

# Contemporary Challenges of Information Technology in Promoting Legal Education and Research: A Critical Analysis

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## Abstract

It is pertinent to note that the delivery of knowledge using Information Technology (IT) has influenced the strategy of teaching-learning pedagogy in legal education nationally and globally. The usage of such technology has potentially filled in the gaps left by the more traditional models of knowledge which had been dominated by texts and lectures and traditional didactic or transmission approaches for teaching and learning. A large junk of secondary data is easily accessible at a click of a mouse. Nobody can deny the fact that the IT has significantly facilitated the process of creation, storage and maintenance of information for the purpose of primary as well as secondary researches across the globe.

It cannot be overlooked that on one hand, the quality of legal education has improved considerably after the implementation of IT whereas on the other hand, the quality of research is being diluted by substandard data, arising out of lack of authentic, accurate, complete and latest secondary data and plagiarism. Therefore IT is required to be used with great caution for the expansion of legal education and research in the age of globalisation in the 21<sup>st</sup> Century.

This research paper is an attempt to provide insights into the impact of the IT tools on stimulating quality of legal education and legal research. The research article will concentrate on the following research questions:

1. Whether the lack of availability of authentic data on IT sources detrimentally affects the quality of legal education and research?
2. Whether the deficit of availability of complete & latest data on IT sources adversely affects the quality of legal education and research?
3. How to overcome the restraints of IT sources for the advancement of legal education and research?

This research paper will also examine the inherent dangers involved in the

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collection of secondary data from the IT sources for the advancement of legal education and research. The researcher would also explore the remedial measures to overcome the deterrents of IT for the effective and efficient use of IT for the expansion of legal education and legal research.

**Key Words:** Plagiarism, access to information, quality information, authentic information, Updated information.

## 1. Introduction

It is an accepted fact that research is an integral part of teaching-learning skills development. The quality of education cannot be enhanced without quality research in a specific subject. It is also pertinent to highlight that quality research is not a compilation of the existing literature in the public domain on a particular topic. The quality research requires a value addition in the existing pool of knowledge on a particular theme. In other words, quality research, through analytical, exploratory and explanatory research approaches, must expand the horizons of the domain knowledge of the relevant subject.

It is pertinent to note that the delivery of knowledge using Information Technology (IT hereinafter) tools has influenced the teaching-learning pedagogy and research tools across the globe. IT has made conceivable online research and online lectures & deliberations. Because of the IT revolution, a huge data bank is available at a click of a mouse. IT, through paid and open access sources for the advancement of education and research, has generated and disseminated an enormous volume of information in the public domain. Further, IT services have also overcome the territorial barriers for conducting doctrinal as well as empirical research across the globe.

It cannot be denied that IT has certainly advanced the causes of legal education & research in the era of technological development in the 21<sup>st</sup> Century. But it is also a matter of fact that the quality of research is also being diluted due to lack of availability of reliable and authentic data on internet sources and plagiarism. Moreover, the lack of accountability of researchers for committing plagiarism has also contributed to the substandard research outputs. Further, accessibility to low quality, incomplete and inauthentic information on internet sources, without any value addition to the existing pool of knowledge, has certainly stimulated duplication of the literature only.

This research paper is an attempt to provide an insight into the impact of IT on legal education and research. The research paper would also describe and elucidate the pertinent impact of unreliable, inauthentic, incomplete information, and plagiarism on the quality of legal education and research. To overcome the hindrances created by the low-quality secondary data collected from the IT sources, the author has also advocated some curative measures for the advancement of legal education and research.

## **2. IT in The Expansion of Legal Education & Research**

IT has been considered as an essential tool for the advancement of teaching and learning pedagogy by all the stakeholders of legal education and research across the world. IT has become an integral part of the legal profession to empower such professionals for conducting research on transnational issues or defending foreign clients in the era of IT revolution in the 21<sup>st</sup> Century. The speedy access to internet sources has enabled the legal professionals to abreast with the latest activities carried out by the Judiciary, the Executive and the Legislature. IT has also facilitated and stimulated the process of development of legal education and research. It is also seen that IT stimulates access to gigantic storage of information in the form of judgments delivered by higher and lower courts, statutes, articles, reports, public notification etc, at national and international levels.

