OPENING THE GATEWAYS OF KNOWLEDGE THROUGH E-INFORMATION LITERACY : A NEW VISION

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Abstract

The paper defines the term Information Literacy, its need and importance, and takes a stock of some notable efforts being made to initiate Information Literacy activities in different parts of the world. It stresses on the importance of Information and communication Technologies for Teachers vis-à-vis students, its pedagogy, and the role of Information providers. It puts forth certain models of Information Literacy, and more particularly e-Information Literacy experiments in India. It highlights the e-information literacy programmes of the Institutions at local level, and spells out the urgent need to streamline these at other levels too.

Keywords : Literacy, Information Literacy, E-Information Initiatives

1.   Introduction

The co-existence of two worlds, brings live before us, two diverse shades of lives. On one side, is the neat and clean, spick and span sparkling world, resting on electronic circuits, ever crowding malls, overflowing granaries, despite little visible farm land, where work places, are the same as the living spaces, where the world in print can be recreated in the cyber space, where smaller, faster, cosier is the way of life, and this, is the small, smart, sauve, cyber world which is excessively driven by knowledge revolution.

On the other side, is a world, where women, and children have to walk down miles together, even for a pail of water, where hunger, and disease looms large on faces, children have lost the meaning of childhood, and where thumb impression, is a tool for exchanging a meagre amount, and this, is the world of downtrodden, the deprived, the illiterate, which is a no match, in this knowledge driven society, hence literacy has become a prerequisite for emancipation, and empowerment.

2.   Understanding Literacy

The kathas, kirtans, Ramleelas, and the rich folk arts in their various manifestations reflect our rich traditions in India, but as a result of innumerable invasions in the middle ages, and later, because of the colonial rule, the country slid back to illiteracy which was projected to be 15% at the time of independence, and the female literacy much below the above. In the above context, the words of Mahatma Gandhi are worth mention, who said 'It is a matter of sin, and shame, that millions in India are illiterate. We have to liberate them.'

Taking a note of the above, the Government of India launched several literacy oriented programmes as the Adult Education Schemes, Primary Education, Jan Shikshan Nilayam, Jan Shiksha Abhiyan, Sarva Shiksha Abhiyan etc. in different phases, with the main aim to make it a 'peoples mission' by mobilizing human resources from all possible quarters to combat illiteracy. It is sad to note, that even after fifty eight years of independence, India has only around 65% literacy branding itself as one of the most illiterate democratic countries of the world.
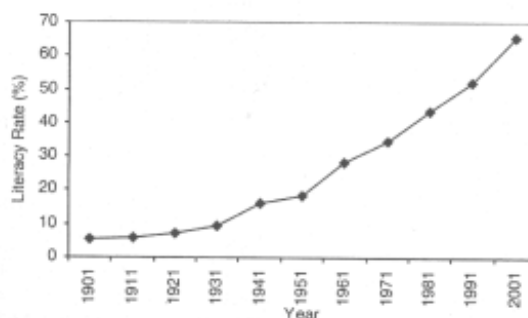
Though, the strategies of all the above programmes, like

• Bringing about improvement towards quality learning

• Massive involvement of students

• Area focus on educationally backward pockets

• Involvement of Shramik Vidyapeeths, and voluntary agencies

• Standardization, management, and complete eradication of illiteracy in selected areas etc sounded very good, and the government spent huge amount for the same, the results have not been encouraging with wide disparity in targets put forth, and those achieved.

3.   Redefining Literacy

The changing world order has posed new challenges before us to think of literacy from a broader perspective, keeping in view the high profile technology. Hence, one has to seriously think of suitable means for motivating the learners, the pedagogy of the literacy skills, and most importantly about our approach to the issue of literacy itself. The three aspects of utmost importance are the population, poverty, and the technology.

