

CHALLENGES OF INFORMATION TECHNOLOGY IN PROMOTING LEGAL EDUCATION AND RESEARCH: A CRITICAL ANALYSIS

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1. Introduction

The Supreme Court of India in *Sahu Rajeshwar Nath v. Income-tax Officer, C-Ward, Meerut and Anr.*¹ (1968), which is pertaining to the liability of a partnership for payment of taxes, has examined the nature and scope section, 18, 25 and 26 of the Indian Partnership Act, 1932. It is important to mention that the Supreme Court in this case has not discussed anything related to minor partner's liability. But when the said judgment was referred and cited by the Supreme Court in *Ashutosh v. State of Rajasthan and Ors.*² (2005), the name of the said case is incorrectly cited under the Para 11 by the latter decision, which reads as under:

In the case of *Sahu Rajeshwar Rao v. I.T.O.*, [1969] 72 ITR 617 (SC), this Court ruled that the liability of the partner of the firm is joint and several and it is open to a creditor of the firm to recover the debt of the firm from any one or more of the partners. In a decree against partnership firm, each partner is personally liable except the minor whose liability is limited to his assets in the partnership.³

It is pertinent to note that in the said decision of 1968 the Supreme Court did not deal with the issue of minor partner's liability and secondly the name of the said case is also incorrectly mentioned in the decision of the Supreme Court in 2005. This is not the isolated instance. The question arises as to how to conduct a quality research where the source of information is not authentic and not accurate and what would be the impact of such research work on legal education and legal research in India. We cannot ignore the significant contribution of the IT in legal education and research. But the quality of research has deteriorated by the inaccurate and unauthentic and latest information.

It is pertinent to note that the delivery of knowledge using ITs has influenced the design of various curricula programmes nationally and globally in launching of different educational programmes. Through the computer network, learners are able to communicate with the instructor on the material and could discuss assignments involved. In this process learners are able to attend lectures online. It has also been argued that IT was a way to move from elite to mass education through digital media where more learners could get access to education for both campus and distance-learning students.

It cannot be denied that the quality of legal education has improved considerably after implementation of Information technology, but the quality of

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research is deteriorating due to low quality of inputs and plagiarism. There are various limitations of information technology in promoting and advancing the legal education and research, such as the lack of awareness, lack of infrastructure facilities, lack of availability of reliable and authenticated data and the access to the various modes of information.

This research paper is an attempt to provide an insight into the impact of the technological age on the legal education and legal research. The main focus of the paper will be on the impact of emerging technologies on legal education and legal research. The author has suggested some remedial measures, to overcome the hindrances, in order to promote and develop legal education and legal research.

2. The Information Technology (IT) In Development Of Legal Education And Research

The information technology has been beneficial to Students who can get information at a click of mouse of a computer. Student have gigantic storage information from the internet services, therefore the information technology provides various benefits to students such as Increased access, flexibility of content and delivery, Combination of work and education, and higher quality of education and new ways of interaction. IT also enables a large number of students and researchers to have ready access to case law and other legal materials more efficiently than having them queue up for access to a limited number of books in the library. It also guides organisations in promoting and regulating the distance learning, online courses and other continuing education programmes.

2.1. Contribution Of The IT In Promotion Of Legal Education

Libraries have played important role in supporting legal education and doctrinal as well as non-doctrinal quality research. The last decade has brought about a sea change in relationships between users and libraries. Information technology enabled products and services, and the availability of online information resources have changed the way the services academic institutions and libraries now provide to their users. It has changed the traditional practices of library and information centres in delivery of services to the end users. Now users can have access to a variety of information and scholarly journals, bare acts, cases etc online. It also helps the users to access, manage, integrate, evaluate, create, and communicate information more easily than ever. Significant envelopments in IT have forever changed the way information is gathered, processed and disseminated. While processing, storage and retrieval facilities are provided by computers, telecommunication provides the facilities for the transfer or communication of data or information

The IT has nowadays become an important technology in academic institutions as it plays a very important role in meeting information needs of the

users and institution as a whole. The evolution and advancement of online legal resources resulting in the demise of the use of print based materials, there has been a substantive shift in the legal education and legal research. The use of emerging and eLearning technologies such as wikis, blogs, google, yahoo, podcasts, synchronous virtual classroom systems and online interactive tutorials, has created a new world of learning.