Therefore the IT facilitates augmented access to information, the flexibility of content and delivery, a combination of work and education, and higher quality of education and new ways of interaction with domestic and international stakeholders of legal education and research. Let's examine the impact of IT tools on the promotion of legal education and research.

### **2.1. Influence of IT on the advancement of legal education**

It is also germane to note that legal professionals including the law teachers, law students, and most importantly members of the Bar and the Bench, advertently or inadvertently, through routine activities of the legal profession use IT services to disseminate legal education and research. The IT has also become an important prerequisite for the governance of law colleges and law universities in meeting the information needs of the users and institution as a whole.

As on one hand, the legal profession today demands fundamental skills like the power of expression, effective use of language and art of advocacy. This level of competency and professionalism can only be attained by proven mastery over the use of IT tools which facilitates easy access to books, reports, and journals related to the field of law<sup>(1)</sup>.

On the other hand, libraries have been playing a significant role in supporting legal education and doctrinal as well as non-doctrinal quality research too.

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(1) Dada, Theophilus Olakunle (2011) "Law librarianship and legal research in the digital age", Nigerian Institute of Advanced Legal Studies, Lagos.

Due to IT advancement, the last decade has brought about a sea change in relationships between users and libraries. IT-enabled products and services, and the availability of online information resources have transformed the ways of interactions among the students, faculties, academic institutions and libraries.

Certainly, IT has changed the delivery of information to the end users. The pervasive use of eLearning platforms like Wikipedia, Google, podcasts and online interactive tutorials have carved a new world of learning.<sup>(2)</sup> This particular phenomenon has substantially shifted the approach in legal education and research techniques and has led to the demise of print-based materials<sup>(3)</sup>.

Now IT users, without visiting libraries on holidays or otherwise, can have online access to a variety of information in the form of scholarly journals, bare acts, judgments, etc. IT also helps the users to access, manage, integrate, evaluate, create, and communicate information more easily than before. Free and paid anti-plagiarism software are also meticulously trying to combat the menace of plagiarism across the globe.

Further, conducting online examinations, online courses, online assignments, online submission of research papers and reports have been made feasible by the IT tools. Finally, it can logically be assumed that the legal professionals in any capacity cannot survive without the support of IT tools in the profession.

### **2.1.1. IT augmenting the quality of legal education**

The world for the purpose of research and education, with the support of IT tools, has become a global village. Scholars across the globe, without visiting any nation physically, are in a better position to conduct research on transnational issues such as environmental pollution, corruption, cyber-crimes, and Intellectual property rights. IT has also facilitated the transnational research culture in legal education and research, where the researchers can carry out research by sitting at their respective native places. Thereby, stimulating the learning of the best practices researchers are able to learn best practices on specific issues across the globe.

The place of IT in education and research has become increasingly significant. Therefore, most of the universities/colleges are employing IT tools to enhance the quality of students learning. Students of law are one of many such groups

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(2) Kayleen Wardell (2009) "From caveman to case-base: the evolution of legal research through the technological age» Southern Cross University ePublications@SCU, Southern Cross University Australia, 2009.

(3) Ibid, p.1.

which have assimilated with IT tools, and discussions on the subject of use of technologies in the academic settings have also started to take place<sup>(4)</sup>.

The practice of IT tools holds the potential to fill in the gaps left by traditional models of education<sup>(5)</sup>, which had been ‘dominated by texts, lectures and traditional didactic or transmission approaches to teaching and learning’<sup>(6)</sup>. The rapid development of online distance education has resulted in a paradigm shift in pedagogical approaches. This new approach emphasises more on profession centric rather than student-centred or teacher-centric learning in the legal profession<sup>(7)</sup>.

These neo educational technologies are now valued for its wide capacity to improve intellectual development of stakeholders in education and research of legal studies. Tools used in IT have now become instrumental in cultivating an approach of abstract thinking among the students. The IT also assists students to perform complex tasks that are similar to those practiced and performed by mature professionals<sup>(8)</sup>.