The concept of literacy, as an ability to read, and perform the day to day chores, is fast becoming outdated. The technology intensive activities have compelled the people to handle machines with skill, and expertise. Thus, over emphasis on the ability to read and write may sound redundant today. Though, literacy is viewed as instrument for the cause and effect of development, it cannot be considered as a cause of development, at the grass root level. Hence, it is necessary to develop a scientific temper, and the socio-political cultural milieu of the world around i.e. the village, town, taluk/tehsil, state, national, and the globe by helping the populace to raise the levels of their awareness of self, surroundings, and their conscience. Renowned thinkers like Robert Reich, Charles Winslow, and William Baramer have opined in different ways, that 'The very notion of nation may change to one, defined by logical boundaries, and electronic communication, more than by physical geographical locations.'

Hence, redefining literacy, more particularly, the Information Literacy is a survival skill in this Information Age. To keep pace with the knowledge, and technological expertise it would become mandatory for the

literacy oriented programmes to develop Information literate people, who can find, analyse, evaluate, and use information effectively. Hence, an information literate must be technology literate which evidently means, that the individual should have the knowledge of technological literacy, computer literacy, web literacy, visual, and media literacy etc.[3]

4.   Information Literacy

Information Literacy is a key component in the Information age, and democracy and Information a strategic resource, that cannot be fully exploited without information literate citizenry.

Information Literacy can also be considered as a vital component, and contributor for life long learning, the competencies of which extend beyond formal class room setting, and provides practice with self directed investigations to the final stage to understand the role, and responsibility of the learners.

4.1   Need for Information Literacy

 Apart from the traditional printed sources, information is available in abundance, in various forms and formats. Photographs, images, audio, and video, are all valid sources of information. The significant changes in the information environment in content, are affecting information users in several dimension. Information that is available through libraries, community resources, special interest organization, media, and internet is free of any geographical boundaries. Thus, there is so much of unfiltered information, that finding exactly what you want is not a simple process. The question of authenticity, validity, and reliability of culled out information clubbed with expanding quantity is also a serious problem, and needs valid consideration. It is also worth special mention, that abundance of information will not create informed citizenry.

A vast majority of users of information have no skills to using information. Hence, educating users to use information technologies, and to take advantage of the wealth of resources currently available is becoming an important objective, for learners of all ages. Information kiosks, Learning Resources Centres etc. play a key role in imparting information literacy to their beneficiaries to acquire compatible skills for handling the printed vis-à-vis electronic sources of information in the new digital environment.   The skills of Information Literacy would train the beneficiaries to take a logical path in their search for, and application of information by posing the following questions.

What (information) do I need ?	Where could I go (for it) ?
How do I get the information ?	What resources do I use ?
How shall I use the resources ?	What should I make a record of ?
Have I got the information I need ?	How should I present it ?
What have I achieved ?	

Hence, the above mentioned skills will enable them to utilize information in day to day activities, and for problem solving. [2]

4.2   Information Literacy : Some definitions

*   The ability to recognize a need for information, find, evaluate, and use that information in whatever format (print index, online database, internet etc) www.dced.fov.be.ca/irp/it1112/apf.htm.

*   The ability to know when information is needed, and to locate, evaluate, and effectively use the needed information. www.library.okstate.edu/infolit/glossary.htm.

- Information Literacy combines an awareness of the value of information, and knowledge to the organization with the skills, and competencies that enable an individual to play a full, effective, and rewarding role in knowledge environments. (TFPL, unpub, 1999)

Fig. Information flows and problem solving. (Source TFPL)

5. E-Information Literacy : Its pedagogy and Information Providers

Curriculums in almost all the subjects around the globe have started evaluating the contents in the above direction, and LISc is no exception to this. Infact, Librarians vis-à-vis the facilitators of information, have larger roles and responsibilities in generating interest, and carrying these e-information literacy campaigns in a big way.

Ross Todd opines that "The convergence of an intense information society, rapid changes in information technology, and the embedding of such approaches as independent life long learning, are creating rich learning environment for students, as well as unparalleled opportunites for educators".