In order to excel in academic, the legal professionals invariably require certain fundamental skills such as the power of expression, the effective use of language coupled with dexterity in the art of advocacy. However, these vital attributes may not be fully attained without a proven mastery of the use of the tools of the trade as represented by law books, law reports, journals and periodicals. This in effect means that all members of the legal profession including the law teachers, law School students, post-graduate students and most importantly members of the Bar and the Bench should be involved in legal research as a matter of routine.

2.1.1. Enhancing the quality of Legal Education

The place of technology in an academic environment is becoming increasingly important and many universities are utilising web-based or emerging technologies to enhance student learning. Law students are one of the many groups engaging with these technologies and there has been some discussion in the legal education literature regarding the use of emerging technologies in the academic setting.⁴

It is important to note that many of the technologies outlined will have significant impact on the pedagogical approaches of those universities with distance education programs. The use of such technologies can potentially fill the gaps left by the more traditional models of education,⁵ which had been 'dominated by texts and lectures and traditional didactic or transmission approaches to teaching and learning'.⁶ Current literature indicates that with the rapid development in online distance education, there has been a paradigm shift in pedagogical approaches with greater emphasis on student-centred learning. Opportunities and challenges have arisen for educators to utilise these emerging technologies to create an interactive and collaborative learning environment for 21st century students entering universities and law schools.

Educational technology is now widely valued for its ability to enhance one of the most significant intellectual developments for students: their emerging ability to think abstractly. Technology has become a very powerful instructional tool to develop abstract thinking, which should be reflected also in assessment. The technology supports student performance of complex tasks that are similar to those performed by adult professionals and/or fill a genuine need of the student. Technology has been proved to accommodate learning styles and to be an effective motivator for students with specific learning needs. Furthermore, students working in collaborative-team-learning settings appear to function

better when learning events are accompanied by technology use. In addition, technology also is important when used to provide distance-learning opportunities to students who otherwise would not have access to course offerings.

Most of the Students, whether at the National Law schools or at any other faculty or law collage under the governmental or private control, utilise technology tools to enhance learning, increase productivity, and promote creativity. Students make use of productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works. Students take benefits of telecommunications to collaborate, publish, and interact with peers, experts, and other audiences. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Students utilise technology to locate, evaluate, and collect information from a variety of sources. Students take advantage of technology tools to process data and report results. Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks. Students also use technology resources for solving problems and making informed decisions. It cannot be denied that the information technology has made access to information so easy that they can obtain information on any subject at any time anywhere, but students need to verify the source of information and authenticity of information before taking benefits of such valuable technology. It may drive wrong and incoherence result if not used cautiously and carefully.

2.1.2. Development of Teaching-Learning Skills

Teaching-learning methodology is rapidly changing and, in many ways, becoming a more challenging because of increasingly numerous contradictory expectations. It is pertinent to mention that in the digital age of information overload with the expectation, students will learn high-level skills such as how to access, evaluate, analyze, and synthesize vast quantities of information. At the same time, teachers are evaluated by their ability to have students pass tests that often give no value to these abilities. Teachers are expected to teach students to solve complex problems that require knowledge necessary across many subject areas even as they are held accountable for the teaching and learning of isolated skills and information. Teachers are expected to meet the needs of all students and move them toward fulfilment of their individual potential even as they are pressured to prepare students for maximum performance on high-stakes assessment tests that are the primary measure of student and school success.