Even academics use IT-based productivity tools to work together in building technology-enhanced models, prepare publications, and develop other creative works. In short, scholars reap the benefits offered by telecommunications to publish, collaborate and interact with peers and other audiences.<sup>(9)</sup>

It is also observed that most of the scholars of legal education and research, whether at the National Law schools or at any other faculty or law college under the governmental or private control, utilise IT tools to enhance learning skills, increase productivity, and promote creativity. Further, scholars also

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(4) Morrison, Matthew (2008) M., «Where Web 2.0 and Legal Information Intersect: Adjusting Course without Getting Lost», Cornell Law Faculty Working Paper 35; available at <[http://scholarship.law.cornell.edu/clsops\\_papers/35](http://scholarship.law.cornell.edu/clsops_papers/35)>; accessed on 05 March 2019.

(5) Tennent, Beth, Becker, Karen L., & Kehoe, Jo (2005) “Technology-enabled Delivery and Assessment Methods: are we addressing student expectations and learning preferences?” In GOSS, Halima (Ed.) Australasian Society for Computers in Learning in Tertiary Education (ASCILITE), pages pp. 649-65, Brisbane, Australia. <<http://eprints.qut.edu.au/12178/>>; accessed on 05 March 2019

(6) Tracey Carver and Tina Cockburn (2006), “Making Law More Accessible: Designing Collaborative Learning Environments for Physically Remote Generation Y Students” OLT Brisbane 2006; available at <<http://eprints.qut.edu.au/5356/>>. Accessed on 05 March 2019.

(7) Yoany Beldarrain (2006), ‘Distance Education Trends: Integrating New Technologies to Foster Student Interaction and Collaboration’ (2006) 27(2) Distance Education 139-140.

(8) Gilbert Valdez (2011) “Technology: A Catalyst for Teaching and Learning in the Classroom” North Central Regional Technology in Education Consortium, 2011, page 4.

(9) Ibid, p.1.

make use of IT to locate, evaluate, and collect information from a variety of sources for the purpose of statistical analysis of data for research report writing and other research publications.

### **2.1.2. Development of teaching-learning skills of teachers**

The teaching-learning methodology is rapidly changing and, in many ways, becoming more challenging because of the high expectations of the stakeholders of legal education and research across the globe. It is pertinent to mention that “the digital age of information overload with the expectation, students will learn high-level skills such as how to access, evaluate, analyse, and synthesize vast quantities of information.”<sup>(10)</sup>

It is also seen that “teachers are expected to teach students to solve complex problems that require knowledge of many subject areas even as they are held accountable for the teaching and learning of isolated skills and information. Further, teachers are also expected to meet the needs of all the 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 students”<sup>(11)</sup>.

IT tools facilitate teaching-learning methodology in many ways. Now, the teachers take the support of PowerPoint presentations, online videos, online documents, report, judgements, and research papers for delivering quality lectures. Further, IT tools, with the support of LED/LCD/ projector, a podium with computer facility, collar mike, etc, have also substituted the ‘Talk and Chalk Method of teaching’ for effective dialogue. Finally, the quality of education has improved significantly after the introduction of IT tools in the advancement of teaching-learning pedagogy in the world.

## **2.2. IT is promoting quality research**

IT has become an integral part of the functioning of every academician and administrator of legal education and research across the world. IT provides a significant contribution to legal education and production of quality research in any field of life. The IT has been able to equip academicians with the powers to facilitate the storage, retrieval and dissemination of vital legal information for a successful pursuit of legal research and study.

It is certain that in a very small number of years technological advancements

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(10) Ibid.

(11) Ibid, p.2.

have also impacted legal research, and the volume of that impact seems immeasurable. Undoubtedly, the sheer volume of quality legal publication and rapid development of technologies have impacted legal communities and altered very landscape of legal research<sup>(12)</sup>.

It is also pertinent that the nature of legal information has been transformed over a relatively short period of time. It has changed the face of legal research as scholars and professionals are now dealing with an abundance of information which is available to them online<sup>(13)</sup>. This very transformation has shifted the legal research from the traditional hierarchy of print and digest system to an online computer-assisted legal research<sup>(14)</sup>.