Gaining skills in information literacy multiplies the opportunities for students' self-directed learning, as they become engaged in using a wide variety of information sources to expand their knowledge, ask informed questions, and sharpen their critical thinking for still further self-directed learning. Achieving competency in information literacy requires an understanding, that this cluster of abilities is not extraneous to the curriculum, but is woven into the curriculum's content, structure, and sequence. This curricular integration also affords many possibilities for furthering the influence, and impact of such student-centered teaching methods as problem-based learning, evidence-based learning, etc. Guided by faculty, and others in problem-based approaches, students reason about course content at a deeper level than is possible through the exclusive use of lectures, and textbooks. The fullest advantage of problem-based learning, is that students must often use thinking skills, become skilled users of information sources in many locations, and formats, thereby increasing their responsibility for their own learning.

Hence, the Information literacy programmes have to be planned to counter the following issues, wherein the information providers can be largely projected as the skill developers.

- To enlighten about the growth of digital media to bridge the gap of digital divide.

- To encounter the complexities due to the proliferation of information

- To enable people as informed citizens through ability to access, and use credible information.

- To encourage independent learning by new, and vast information resource in many forms, and formats.

- To create an awareness about lifelong learning in this fast changing society, and competitive world economy

- To enhance employability of workforce that is increasingly information dependent

- To manage ably the knowledge capital.

6. Models of Information Literacy

Renowned professionals have developed several IL models which attempt to describe an individuals strategies as they search information. Some of these are linear, and others non-linear.

6.1 Kuhlthaus Model

The information search process consists of six linear steps i.e. initiation, selection, exploration, collection, presentation, and assessment.   The model also states, that intermediaries such as librarians can help the individual beneficiaries to define their information problem, and goals during reference interview. It also points out, the zone of intervention for librarians.
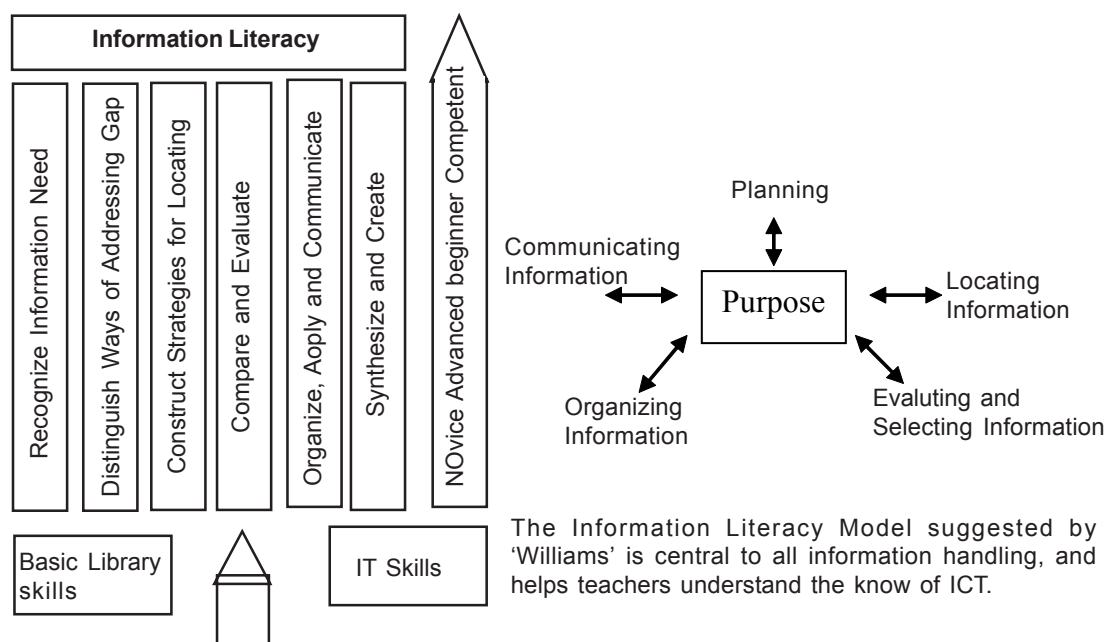
6.2 Ellis Model

Contrary to the above, this model suggests a nonlinear path of information search, though it has the same 8 stages as that of the kuhlthau's model. The relationship between the stages is dependent on the individual's specific problem and situation.