Information Technology can actually assist teachers and their students to make them more competent and skilful in their profession. However, as the world becomes more complex virtually year-to-year instead of the generation-to-generation pace of most of the last century educational needs continue to shift from teaching and learning isolated skills and information within each content area, to teaching skills that enable students to solve complex problems across

many areas. Educators must prepare for a technology-rich future and keep up with change by adopting effective strategies that infuse lessons with appropriate technologies. This makes authentic assessment needs even more important: Assessments must keep pace with effective instructional technology use. All this while educators at every level, but teachers especially, actively pursue professional development that enables a lifelong exploration of ways to enhance the teaching and learning research and legal education.

2.2. The IT In Promotion Of Quality Research

Information technology has become integral part of functioning of every academician and administrator, whether it is teacher or students or administrative authority, at any place of the world. The IT provides significant contribution in legal education and production of quality research in any field of life. The information technology has been able to equip academicians with the powers to facilitate the storage, retrieval and dissemination of vital legal information for the successful pursuit of legal research and study. The IT also facilitates the performance of routine processes like the amendment of law, indexing and abstracting services. It serves as a link among the various legal education institutions as well as foster necessary cooperation and working relationship among them. This would also facilitate intellectual resource garnering and sharing. It assists the academics in the formulation of legal studies syllabi that would have universal acceptability and applicability. The Information technology provides support in learning and teaching in specialized area of video conferencing, teleconferencing, group discussions, questions and answers sessions, and moot court trials. It assists the researchers in the publication of research findings, law books, law reports, law journal and other valuable technical reports.

The technological age is measured by only a small number of years, but in terms of the advancements in technology and impact on legal research, it is immeasurable. There can be little dispute that the rapid developments in technology and extraordinary growth in legal publishing have brought about many changes which have impacted on legal communities and have irrevocably changed the legal research landscape.⁷ Over a relatively short period of time, the nature of legal information experienced a parallel transformation, and the abundance of information available online and the speeds with which it appears has changed the face of legal research'.⁸ This transformation has resulted in a distinct paradigm shift in legal research from the traditional hierarchy of the print digest system, to the new world of online legal resources and computer assisted legal research.⁹

Computer data processing not only frees researchers from the cumbersome task of manually analyzing data but more importantly facilitates quick and accurate analysis of huge amounts of data from national samples or even multi-national samples covering tens of thousands of respondents. This is facilitated by

speedy telecommunications and the emergence of social networking sites, wikis, and communication tools. Another important dimension of ITs in research is the use of online full text databases and online research libraries/virtual libraries which are the direct outcome of the growth in telecommunications networks and technology. These databases and libraries provide researchers with online access to the contents of hundreds of thousands of books from major publishing houses, research reports, and peer-reviewed articles in electronic journals.

Access to these online legal resources has particularly benefited legal practitioners, teachers and the students as they are now able to view courts decisions very soon after they have been handed down. Also, one of the notable advantages of the availability of online legal publications is that researchers can now access information which may have previously been unknown or inaccessible.¹⁰ The evolution of legal information from print to online format and the influences of globalisation¹¹ have generated a vast amount of information available to legal communities.

3. Challenges Arising Out Of Use Of Information Technology

If the legal education and quality research in India need to compete and excel not only at national but also at international level, then there are certain pre-requisites for excellence in education and research, which includes assurance of accurate and latest information to the researchers. It cannot be denied that the information technology has become a powerful weapon in the hands of researcher to conduct a quality research work, but this weapon has to be used cautiously. This is due to the limitations of the data that are made available by the IT. There are the universally acknowledged problems of infrastructure like electricity and telephone facilities, coupled with the low level of awareness and education, plagiarism in information technology. Computer literacy is still essentially at its rudimentary stage. It is also urban-oriented, very elitist and highly restricted in scope. IT may be considered as a tool for research and legal education. It is well known that IT cannot substitute the researchers' research skills and human intelligence. Lot of data is available in different forms and the researcher finds it difficult to select the data for his research requirements.¹²