As IT now, not only links various legal education institutions, it also promotes cooperation and working relations among those institutions. Further, it forms the very basis of intellectual resources sharing and garnering which aids academics from these institutions to formulate legal studies syllabi, with universal applicability and acceptability. For instance, video conferencing, teleconferencing, group discussions, questions and answers sessions, and moot court trials are being taught and learned via tools and support provided by IT<sup>(15)</sup>.

Computer-Based processing not only liberates a researcher from the unwieldy task of analysing the data manually. It also facilitates swift and accurate analysis of the huge amount of data from varied samples, be it national or multinational samples. Another crucial aspect of IT in research is the practice of online full-text databases or virtual libraries. These new virtual databases are examples of the depth up to which IT has now become the backbone of research in legal studies<sup>(16)</sup>.

Access to new online platforms of resources has been beneficial for every legal

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(12) F Allan Hanson (2002), "From Key Numbers to Keywords: How Automation Has Transformed the Law" (2002) 94 Law Library Journal p. 563 - 563.

(13) Kellie Harpley (2005), "Information Immediately" Lawyers Weekly 26 August 2005, p.12.

(14) Carol M Bast and Ransford C Pyle (2001) "Legal Research in the Computer Age: A Paradigm Shift?" (2001) page 285, accessed from the link [https://heinonline.org/HOL/Page?handle=hein.journals/lj93&div=25&g\\_sent=1&casa\\_token=&collection=journals](https://heinonline.org/HOL/Page?handle=hein.journals/lj93&div=25&g_sent=1&casa_token=&collection=journals) accessed on 05 March 2019 see also; Barbara Bintliff, 'Context and Legal Research' (2007) 99 Law Library Journal p.249- 257.

(15) Audu Echono (2019) "ICT and the advancement of legal studies and practice in Nigeria" p 2, January 2, 2019, at is available at <https://www.thelawyerschronicle.com/ict-and-the-advancement-of-legal-studies-and-practice-in-nigeria/> visited on 18 April 2019.

(16) Report on "ICTs in Research UNESCO World Conference on Higher Education Paris, 2009", Data is available at <http://unesdoc.unesco.org/images/0018183207/001832/e.pdf> visited on 07 March 2019.



practitioner, teachers and especially students as they can now view the court judgements with a click of a mouse. This new development is a reflection of the availability of legal resources which were earlier neither inaccessible or were nor known to researchers<sup>(17)</sup>.

The IT techniques have also facilitated downloading and uploading of the research assignments and research material for dissemination to the stakeholders and peer group. Further, conducting online empirical research by using IT tools has become speedy and economical. Finally, IT software has also stimulated the process of scrutinisation of research assignments for plagiarism and other malpractices very easily and in an authentic objective manner.

### **3. Contemporary Challenges Arising Out of IT**

There are universally acknowledged problems of infrastructure like electricity, internet connectivity, and other IT equipment, coupled with the low level of awareness and education, plagiarism in the use of IT services, for the advancement of IT services for legal education and research. Further, IT may be basically considered as urban-oriented, very elitist and highly restricted in scope for a common man engaged in legal education and research.

Quality research requires substantial contribution based on the creation or extension of some rule/theory/principle by the researchers to the existing literature on a specific subject. It is also a matter of fact that mere combining or describing existing information from the internet sources or other sources without any analysis can never be treated as quality research at all.

It is a matter of fact that the IT has become a powerful weapon in the hands of legal professionals to conduct quality research work, collect relevant legal literature etc. But this supplementary tool of legal education and research must be used very cautiously because of the inherent weaknesses of the secondary data.

If the legal education and quality research need to compete and excel not only at national but also at the 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. Let's examine the fundamental constraints on the availability of data, the authenticity, the reliability and

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(17) Lynn Foster and Bruce Kennedy (2000), 'The Evolution of Research: Technological Developments in Legal Research' (2000) 2 Journal of Appellate Practice and Process, p.275-279.

the latest data while using secondary data for research and education related assignments.