6.3 SCONUL Model

The Society of College National and University Libraries (SCONUL) task force on Information skills was convened in early 1990.

At the base of the model are the two fundamental blocks, the basic library skills, and the basic IT skills. The culmination of user programmes are the result of Library skills, but between the base, and higher level concepts of Information Literacy appear seven headline skills, and attributes, the interactive practice of which leads from being a competent user to the expert level of reflection, and critical awareness of information as an intellectual resource. An arrow indicates the progression from novice to expert. [12]

Information Literacy

Recognize Information Need | Distinguish Ways of Addressing Gap | Construct Strategies for Locating | Compare and Evaluate | Organize, Apply and Communicate | Synthesize and Create | NOvice Advanced beginner Competent

Basic Library skills

IT Skills

Planning

Communicating Information — Purpose — Locating Information

Organizing Information

Evaluting and Selecting Information

The Information Literacy Model suggested by 'Williams' is central to all information handling, and helps teachers understand the know of ICT.

Rajgoli, Iqbalahmad, U. Information Literacy in Digital Environment.

7.   Information and communication Technology (ICT) for Teachers-Student and Information Literacy

Carter and Monaco' feel that, "The use of ICT for imparting Information Literacy goes much farther than key board, and mouse skills; the relevance, value, and impact of information as a resource is crucial."

Teachers ICT may be looked in the wider context of IL ie the ability to search for, identify, and critically evaluate information content, and quality; select, adapt, present and communicate information to meet particular learning needs ie their own as well as their pupils. [3]

7.1   ICT Literacy : This module covers the use of ICT in daily life. Topics include

Basic concepts of ICT, using computers and managing files, word processing, spreadsheets, databases, creating presentations, finding information, and communicating with ICT, social and ethical issues, and jobs using ICT.

7.2   Application of ICT in Subject

This covers the application of ICT-tools within specific subject areas. The topics include measurement, modelling and simulation, and feedback devices, statistics, creating graphics, spreadsheet design, and database design.

7.3   Integration of ICT Across the Curriculum

The module suggests integrating ICT into several subject areas, and to demonstrate the use of ICT to combine subject areas to work on real-world projects, and solve real problems.

7.4 ICT Specialisation

Here modules are designed for students who plan to go into professions that use ICT such as engineering, business, and computer science or who plan to advance to higher education.

7.5 ICT for E-Information Literacy : Four model Approach

Teachers and students can discover, understand, and use ICT in the four-way model :

- To discover ICT tools and their general functions and uses; this implies ICT literacy and basic skills.

- To learn to use ICT tools in different disciplines; this implies general or particular applications of ICT

- To understand 'why' and 'when' to use ICT tools, and recognize situations where ICT will be helpful, to choose the appropriate tools, and to combine them for solving real problems.

- To cope with ICT when one enters more deeply into the science that creates, and supports ICT; to study ICT to become specialist.

The ICT curriculum for teachers offered by International Fedeeration for Information Processing (IFIP) under the aegis of UNESCO have been found to be the most convincing. The slightly modified version as suggested by 'P.C Biswas'[3] is as follows which could be applicable for school students, teachers, and teacher educators.

The curriculum consists of four modules designed in a hierarchical manner

- ICT Literacy : ICT as a separate subject.

- Application of ICT in subject areas : ICT as a tool to work within a subject,

- Integration of ICT across the curriculum : ICT as a method to work across subjects,

- ICT specialization : ICT as a profession (Not in a general connotation) [3]

8. E-Information Literacy : Some Reports

In 2000, CITSCAPES[27] carried out a survey of all UK Higher Education (HE) institutions to obtain information about addressing both strategic as well as practical considerations of Communication and Information Technology (C&IT) induction. From this survey, it was found, that student C & IT induction was recognised as either 'highly' or 'fairly important' by 92% of HE institutions. In more than 98% of institutions, either one or more unit/ department was involved in providing C&IT induction; in fact, on average, three agencies (such as IT Services, the Library, and so on) within an institution were involved. The report concludes, that 'it is clear that there is no obvious direction from which student C&IT induction should be expected to come, and academic areas involved in delivery as central ones'. Word processing, email, network features, and Internet access are the most common areas included in the induction syllabus. Over 35% of all respondents to the survey are trying to make students aware of the potential uses, and misuses of IT.