3.1. Restrictions On Accessibility Of Data

Data may be obtained from free access sources and subscribed sources. Unless a researcher is aware about the freely accessible resources he cannot get information from resources and take benefits of these sources for legal education or research or both. Information related to availability of bare act, reports of commissions, cases decided by the Supreme Court and high courts and tribunals, eBooks, research articles are vital sources for any research activity. There are various web sites where free access to information is available, but how many researchers and students are well aware of it and also the procedure of obtaining information. There are some difficulties in having access to subscribed sources that is the cost involve in procuring these sources, which may not be afforded by

majority of researchers. It cannot be denied that in majority of educational institutions whether governed by the state agency or private, lack in information technology infrastructure. Therefore the educational institutions should make some allocation of fund towards IT services. In order to ensure effective accessibility to data for legal research and legal education, IT infrastructure must be developed and maintain at all the educational education. The University Grant Commission and the Bar Council of India can ensure the compliance of requirement infrastructure development and orientation of faculty members and students.

3.2. Hindrances Into Availability Of Data

A large junk of data is available with free access sources and subscribed sources of information. We have all seen horrifying statistics about the information explosion, the vast size and number of electronic databases, and the exponential number of websites. As if that were not bad enough, electronic data, especially on the internet, is much more disorganized than legal researchers are accustomed to. It does not fit our established patterns, and a consistent way to cite it has not yet been developed.

Adequate information is not available in organised manner on the internet. There are too much irrelevant information and very difficult to locate the perfect source of information. Majority of Information seekers are not in a position to locate what is needed from online results and how that can be achieved. In some cases only citation or part of information is available; the researcher has to put up a lot of hard work in order to search for complete data from various sources. It is also observed that the subscribed sources of Information are too costly beyond the reach of a common man. There are various difficulties pertaining to processing data, in some cases soft copy cannot be saved only print can only be taken, and in some cases data can only be read. The protection of the copyright has also restricted the free flow of information on internet.

3.3. Difficulties In Accessing Accurate, Latest And Authentic Data

Researchers are able to assume accuracy and authenticity through the exclusive use of the official published print sources, powerful web search engines like Google have blurred the boundaries and now they must establish or verify the authority of the information they find in cyberspace. Once a document is digitised and uploaded to the Web, the 'assurance of quality provided by the publishers' editorial control' is not guaranteed. The document is also more vulnerable to alteration, thereby making the task of authentication more difficult.¹³ Therefore, as the world of legal information becomes more digitised, it is critical that legal researchers in the 21st century have acquired the skills to not only effectively search for relevant legal information, but to also evaluate both the content and sources of information available.¹⁴

3.3.1. Lack of availability of Latest data: It is also important to mention majority of the free access sources and a few subscribed sources do not monitor latest development on related areas. It is for sure that outdated or obsolete data can never promote any legal education and legal research. In one instance where the researcher was looking for some data on free legal aid services to poor people, whose annual income from all resources is below some pecuniary limit, before the Supreme Court. At one place the annual income limit was mentioned as twenty five rupees, at another web site it was fifty thousand rupees, where as this actual limit has been enhanced by the Supreme Court Legal services authority regulation 2000 to one lac twenty five thousand rupees. Secondly, at some places, the Civil Liability for Nuclear Damages Bill 2010 was mentioned as pending before the parliament, which proved incorrect when I visited the web site of www.prsindia.org. There are numerous instances of such nature which is capable of effecting the quality research and legal education.

3.3.2. Lack of accurate and authentic information: Nobody can deny that the lack of accurate and authentic data has significantly affected quality of research work. One of the reasons for that may be that we believe in shortcuts and feel no need to verify the data from its original source. Sometimes it happens that the originator of data is inaccurate in itself that has happened on catena of occasions, then who is to be blamed for that lacuna. A few decisions of the Supreme Court, which is primary source of information, as on such incident narrated under the heading of introduction, got no exception from this fallacy. A researcher needs to verify the veracity of an earlier decision cited in latter decision, from the original decision of former case, otherwise that may lead to ambiguity or confusion or illogical reasoning and ultimately creation of low quality research products. In one instance where the Supreme Court Cases (web edition of the sconline, and CD of SCC cases) has mentioned that the *State of Rajasthan v. Vidyawati and anr.*¹⁵ has been overruled by the Supreme Court in *Kasturi Lal Ralia Ram v. State of Uttar Pradesh and others.*¹⁶ It is pertinent to mention that both these cases have been decided, as unanimous decisions, by the Constitutional Benches of Five Judges Benches. It is also well known that the decision of a constitutional bench can only be overruled by a larger bench and not by the equivalent bench of the Supreme Court.