### **3.1. Constraints on accessibility to quality information**

Data from the internet sources may be obtained from free access sources and subscribed sources. Access to open or paid sources need some computer system in the form of laptop/desktop or smart mobile phones. Therefore, accessibility to IT requires adequate funding either by individuals and public or private institutions for providing good instruments for IT services.

It is also seen that on the basis of quality control and proper monitoring of information, the quality of open access sources is not very effective as compared to paid sources. The internet sources of information in case of legal education and research, such as West Law, Lexus-Nexus, Manupatra, the Supreme Court Cases online, Jestor, and the other paid e-databases at national and international, are comparatively costly.

Further, it is also observed that the paid anti-plagiarism software as compared to free anti-plagiarism software is very costly, therefore beyond the reach of scholars, especially in developing nations. It's very difficult for the public or private institutions or individuals in developing nations to fund such paid sources. Thereby, financially weaker students across the globe are restricted to access to paid resources because of the lack of funds to provide access to such internet source. Further, it is also problematic for public agencies in facilitating access to costly online and offline software for empowering legal education and research.

It is also observed that the internet sources provide information in various regional and national languages. It is very difficult for someone who does not understand a specific regional or national language, to comprehend and analyse data provided in local or regional or national languages for research. Language barriers are one of the main hindrances in appreciating and analysing any public transcripts in local or regional or internal languages. Further, any translation and interpretation of such data with the help of a translator in terms of IT tools/software may not provide a precise translation of such languages. Thereby, the incorrect translation is likely to lead to illogical outputs which may mislead other researchers in their own research.

### 3.2. Hindrances in the availability of comprehensive information

The information explosion in the era of IT advancement has produced a vast size and number of electronic databases with an innumerable number of websites.<sup>(18)</sup> A huge data is available with free or open access sources and subscribed sources of information. But adequate information is not available in an organised manner on the internet. 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 the information is available. Therefore, a researcher has to put up a lot of hard work in order to collect complete data from various internet sources.

It is observed that in some instances soft copy cannot be saved, whereas document can only be printed. In some internet sources, data can only be viewed, no print of the document is permitted. Further, lack of funding of the paid e-databases has also restricted the free flow of information to non-subscribers of the software.

It is also seen that IT facilitate access to information in different forms at different platforms. Therefore, a researcher has to look out for various internet sources to locate complete information on any law-related topics. Furthermore, because of incomplete or partial information in a scattered form, it becomes very risky to draw a logical analysis solely on the basis of the data retrieved from any internet sources.

### 3.3. Constraints in accessing accurate, latest and authentic data

After the advent of IT, it has been noticed that after the digitisation of a source or document on the web, the assurance of its quality and authenticity is rarely guaranteed by either the editorial board or the publisher. Documents, which can be a potential source for a researcher or scholar, are often found to be vulnerable to alteration. Ultimately, making the task of authentication a difficult one<sup>(19)</sup>.

It is also reiterated that quality research is not compiling information from

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(18) John K. Hanft (1999) "Shaping the Future of Legal Information.» *Legal Reference Services Quarterly*, Volume 17 #3, pp. 77 (1999). available at <[http://witkin.cflr.com/pages/eff\\_legal\\_research\\_pages/research\\_model\\_age.htm](http://witkin.cflr.com/pages/eff_legal_research_pages/research_model_age.htm)> accessed on 18 April 2019.

(19) John Shear Book (2008) 'The Librarian as Educator: Teaching Essential Research Skills' in *The Changing Role of Academic Law Librarianship: Leading Librarians on Teaching Legal Research Skills, Responding to Emerging Technologies, and Adapting to Changing Trends* (2008), p99 Published by Aspatore Books.

here and there, but generating information resulting in value accumulation to the existing pool of knowledge. A huge amount of secondary information is availed at the click of a mouse. But the contemporary challenge for legal education and research is the paucity of authentic, accurate, latest and complete data on internet sources.

After interaction with the scholars from across the world, that sightless reliance on the internet sources is very hazardous for legal education and research. It is also very pertinent to highlight that the difficulties of inaccurate, inauthentic and lack of availability of the latest information are not confined to one particular nation, but it has become a global phenomenon.