Case study investigations formed a central strand of the project and involved the detailed examination of student ICT induction provision in five UK HE institutions (chosen to be a representative sample). The

project has also developed tools that will enable each institution to map its own development and strategy. These tools have been designed to enable Higher Education institutions to reflect on their current position, compare themselves with other institutions in the sector, determine where they want to be in the future, and identify key factors to enable the desired transformation.

8.1 ACRL[28]

Speaks about individuals involved with information literacy programming. The characteristics used present a set of ideas that can be used when establishing, developing, advancing, revitalizing, or assessing an information literacy program. The characteristics also provide a framework within which to categorize the details of a given program, and to analyze, how different program elements contribute to attaining excellence in information literacy programming. Individuals are encouraged to consider the characteristics as well as library, and institutional contexts in establishing information literacy program goals and strategies. Librarians are also encouraged to make use of the "Guidelines for Instruction Programs in Academic Libraries" for specific guidance on library involvement with information literacy programs.

8.2 Lidia Derfert-wolf[29]

has emphasized on the Polish governmental initiatives and librarians experiences. She firmly stresses on the role of librarians in information literacy development.

8.3 Andretta, Susie[18]

Talks about the implementation of Information Literacy provision for a Chartered Institute of Library and Information Professionals (CILIP). The key topics in the conference addressed stresses on the issues of supporting e-learning and evaluating the effectiveness of Information and Communication Technologies, vis-à-vis Continuing Professional Development needs which relate to the implementation of life-long learning by applying the heuristic strategy promoted by the IL approach.

In line with the literature and the recommendations of information professional bodies such as Society of College National and University Libraries (SCONUL) and the American Library Association (ALA), Information Literacy is seen as the foundation of independent learning needed to support academic and professional development practices.

9. Indian Scenario : IL Initiatives

Some of the ongoing experiments in various Indian states show, that it is indeed possible to use ICTs for the development of IL in rural areas, and the disadvantaged sections of the society. Tools of ICTs, such as multimedia are effectively used in education, particularly in programmes to impart functional literacy among working adults. Andhra Pradesh has successfully implemented such project in 80 locations. MS Swaminathan Research Foundation (MSSRF) is helping the farmers, and fishermen in Pondicherry for obtaining information on market prices of agricultural products, and to obtain weather information, and satellite image of fish shoal locations. [16]

9.1 Aditya Dev Sood points to the rich potential in rural ICT (Information and Communications Technology) and strongly feels, that this could prove to be one of the most effective means of driving change," Sood points to the potential of these technologies to ensure equal access to disprivileged groups. The computer, as he points out, 'can indeed play a key contributing role in development.' The Gyandoot Project (1 Jan. 2000) of Dhar district of M.P., has set up 'Information Kiosks' which are run by village entrepreneurs. Two officers of the Indian Administrative Service in

Dhar set up an unusual IT-enabled model of citizen-consumer to government interaction. Kiosks called 'Soochannalayas' manned by locals, help to deliver useful content to the villagers. It is a low cost, self-sustainable and community owned rural Intranet project. For a fee of Rs. 10, rural citizens can select from a predetermined menu of 30 different kinds of complaints – like the absence of a schoolteacher, malfunctioning of a public hand-pump etc. [5]

The project has won International 'Stockholm's Challenger Award, 2000' in public serive and democracy category and also CSI-TCS National IT Award for best IT usage instituted by the Computer Society of India for the year 2000. www.gyandoot.net. Centre for Knowledge Societies (www.CKS-B.org) CKS-B is currently involved in a survey to design a rural ICT project in the Sikar district of Rajasthan. [11]