3.4. Impact Of Plagiarism On Quality Of Research

Quality of research has suffered a lot due to the low quality of information that are available on internet, besides that there is another larger problem of plagiarism, which has created numerous difficulties for authentic information. Information is easily available at a click of mouse of a computer, which has led to misuse of the information technology. New ideas and thought are rarely emerging but there has been repetition of existing material in manipulative manners. It is also very difficult find out as to who is the inventor/originator of the original works. Majority of the students believe in cut copy and paste formula (CCP) to frame any research project as a part of their syllabi, which is a matter of grave concern for all stake holders in the fields of legal education and research.

Some software programmes have been developed to check this menace of plagiarism but these have not yielded any desirable results. The Bar Council of India has recognised the disease of plagiarism as a serious threat to research quality and it suggested that appropriate software should be used to counter plagiarism in publications and student assignments.¹⁷

4. Final Thoughts

IT is seen as a way to promote educational change, improve the skills of learners and prepare them for the global economy and information society. IT is used to improve delivery of and access to education. IT as focus of learning, it tends to improve the understanding of the learner. The major infrastructural impediments to the effective use of online databases and online research libraries/virtual libraries include: the high cost of bandwidth; lack of well conceived national and institutional IT policies, the high cost of hardware and software, the absence of sustaining services and systems and lack of technical knowledge .

4.1. Competency Of Teacher Is A Pre-Requisite

The single most important factor in promoting legal education and research is the teachers, who must be well verse with the use of technology to improve legal education and legal research. Teacher's incompetency in the use of technology is often problematic. There are some difficulties in accepting information technology by Teachers who are uncomfortable with technology. They are required to be explained the benefits of the information technology and future prospects of this technique in legal education and research.

Teachers and students should not be expected to be technology infrastructure and support experts. The equipment they are using needs to be dependable and easily accessible. Teachers need to experience technology as something that they can build lesson plans around and not worry that their planning efforts and schedules are frequently impossible because of equipment failure or unavailability.

The teacher is a key variable in technology implementation and effectiveness. Technology's impact on teachers and their practice should be considered as important as student effects because students move on but teachers remain to influence many generations of students.¹⁸ It is also important to note that no mode of information technology can substitute the requirement of a competent and proficient teacher. The success of this supplementary technique depends upon the professional skills of a teacher, which are needed to be developed only through training and research. It is strongly recommended that the teacher and students should make a habit of monitoring the latest cases and legislative enactments, pertaining to his/her area of specialisation or area of interest, not only in India and but also abroad

4.2. Propagation Of Source Of Information

It is well known that a person can not avail benefits of any scheme unless he is informed or made aware about that scheme. Teachers and students in large number are not well versed with technique of operating computer technology and even if they are aware but they may not be aware of the free access resources available to them in obtaining relevant information. It is for that reason awareness about the free access networks and its operation should be explained to all stakeholders on priority. It is also suggested that more information networks should also be included in the list of free access of information system. The author is of the view that the well informed students and teacher can enhance the quality of research and education

4.3. Infrastructure Development

There are various hindrances such as Lack of technology infrastructure, Lack of technical support, Lack of high-quality digital content, and Lack of instructional vision for technology in the promotion and development of information technology in legal education and research, Which have not only hampered the growth of legal education but also quality of research in majority of Indian education institutions. The main factors that affect the adoption of IT in education are the mission or goal of a particular system, programs and curricula, teaching/learning strategies and techniques, learning material and resources, communication and interaction, support and delivery systems, students, tutors, staff and other experts, management, housing and equipment, and evaluation.¹⁹

Applications of ITs are particularly powerful and uncontroversial in higher education's research function. The UNESCO World on Higher Education²⁰ has recommended some following remedial measures to enhance the IT infrastructure for development of legal research and legal education in the world.