Now let's examine the impact of lack of authentic, latest and accurate internet information on the quality of research and education with the support of real-life instances in the Indian context, but the same may also logically be applied globally, for the analysis of pitfalls of internet data on legal education and research.

### **3.3.1. Lack of accurate and authentic information**

One of the main reasons for inaccurate and inauthentic data is the casual approach in data collection from internet sources. It is also seen that a majority of researchers firmly believe in shortcuts and use data without any verification from the original sources for conducting research assignments. Sometimes it happens that the inaccurate data, without verifying the facts from the original information, is perpetuated and repeated several times, The same is evident from reported and unreported instances in the public domain and the observations made by the researcher during the course of his research on various issues related to research methodology, labour law, administrative law and law of torts.

It is also evident from the analysis of some books and articles written by Legal professionals that there is a lot of confusion about nature of data (primary data and secondary data) regarding judgments delivered by Higher Courts and primary and secondary legislation enacted by the legislature and executives. As per the existing literature, without examining the fundamentals of distinguishing primary and secondary data, the judgements of courts and primary & secondary legislative actions have been treated as primary sources and primary data for research. After applying the fundamentals of data classification for the purpose of research methodology, it is revealed that in the case of primary data, the data is created from primary sources by different tools. In the case of secondary data, the data created by somebody is used for further research. Therefore, the judgments of courts, law commission reports, primary and secondary law-making actions would not be treated as primary data for further research in any case.

In another interesting illustration, for the purpose of some research on domestic workers, the author visited the official website of the Ministry for Women and Child, Government of India. The researcher found that the Domestic Workers Act 2010 was shown as the law regulating domestic workers. When the researcher verified the said information from the official website of the Parliament and other law-making agencies, it was revealed that the nomenclature of the said law was erroneous. No such 'Act' till date has been passed by any agency of the Central Government. Actually, the Domestic workers Act 2010, was a draft prepared by the Ministry of Women and Child for generating public debate on the issues of protection of domestic workers in India.

Further, in the judgment of the Supreme Court of India in *Sahu Rajeshwar Nath v. Income-tax Officer, C-Ward, Meerut and Anr*<sup>(20)</sup>, which is pertaining to the liability of a partnership for payment of taxes, has examined the nature and scope of provisions under Sections, 18, 25 and 26 of the Indian Partnership Act, 1932. It is important to mention that the Supreme Court, in this judgment, has not discussed anything related to the minor partner's liability. But when the said judgment was referred and cited by the Supreme Court in the later judgment of *Ashutosh Vs. The state of Rajasthan and Ors*<sup>(21)</sup> (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]72ITR617 (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 the partnership firm, each partner is personally liable except the minor whose liability is limited to his assets in the partnership.<sup>(22)</sup>

After verifying the facts from the judgments, 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. Secondly, the name of the said case is also incorrectly

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(20) AIR 1969 SC 667; Hon>ble Judges: J. C. Shah, V. Ramaswami and A. N. Grover, JJ. The sole question presented for determination in the present appeal therefore is--when a firm not registered under the Act is assessed to income-tax and a notice of demand is issued against that firm, whether a separate notice of demand is necessary against a partner of the firm if the tax assessed against the firm is sought to be recovered from that partner.

(21) AIR 2005 SC 3434 Hon>ble Judges: Ruma Pal and Dr AR. Lakshmanan, JJ.

(22) *Ibid*, Para 11.

mentioned in the decision of the Supreme Court in 2005. The question arises as to how to conduct quality research where the source of information is not authentic and not accurate and what would be the impact of such research on legal education and research in India?

Similarly, the author examined various reports and Judgments of the Apex Courts related to the interpretation of the Term Industry including the landmark judgment of Bangalore Water Supply and Sewerage Board vs. A Rajappa 1978 decided by a Seven-Judge Bench, for the application of the Industrial Disputes Act 1947. As per the analysis of many authors and scholars, the Bangalore Water Supply and Sewerage Board Judgment and views of Justice VR Krishan Iyer, have been considered the originator of the triple test and dominant nature test to determine the status of any activities as an Industry for the application of the ID Act 1947.