9.2 The Warana Wired Village Project in Maharashtra and is creating new levels of service to the rural citizen-consumer. SARI in Madurai hopes to wire up all 1000 villages in the district using low-cost WLL technology, developed in India. Meanwhile, Tarahaat.com is a company seeking to build branded computer kiosks in relatively prosperous rural areas. [16]

9.3 **E-choupal :** Sagar welcomes you like an oasis to a Guppi (Gurgaon Yuppie). ITC, one of the leading private companies, which has pitched for rural marketing rather aggressively in the past, envisioned the e-choupals as a unique information, and an e-commerce hub. Launched in June 2000, "e-choupls" are undoubtedly the largest and most successful private initiative in rural India, which reaches out to more than 3.5 million farmers today. These choupals with the help of a VSAT connection under the local Sanchalaks (in every village) has had a huge impact in an average farmer's life. [13]

9.4 Making it to the headlines, experiments undertaken by computer training institute NIIT's Dr. Sugata Mitra from Delhi have shown how simple slum-children can learn basic computing themselves. The 'Hole in the wall' project for children by 'Sugata Mitra' are wonderful examples of spreading IL among masses. [5]

10. E-Information Literacy Efforts at Local Levels : Some observations

Observations at local levels reveal, that the e-information sources, are making their presence felt in all quarters of human activity. The libraries vis-à-vis Information centres, are gearing up to meet the demands of the global networked environment. Public libraries (at all levels), with their branches in the rural pockets of the region, are in different phases of computerization. Some of which, who have computerised their activities completely, are providing IL training to their personnel vis-à-vis users.

10.1 Some Private children's Library (Manjiri Circulating Library etc) are providing practical training on computers to their clients. 'Internet' connectivity in these libraries, help the child to identify the information needs, and cull out the necessary information with little professional help. It is enlightening to note, that the children from nearby economically backward pockets, are being offered this training free, and have free hand on experience on computers during the library hours.

10.2 In lieu of NAAC, and other accreditation agencies almost all the Academic libraries (baring a few) have computerised all the in-house operations, and have internet connectivity. This has provided a first hand training to the Library personnel, as well as the staff and students to understanel these technologies from close quarters. With the constant increase in electronic information sources (specially in academic libraries imparting professional education), the manpower, at the learning

resources centre are learning the skills of information retrieval, and imparting the same to its users. Colleges running the 'Jan Nilayam shikshan kendras,' and other 'Adult Education Programmes,' with separate Women Counselling Cells, Research Cells, and Career Counselling Cells, are blending the user education, and Information Literacy Programs with the literates and neo-literates.

Hence, it is keenly felt, that Academic Libraries too, are becoming an instrument in this social change. The compulsion of MSWord / MS office, MS-CIT and other computer oriented courses have updated the IT skills in the staff (though a meagre percentage) and students. Constant use of Power point, OHP and 'internet' sites have given opportunities for each, to be aware and conscious of the modern teaching aids, which have largely been instrumental in increasing teacher-student interaction. Orientation, and Refresher Courses, Training programmes etc. are also emphasing a lot on the IT component in different areas.

10.3   Special libraries, which are in the forefront, in accepting the new technologies are way ahead in imparting the e-information literacy skills to their peers, and beneficiaries. Organisations / Institutions working under the Ministeries of ICAR/ICSR etc. have done a marvelous job in taking these technologies to the farthest of villages for the benefit of the rural folk. Despite the barriers of communication and technology, a large beneficiary group in rural pockets of the region is using, and understanding these technologies with success.

10.3.1 The Rajiv Gandhi Vikas Biotechnology Centre established under RTM Nagpur University, in a sprawling campus here and being funded by DBT, Ministry of Science & Technology (Govt. of India) under RVBC-DBT-STATE SUPPORT BIOTECH PROGRAMME has taken a number of issues, basically with a view to develop, and supply the most appropriate low cost viable biotechnology with special emphasis on Biopesticides and Biofertilizers. The Rajiv Vikas Kendra, New Delhi (NGO) has assisted in establishing a Research based Biotechnological Development and Production Centre with Rs. 11 lacs in 1995. Voluntary organizations have also played a pivotal role in the speedy progress of this centre .

