The information literate civilization plays a vital role in the nation development and dire step has to be taken for transforming the young India to information literate India. India has to focus on imparting information literacy skills and competencies among the public. The roots of information literacy being embedded with the education system and imparting of life-long learning skills became an essential component of today’s’ higher education system. The current study has been made an attempt to provide a practical approach for the institutionalization of information literacy instruction program in Indian higher learning environment. It intends the ATP model as a suitable approach to introduce information literacy instruction program in Indian higher learning environment, along with a conceptual base and the different components of information literacy required for Indian higher learning environment.

**Keywords:** Implementation of information literacy program, Information Literacy, Information literacy and Indian higher education, Information Literacy in India, Information Literacy Instruction Program

**INTRODUCTION**

‘Information Literacy’ was conceptualized by Paul Zurkowski, in 1974 and it is widely accepted as the set of skills required for effective use of information in ethical way (Eisenberg et al., 2004). In Indian context, Information literacy program has now become a part and parcel of education, especially in higher education where academic libraries have introduced the programme but without proper preparations, like a structured course program, training of trainers and extending the program to different educational levels, i.e., from primary to higher
education. So that research studies on the subject are on the rise in India and the university libraries of Karnataka have inherited a rich tradition and some of them are, more than 100 years old one. The present state is also on the forefront of ICT developments and is considered as the country’s IT hub. The Government of India has come up with a major concept called “Digital India”. It is highly influenced in higher education level along with libraries have made part and parcel of these developments. So, the present programme of Information Literacy needs to add new dimensions particularly to higher education as part of supporting research.

The proposed core model is based on the findings and the observations made regarding the information literacy program of university libraries in Karnataka. The research study was conducted on the information literacy skills and competencies in the utilization of information sources and services among the university library users of selected State Universities of Karnataka. The study has comprehensively investigated on, the form of user education programs, user training programs in the use and access of electronic information sources and training on the user library catalogue/OPAC along with the library induction program. The university libraries’ have conducted user education programs and focused more on educating its users to use of e resources. The study has been observed that there is no regularity when organizing the user education programs, also only less number of university libraries have taken initiatives to encourage this activity. There should be an essential plan for a pedagogical approach to conduct the information literacy program in different phases, the university libraries have to be taken greater responsibility in this regard to the teacher should also join their hands in developing an information literate society and empowering the individual, towards lifelong learning goal and achievements. To provide a practical approach to information literacy programs, the model is proposed.

The ultimate purpose of using information in higher learning environment is to prepare or create information and applying it to take a right decision. As said by Zurkowski, any person who has knowledge in using of abundant information to solve problems of in his/her personal and professional life is known as information literate. The ability to identify and locate the needed information is the core concepts of information search process and evaluation and the effective use of information in ethical/legal way is the core concepts of research process. The theories defining the information literacy are ultimately articulating about the information handling skills. Therefore, to provide a practical approach to implementation of Information literacy instruction programs, the study defines information literacy as “summation of information search process and research process”.

**REVIEW OF LITERATURE**

In Indian perspective, Karisiddappa and Rajgoli (2005) have discussed the importance of IL in higher learning and research environment and the emerging knowledge society contexts. Chakravarthy (2008) discussed the importance of IL in the knowledge society and how it empowers
learners for a better tomorrow. Neelameghan and Chester (2008) discussed IL for managing community knowledge in a knowledge society. Bavakutty and Nasirudheen (2008) carried out a study to assess the IL competency of research students of Kerala University. Professional organisations at regional and national level have been active in organising seminars and lectures on IL. Pawinun and Kemparaju (2004) mentioned the range of education programmes developed by libraries such as literacy campaign, functional literacy and library instruction. They too pointed out the importance of IL and information technology literacy in higher education with the advent of online services and digital libraries Hadimani and Rajgoli (2010) conducted a survey among the UG students of college of Agriculture, Raichur to know the information literacy competency among them. Based on the study results, it is suggested to implement information literacy competency program in the college. 

Swapna and Biradar (2017) explained the significance of information literacy in higher education system and suggested a DIAEDCU information literacy model for Indian higher education environment. Ranganathan and Dugra (2016) were made an attempt to explore the status of Bharathidasan University, Trichy. The study found that, the information literacy instruction programs are not comprehensive and opined as effective information literacy programs should be essential in the Indian higher educational institution. Bapte (2019) opined that the success of information literacy program is based on the collaborative endeavor of LIS professionals and teaching staff and suggested to adopt the ILIAC model developed by Oakleaf.