Whereas the ‘Dominant Nature Test’ without naming it so, was originated by Justice K Subba Rao in the leading Judgment of Supreme Court in Corporation of the city of Nagpur vs. the employees 1960. Similarly, the specific Triple Test without terming it as Triple Test’ was advocated by Justice PB Gajendergadkar in the leading judgment of State of Bombay v. Hospital Mazdoor Sabha 1960, where the said Judgment originated three essential components to determine the status of the industry.

Actually, the Triple Test and Dominant nature Test, which were originated and created by the Judgments of 1960, have been recapitulated and reiterated by Justice V Krishna Iyer in the Judgment of Bangalore Supply Case 1978. But in most of the literature available on the issue has recognised Justice Krishan Iyer as the founder of these two tests for the interpretation of the term Industry under Industrial Disputes Act 1947.

Thus, it can be said that due to inaccurate and inauthentic information on the internet, sometimes it becomes very difficult to locate the original source of data. Further, it is also observed that the widespread repetition of the existing literature has aggravated the conditions. Therefore, the use of inaccurate and inauthentic information would lead to illogical and unreasonable findings and conclusions.

### **3.3.2. Lack of availability of the latest data**

It is also important to mention that the majority of the free access sources and a few subscribed sources do not monitor the latest development in related areas. It is for sure that outdated or obsolete data can never promote any legal education

and legal research. In one instance, the researcher was looking for some data on free legal aid services to poor people, whose annual income from all the resources is below a specified pecuniary limit for the requirement of empirical research on legal aid counsels in India. It was observed that at one place the annual income limit was mentioned as twenty-five thousand rupees, at another website it was mentioned as fifty thousand rupees. Whereas, the actual income limit for the eligibility of getting the benefits of free legal services at the Supreme Court, was one lakh twenty-five thousand rupees, which has been increased by an amendment in the Supreme Court Legal Services Regulation 2000.

Further, during the course of a specific lecture on labour law, one student, after visiting the official website of the Ministry of Labour and Employment, questioned the authenticity of some information on wage limits for the application of labour law to some specific workforce in India. It is revealed from the discussion that the student, without monitoring the latest developments on the issue, heavily relied upon the official website of the Ministry, where the appropriate information was not updated for months.

It is also relevant to mention that the “Workmen Compensation Act 1923”, provided compensation in case of employment disablement and death to workers, was amended in 2009. The nomenclature of the same Act of 1923 has been changed to “Employees Compensation Act, 1923”. But still there are many reports, and other research publications, which have been generated even after the said amendment in 2009, are still showing the old nomenclature of the Act.

Finally, the latest information on any topic is one of the essential components of high-quality research in legal science. A quality review of literature demands analysis on the basis of the latest existing literature for framing any research hypothesis or research question or objectives in empirical or doctrinal research. If we are going to rely upon the outdated data for conducting any research or delivering a quality lecture, then the research outcome of any research would simply be a wastage of valuable resources and time. Such research is also unlikely to contribute to the existing pool of knowledge but would be repetition or duplication of outdated information.

### **3.4. Influence of plagiarism on quality of research**

“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 has been considered as serious misconduct by the

stakeholders of legal education and research. 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”.<sup>(23)</sup>

Plagiarism is a serious threat to quality research and education in any nation. This academic theft or academic dishonesty, without any accountability for such wrongful actions, has motivated a generation of low-quality research or repetition of research without any advancement of the existing literature. It is also observed that plagiarism has primarily been considered a civil wrong, not a criminal offence. Plagiarism in any form has also been treated an infringement of copyright law across the globe.

Easy access to public information, without effective control over this academic theft, has also contributed to low-quality research coupled with the repetition of existing literature. The unchecked menace of plagiarism has also generated numerous difficulties for the promotion of legal education and research. New ideas and original thoughts are rarely emerging but there has been a repetition of existing material in manipulative manners.