*Four areas are particularly important. First, the steady increases in bandwidth and computing power available have made it possible to conduct complex calculations on large data sets. Second, communication links make it possible for research teams to be spread across the world instead of concentrated in a single institution. Third, the combination of communications and digital libraries is equalising access to academic resources, greatly enriching research possibilities for smaller institutions and those outside the big cities. Fourth, taking full advantage of these trends to create new dynamics in research requires national policies for IT in higher education and the establishment of joint information systems linking all higher education institutions. For these applications high bandwidth is the key priority since it allows computing power to be aggregated by linking equipment together.*²¹

Advanced Information technology system should be provided at all the educational institutions whether controlled by the government or the private entrepreneurship and policy to that effect should also be framed by the institutions such as the UGC, Bar Council of India and the state education departments. If we are really serious about any development in legal education

and research then information technology is the mandatory pre-requisite requirement for it. We cannot imagine of promotion and development of legal education and research in isolation or independent of information technology.

Information technology Infrastructure at all educational institutions should include free access and subscribed sources which can facilitate in providing latest and authentic information. The information tech system should also be maintained and updated regularly, according to future requirement.

4.4. Control Of Plagiarism

Plagiarism is the use of another person's work for personal advantage without proper acknowledgement of the original work with the intention of passing it off as your own. Plagiarism may occur deliberately or accidentally. Plagiarism can take many forms. It includes copying material from a book; copying-and-pasting information from the World Wide Web, getting your parents to help with coursework even copying answers from a fellow student during an examination is a form of plagiarism.²²

Quality of research is deteriorating due to low quality of inputs, restricted access and plagiarism. Plagiarism is one of the main hindrances in compromising the quality of research work. It is suggested that some software, which are available in market, should be used to monitor and control the menace of plagiarism. Besides some exemplary penalty, may be in form of negative marking or declaring such work as null and void, should be imposed if anyone is guilty of plagiarism. There is a need to frame a policy, at university or collage level, to regulate this menace of plagiarism. Educational institutions should also recognise this problem as serious erosion in intellectual values which is capable of affecting the quality of legal education and research work of any academic institution in long term. Due recognition to the original work should be given by making proper reference to the author of the original work. The author strongly believes that plagiarism, as a corruption in academic, must be treated and cured according to the policy on plagiarism as proposed by the author.

It is so pathetic that time and again we quote and refer to the Harvard Law Journal or Yale Law Journal or Oxford Law Journal or any other foreign law journal, which has been recognised all over the world, as one of the best sources of accurate and authentic information, on legal education and research, without recognising our own talents and resources. Why cannot we create such a reputation, by producing quality education and research work in India? I believe that India can do it, provided proper infrastructure, awareness, proper training and recognition of quality research work, are provided and the menace of plagiarism is handled effectively. There is no dearth of good researcher and legal educationist in India, but it is a matter of providing opportunities to them. It is pertinent to mention that majority of stake holders involved in legal education and research, have made up their mind that journals, which are being published outside India are of best quality and we cannot compete with them and by doing

so we ignore our resources and talents. Therefore we have to overcome that sort of mentality and do our best to promote legal education and research in India.

It is well recognised that the modern technology has great potential to enhance teaching and learning, turning that potential into reality on a large scale is a complex, multifaceted task. The key determinant of our success will not be the number of computers purchased or cables installed, but rather how we define educational visions, prepare and support teachers, design curriculum, respond to the rapidly changing world and access to accurate, authentic and latest information to all stake holders.

Endnotes

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