Boss and Drabinski (2014); Beuoy and Boss (2019) analysed the sylabbi of information literacy instruction and the studies were identified opportunities to integrate information literacy in the curriculum and offered disciplinary insights on the framework within and across each program. Andrés Fernández-Ramos (2019) evidenced a limited development of information literacy instruction in general and in online instruction in particular. The study has identified the lacks in technological resources, trained personnel, institutional support, faculty cooperation, students’ motivation and librarians’ expertise. Diekema et al. (2019) identified the staffing, scheduling, curriculum integration, teacher collaboration and student assessment as areas of challenging and suggested for the improvement of required facility and support. Donham (2004) opined that an intentional effort to integrate information literacy into coursework in all disciplines has revitalized the dialog about teaching the critical thinking skills and has re-invigorated effort toward information literacy goals. Sung et al. (2015) were observed that the students rated their own information literacy skills higher and rated the importance and impacts of information literacy instruction lower than librarians or instructors did. Hunsaker et al. (2009) have presented a virtual library plan developed by library directors of 23 California State university system campuses with high quality interactive information literacy program with digital learning objects. The study suggested to utilize the web 2.0 tools in creating supplemental learning modules in the information literacy instruction program and also
recommended an approach for local production of virtual information literacy content available on the internet for the benefits of the stakeholders.

With related to the practical integration of information literacy, Jamil et al. (2009) conducted a study to investigate the resources and methods used in information instruction offered at private university libraries in Jordan. Data collected through questionnaire from library administrators and students. The findings of the study revealed that information literacy instruction programs were not comprehensive and the programs concentrated on theoretical aspects more than practical aspects, thus study recommended to add more practical aspects in the information literacy instruction program. Nicholson and Eva (2011) were provided a low-cost and low-tech solution to libraries to teach information literacy for distance students. The study described the pilot project of University of Lethbridge library initiated to deliver the information literacy to satellite campus students using Skype. The study found the limitations of Skype as an instructional delivery tool, and it proved the project was fairly successful. The authors opined as it’s a good “First Step” in delivering information literacy for distance students. Tuamsuk (2013) has made an attempt to study the course units, teaching pattern, course details and content, teaching and learning methods, assessment and evaluation of information literacy instruction in Thai higher education. The findings indicated that most of the content are in accordance with ALA and SCONUL IL standards, the course topics covers selection of information sources and resources, information accessing, searching and academic report writing. The course instruction uses active learning, problem-based and inquiry-based approaches. The assessment and evaluation were done from attendance, participation and examination. Artemchik (2016) described a journey of librarian in creating interactive tutorials with the instructional design process. The study provided an outline for the use of instructional design process to develop a specialized guide on the side (GotS) tutorials for upper level business students to integrate business information literacy and database instruction into courses. Chen and Chen (2019) presented how the information literacy instruction can be integrated into different subject matters by using framework of inquiry-based learning such as Super3 and Big6 Models. The study reported on six year integrated information literacy instruction program based informed learning in Taiwan with the inquiry based six framework in schools.

It is observed from the above reviews that, there is a gap in the practical integration of information literacy instruction in Indian higher learning environment and structured and comprehensive approach is very much essential for information literacy instruction program. Thus, the present study has made an attempt to propose the practical approach implement information literacy in university libraries of India.
INFORMATION LITERACY – CONCEPTUAL BASE

The present study has made an attempt to conceptualize the information literacy components suitable for Indian Higher Education system. The following concepts are identified as essential components of information literacy instruction program for Indian higher learning environment.

![Diagram: Information Literacy Concepts for Indian Higher Learning Environment]

LIBRARY LITERACY

Bell (1990) defined library literacy as an acquisition of a range of skills regarding identification of and familiarity with sources and information seeking process usually through training programs offered by the libraries. Leupp (1924) thought, library is the heart of University, Barker and Castello (2011) were assumed that, if library is the heart of the university, then information literacy is the brain. Another researcher Coravu has believed, library literacy is the step before information literacy. These above statements emphasize the significance of library literacy in the academic settings. The libraries are playing a vital role in the higher education system, by acquiring; processing, storing, retrieving and disseminating the needed information to its users in the fulfillment of achieving their academic goals and objectives. The library is the major sources of information, and libraries are the ultimate platform to the users to access the different types of information sources where an individual cannot invest or buy for his academic activities. Keeping in view of the above opinion, the study proposes Library Literacy as first step of information literacy instruction program.

The library literacy concepts like creating awareness regarding Library membership, Rules & Regulations, Library Hours, library Staff, different sections of the library, circulation privileges, library services and facilities includes purchased and subscribed library materials, Training to make use of OPAC, to make use of Electronic information resources, consortia, and other different databases. Libraries can utilize its library web page/site to create awareness about library consortia and other useful activities, which will assist the users to know about OPAC and E-resources.