The output of R and D Project on "Use of Biopesticides for Controlling Microbial Diseases of Major Carps" sponsored by DBT, Ministry of Sci. and Tech. (Govt. of India) has been of the nature of a unique service to the extension system of the country under the Lab-to-Land programme for the nearby region viz; Gadchiroli, Bhandara, Chandrapur, Nagpur, Wardha and Amravati Districts. This research has been enhanced by conducting practical demos, and experimentation in the course of weekly training programme for tribal people engaged in fish farming. Excellent to and fro transportation, and good lodging and boarding arrangements are being made for the batches of fish cultivartors and entrepreneurs. These cultivators are trained in regard to the developed biotechnology in the realm of fish cultivation and other aspects. The programme is so structured that the pisciculturists in general, whether of tribal, rural or semi-urban areas can get the seminal messages of the prgramme.

Lab-to-Land programmes are conducted twice a year at the villages, and such programmes are becoming very more effective with the use of video-films, booklets etc. specially prepared for this purpose in local languages.

10.3.2 The NBSS and LUP was set up at Nagpur in the year 1976 with a main aim to understand natural soil resource base, by assessing, monitoring/evaluating the soils, for implementing the development plan for sustainable land use. Keeping in tune with this new era, NBSS&LUP has emerged as a pioneer user of computer based Geographical Information System to manage the

soil and land resource data as early as in 1989. Major GIS packages being used to accomplish the activites of the Bureau are SPANS, PAMAP, AGROMA, EASI/PACE, IDRISI, used mainly for the purpose of training and teaching.

As a common goal and mandate of the Bureau, the institute has created the National Soil Resource Information Cerntre (NASRIC) which is the first soil resource database based on thorough ground truth checking and soil survey work. The major objective of the NASRIC is to provide soils information to the user agencies through paper copy as well as through digital medium.

The Agro-ecological methodology provides a tool for delineating homogeneous land units to implement a wide range of land resources applications. The Agro-ecological zoning and Geographic Information System (GIS) are greatly enhancing the capability of the system, and improved interfaces to promote use of such systems together by scientists, administrators and land users.

10.3.3 The National Environmental Engineering Research Institute has always valued, encouraged, and practiced excellence in R and D work in environmental engineering and sciences. NEERI plays a leading role in Research and Development in Environmental Sciences and Engineering. During the past 28 years, NEERI has been engaged in a number of activites leading to indigenous and competent solution of several environmental problems which helped in laying down criteria and guidelines to environmental quality. NEERI, Nagpur work as a National Documentation Centre for environmental engineering and science using the available information base, infrastructure, and expertise for dissemination of knowledge to their peers, and masses through a host of training programmes and activities.

10.3.4 National Research Centre for Citurs came into existence in Nagpur on April 1, 1986 as a result of a series of the recommendations of task force appointed by Ministry of Agriculture; UNDP consultant; Govt. of Maharashtra and Quinquennial Review Team of Indian Institute of Horticultural Research (IIHR), Bangalore. The transfer of technology programme is being accomplished through the various training programmes organized under the ageis of Trainers' Training Centre on Citurs (TTC). The Research work being carried on Nagpur Mandarin (A variety of Orange) is being successfully passed on to Horticulturists and rural masses of this region through their Lab to Land Programmes.

10.3.5 Central Institute for Cotton Research was established in April 1976 at Nagpur. The Institute at Nagpur has three Divisions and two independent sections for undertaking research and transfer of technology programme with an Agriculture extension section for interactions with the farmers etc.

In addition to the research programme, the Institute is engaged in first line of extension through lab to land programme, adaptive research trials, and demonstrations in the neighborhood of the institute and its Regional stations. Under these programmes the improved technologies generated in the Institute are evaluated on the farmers' fields as a prelude to large scale transfer to the farmers' fields. The small and marginal farmers from selected villages are given special training in the improved technologies, and their visit to the Institute arranged periodically. Kisan mela and farmers day are organized periodically for enabling indepth interaction between researchers, extension workers and farmers.

