different opinion on the same situation (i.e. in class, some learners may prefer one subject teacher while others in the same class may not be in favor of the same teacher).

**Knowledge Must be Well-Organized**

Knowledge learnt in either setting (traditional or modern) need to be well organized so as to be capable of application in new situations. As a student of education, you must have learnt the various aspects of teaching in different class situations. In this regard, you will be evaluated more and more not on the examinations you passed but on your ability to apply the knowledge to the classroom situation i.e. ability to transfer knowledge to learners in a way as to:

- Organize the knowledge in memory to allow efficient application.
- Know when to apply the relevant information.

It has been noted that teachers who cannot organize knowledge and to transfer are missing an important aspect of the teaching profession. Knowledge organization and application are dependent upon the setting of the learning experience and the setting in which the knowledge must be applied.

**Learning Involves Mental Activity**

Learning is part of an intentional and purposeful processing of information. Mental activity requires strategies that promote the manipulation of information so that learners
can acquire both lesson knowledge and deeper conceptual insight. Learning is the ability to recall or recognize specific facts, or procedural patterns and concepts that serve in the development of intellectual abilities and skills. Educationists have listed six major categories of mental activity depending on the degree of difficulties as:

- Knowledge involving recognition and recall of information.
- Comprehension involving interpretations, translation or summaries.
- Application of information learnt to a new situation.
- Analysis of the situation to arrive at a clear
- Synthesis of the different parts into a new entity from the original one.
- Evaluation of the facts of decision making based on some predetermined criteria or rationale.

Reflection as a Powerful Tool for Learning

In the earlier Units, you have already learnt that learning is enhanced when learners are able to make connections between the content being presented and their own experiences (both past and present). The term given in most learning theories to this process is “reflection”.

You may have entered into the master’s programme of study with vast range of work and life experiences. Reflection as a powerful tool for learning can best tap your experiences and so increase the learning potential. Teachers need to explore the power of reflection in transforming experiences into learning and to develop a range of models and techniques that they can use for the process of reflection. Teachers further need to expose learners to a variety of learning methods, enabling them to make sense of and learn from their own experiences whether these have been derived from life, work or classroom experiences.

Reflection as a powerful tool for learning therefore is a descriptive phrase that refers to attempts to prevent the unquestioning adoption of ideas without careful analysis. Its major aim is to provide critical evaluation of information, paying particular attention to both the positive and the negative aspects of the information being evaluated. As a teacher, you may be feeling that helping learners to develop and strengthen their capacity to think critically is an important objective of their pedagogy, and yet you may differ about the precise characterization of what learners try to inculcate. To clarify the concept of reflection further, consider the activities of a journal editor who critically evaluates research articles submitted for publication, making some recommendations before the article goes to the press for publication. The editor in this case is involved in a collection of overlapping mental activities such as intuiting, clarifying, reflecting, connecting, inferring and judging. It will be the duty of the editor to bring these activities together to evaluate the credibility, quality, impact, significance, usefulness or desirability of the research article on the basis of an implicit or explicit value system and a set of criteria of evaluation acceptable to the journal.

Check Your Progress 2

3) Write short notes on the traditional forms of knowledge.

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12.7 NATIONAL KNOWLEDGE COMMISSION OF INDIA

Every country, every area and even every group, howsoever small it may be, has its own corpus of knowledge which is in every case very crucial to that country, area or group. It is not only important but also very necessary to keep that knowledge corpus
Knowledge and Education

Knowledge and Education
alive and transfer it from generation to generation. The Government of India established a Commission to make recommendations to nurture the indigenous knowledge and further the process of knowledge creation and dissemination. However the NKC of India, it appears has not paid much attention to the traditional knowledge but devoted itself to modern methods and system of knowledge creation and dissemination.

The National Knowledge Commission (NKC) was established by the government of India on 13th June 2005. According to its chairman (Mr. Sam Pitroda), “The Commission was set up by Prime Minister Manmohan Singh to prepare a blueprint to tap into the enormous reservoir of India’s knowledge base so that Indian people can confidently face challenges of the 21st century”. Five key areas related to Access, Concepts, Creation, Application and Service were identified for action. The commission was thus mandated to consider policy changes that will give India a comparative advantage in the knowledge-intensive service sectors. The government had felt the need for a reform in education, research institutes and intellectual property legislation. The NKC was therefore mandated to:

- “Build excellence in the educational system to meet the knowledge challenges of the 21st century and increase India’s competitive advantage in fields of knowledge.
- Promote creation of knowledge in science and technology laboratories.
- Improve the management of institutions engaged in Intellectual Property Rights.
- Promote knowledge applications in agriculture and industry.
- Promote the use of knowledge capabilities in making government an effective, transparent and accountable service provider to the citizen and promote widespread sharing of knowledge to maximize public benefit.”

The various issues which were addressed included reforming various institutions such as:

- a comprehensive reform of higher education, overhaul of public libraries, creation of a Knowledge Network, setting up of national portals, transformation of vocational education, re-engineering of government processes and making E-governance citizen-friendly”.

12.8 LET’S SUM UP

We started this Unit by looking at the nature and types of knowledge. We also looked at some modes of knowledge transfer where we noted that making new knowledge available may not result in it being transferred and accepted by all. We noted further that the process of knowledge transfer is further complicated because those who have the knowledge may be ignorant of their capacities or may be considering their knowledge as less significant and may end up not transferring the same to others. The process of knowledge transfer is further complicated because those who have the knowledge may be ignorant of their capacities or may be considering their knowledge as less significant and may end up not transferring the same to others. This unit also went into various forms of knowledge, giving particular emphasis to the traditional and modern approaches to education. The Unit ends by discussion the National Knowledge Commission of India and its mandate and major objectives of the Commission.

12.9 SUGGESTED READINGS

National Knowledge Commission Report (2006, 2007) access at:
http://knowledgecommission.gov.in/about/default.asp