Information Search Literacy

The electronic information sources become an essential component of today’s collection development and the present complex information systems have posed a great challenge to information seeker. Information search
techniques/strategies are necessary to each and every one to search the required information in the networked environment. Without having information search skills, it is very difficult to search and locate the desired information in an abundant volume of information available at WWW. Thus, the study identified the Information Search Literacy as a second concept of information literacy instruction program. The Information Search Literacy includes the concepts such as creating awareness on different search options, search approaches and search techniques and train the users to use different search strategies/techniques such as phrase search, basic search options to advanced search options.

Computer Literacy

Computers are become a building blocks of modern society and computers playing a vital role in each and every aspects of human life and higher education sector is not an exception to this. Computer literacy is the basic requirement for the academia, without having computer literacy skills; it’s very difficult to survive in the contemporary challenging world. To equip the future generation to face the challenges and to make them survival in the present and future techno savvy world, computer literacy skills are indispensable. Thus, the study identified computer literacy as the third concept of information literacy instruction program. The computer literacy includes using of basic computer application and its updates in the management of day-to-day academic and research activities and its communication.

Web Literacy

Web literacy is known as the ability to participate on the web and to be engaged on the internet meaning fully. Internet has become a major source of information, the users must know about the information sources available for open access, free web based personalized information services, products to utilize them to achieve and excel in their academic goals and objectives. The web literacy includes, awareness different web platforms providing information for open access and digital libraries and train the users to utilize web based information sources and services needed for their academic activities.

Research Literacy

Research Literacy is known as users’ ability in finding, processing and understanding the basic purpose and value of research in making informed decisions. The research literacy includes, awareness on different reference standards, citation, referencing and Plagiarism. Awareness and training on Reference Management tools and plagiarism checking tools, Hands on training in contextual need of the users. (For e.g.: Software application for research data management such as SPSS, PSPP and so on).

THREE PILLARS OF INFORMATION LITERACY INSTRUCTION PROGRAM

To provide a practical approach and for the institutionalization of information literacy instruction program, the present study recommends the three pillars of information literacy instruction program to introduce the above discussed concepts practically in libraries. This model is helpful for the librarians to adopt
educational approach to introduce and adopt in their information literacy instruction program in their libraries. The model suggests three phases of information literacy instruction program. Which is suitable for novice to become information literate and it covers the concepts from basic to advanced or conceptual to contextual.

The information literacy concepts proposed in the figure 1 is essentially required for the faculty, researchers and to the students to use the information effectively, efficiently and ethically. Thus, the model has suggested three phases for introducing the information literacy program in the university libraries. The first phase is to create awareness among the users, similarly in the second phase is to provide training for users to inculcate the necessary skills and build competency among them to become information literate and in the last phase libraries need to provide the contextual based training programs such as statistical packages like M S Excel or SPSS, technical writing, research methods etc. along with this, the user has to put his/her knowledge into action practically and in the third phase, there is a need for teachers and librarians’ collaborations to put users’ knowledge into practice.

Figure 2: Three Pillars of Information Literacy Instruction Program (This diagram is developed by the authors for this article)
The figure 3 shows that the IL concepts to be introduced in all the three phases, i.e., awareness phase, training phase and in practice phase. The model covers the ideas from conceptual to contextual or basic level to advanced level, which is more useful for novice to become information literate. In this, basic level is called an ‘Awareness Phase’, where libraries have to create awareness about the five concepts proposed in the study. Awareness motivates users to utilize the information sources, services and facilities of the library and WWW and in ‘Training Phase’, where libraries have to conduct hands on program or workshops to enhance the knowledge and skills among its user. The competency enriches the confidence among the library users in identifying, locating the wanted information and its ethical use. In the last phase called as ‘Practice Phase’, where teachers and librarian collaborations is essential. The libraries have to introduce the personalized services to its users such as teachers and researchers for the quality research output. The basic necessity for the research is information However Identifying, locating of needed information and its evaluation are the essential part of the research and using of collected or gathered of information in an ethical way is another important and significant part of research. University libraries have to adopt pedagogical approach in providing personalized and contextual information services as per the requests of its user’s community to support their research activity.

‘Change is eternal’, the concept mentioned in the figure 3 is not static in all the three phases; the university libraries can adopt and introduce the various concepts as per its users’ requirements.

CONCLUSION
The Indian university libraries’ user education programs are focused more on educating its users in the use of e-resources. However, libraries must take care of other aspects such as information search strategies, search approaches and their application to information retrieval, awareness regarding plagiarism, reference management tools, anti-plagiarism tools and open access information sources, web service platforms etc. In Indian context, pedagogical approach is very much needed in the information literacy programs and the librarians are working on the assessment of information literacy skills and competencies of users. The earlier efforts have emphasized the importance and significance of information literacy in the Indian education systems (Hemavathi, 2018). The information literate society plays a vital role in the nation development and there is a dire need to take steps in transforming the young India to information literate India. India needs to focus on imparting information literacy skills and competencies among the public.

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