10.3.6 Pashusoochnalayas' an information centre is being developed by MAFSU, "Maharashtra Animal and Fisheries Sciences University", Nashik and Veternary college, Nagpur. In the proposed IC, information will be disseminated to the end users through a two way interaction between the farmers, and the experts in the university through which, all queries related to handling of animals,

their available breeds, first aid to animals, fodder preparation, manure preparation etc. through ILs at Village Panchayat Offices, and the Veterinary Colleges in the state. The Extension MAFSU is also collaborating with Dhirubhai Ambani Institute for Information, and Communication Technology (DAIICT). Gandhi Nagar, Ahmedabad for increasing common information space by using modern tools of IT, and digital information repository and public information access points.

Several other organizations and agencies of repute as the Anthropological Survey of India, Archeological Survey of India, Gondwana Geological Society of Central India, National Informatic Centre, Regional Remote Sensing Centre, Vidarbha Nature and Human Science centre etc. are striving their best to impart IL among their clientle.

AnSI with its sophisticated DNA Lab has undertaken Research in varied areas, and this is being carried to the tribals of the region to combat several dreaded diseases etc. through regular interactions, and on site exhibitions etc. ASI with its indigenous-database on the Archeological sites are providing first hand knowledge to the masses through lectures (power point presentations), exhibitions, slide shows, discussions, mobile audio visual displays etc.

It is extremely happy to note that the libraries /LRC's are playing a key role in the above programmes and the LISc professionals are providing a helping hand to our rural bretheran in understanding and transferring the technological findings. Among the methods used for advancement of e-TL are the lectures, seminars and demonstrations, guides newsletters, leaflets, user manual, AV material, video tapes, audio cassettes, individual instructions, online courses, tutorials etc.

11. Strategies for promoting Information Literacy programmes : Some Suggestions :

'Dr. Karisiddappa' [9] and a number of renowned experts, have suggested some strategies for induction of ILPs which sound very apt in recent times. The highlight are as follows

- The Government should envisage a National Task Force to monitor ILPs.

- Higher Education Institutes be initiated to develop IL curriculum at different levels of education.

- Launch a National Information Literacy Mission to campaign for the promotion of IL.

- Organising symposia, workshops etc. to redefine the role of IL in the growing digital environment.

- Periodical publication of reports regarding standards, and guidelines on IL.

- Launching of NIL website to facilitate sharing of resources.

- Formulate a Joint Action Committee at all levels to evaluate the IL movement.

- Take initiatives to start more PIKs, and Soochanalayas at rural levels.

- Involve more Public, Academic, and Special libraries to develop, and design Information kiosks as per the needs of the users.

- LISc professionals should join hands with IT experts, and Government, and other Administrative officers to-wards developing 'Subject Gateways' in different areas, and optimize the use of 'Soochanalayas' to the maximum.

- Senior professionals with wide experience and expertise could be of great help in designing developing, maintaining, retrieving and disseminating information from these Information kiosks to its Beneficiaries, and this has to be tapped urgently. [9]

12. Epilogue

Efforts are being made world wide to make people information literate and gain skills that will help them to prepare themselves for life long learning, and effectively utilize the super flow of digital information. Information literacy endeavors are just at the beginning and more work is needed to understand the complexity, long-term effects and importance of preparing people for effective information work.

The movement towards more open and democratic societies has created a need for learning that goes beyond the academic curriculum and factual knowledge to emphasize problem solving and open-ended enquiry. Information Literacy, in conjunction with access to essential information and effective use of information and communication technologies, plays a leading role in reducing the inequities within and among countries, and peoples, and in promoting tolerance and mutual understanding through information use in multicultural and multilingual contexts. Information Literacy is a concern to all sectors of society and should be tailored by each to its specific needs and context.

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