It is also observed that the quantum of research publications is increasing, but there is a serious question mark on the quality of research publications in legal science. It is also seen that majority of the students in private as well as public law universities/colleges have strong reliance in cut, copy, paste formula (CCP) for framing any research project as a part of their curriculums. This is a matter of grave concern for all stakeholders in the fields of legal education and research. Taking into account of the deteriorating quality of legal education and research, the Bar Council of India, after recognising the serious erosion of research quality, due to rampant plagiarism, has recommended that appropriate software should be used to counter plagiarism in publications and student assignments.<sup>(24)</sup>

In order to seek the accountability of academic dishonesty in doctrinal and empirical researches, the University Grants Commission (UGC), a central

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(23) Concept of Plagiarism explained at the website; the said information available on: <<http://www.bobbyelliott.com/Plagiarism.htm>,> visited on 15 Feb 2019.

(24) The Vision Document by the Bar Council of India (2011).  
<http://www.barcouncilofindia.org/>; accessed on 14 Feb 2019.



regulator of higher education and research in India, has implemented the UGC Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations 2018. But the said Regulation has created a confusion between the similarity index and plagiarism. The said Regulations has permitted plagiarism up to some 10%, whereas such academic theft is contrary to the mandate of quality research.

It is also seen that because of the lack of meticulous compliance of the said policy by the higher educational institutions and ineffective monitoring by the regulators, has failed to yield desirable results to control academic theft in practice.

#### **4. Final Thoughts**

After examining the inherent pitfalls of information provided by internet sources, the author would like to make the following recommendations for the advancement of quality legal education and research.

##### **4.1. Competency and commitment of a teacher is a pre-requisite**

Teachers play a pivotal part in implementation and usefulness of technologies in the classroom. The impact of technology on teachers and their methods of teaching should be considered as important as the effects on student. As students under a teacher may pass on to next stage of their career, but a teacher remains in a classroom to influence the upcoming or new generations<sup>(25)</sup>.

It is also important to note that no mode of information technology can substitute the requirement of a competent and proficient teacher. Competency and commitments of teachers are the prerequisites for the promotion of legal education and research. 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.

All the stakeholders of legal education and research must be aware of the fact that the research based on outdated, inaccurate and inauthentic internet data, can never survive in the age of technological advancement and competitive world. It is strongly recommended that teachers and students involved in legal education and research, 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 in abroad

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(25) Fulton, K. (1998) "A Framework for Considering Technology Effectiveness".

Available at [www.doe.state.in.us/olr/pdf/appresearchkful.pdf](http://www.doe.state.in.us/olr/pdf/appresearchkful.pdf) «accessed on 14 Feb 2019.

## **4.2. Sensitization and promotion of ethical values in legal education and research**

It is well known that a person can not avail the benefits of any scheme unless he is informed or made aware of that scheme. Teachers and students in large number are not well versed with the 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. The author is of the view that the well-informed students and teacher can enhance the quality of research and education.

In order to sensitize students, the anti-plagiarism tools should also be considered as an integral part of course curriculums for the undergraduate, postgraduate and PhD courses. Further, honesty in conducting quality research should always be rewarded and dishonesty needs to be punished to ensure the accountability of such malpractices diluting legal education and research, for the advancement of legal education and research across the globe.

## **4.3. Zero tolerance against plagiarism**

Quality of research is deteriorating due to the low quality of inputs, restricted access and plagiarism. Plagiarism is one of the main hindrances in compromising the quality of research work. Academic theft in any form should not be permitted. The need of the hour is to frame a uniform policy to regulate this menace of plagiarism at the university or college level.

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 the long term. Besides some exemplary penalty, may be in the form of negative marking or declaring such work as null and void, should be imposed if anyone is guilty of plagiarism.

Due recognition to the original work should be given by making proper reference to the author of the original work. The researcher is of the considerate view that plagiarism, as corruption in academic, must be treated and cured according to the policy of 'ZERO Tolerance to Plagiarism'. Academic honesty and integrity must be rewarded and academic dishonesty must always be punished for the generation of quality research.

### **4.3.1. Accountability of researchers and teachers?**

Some software programmes such as Grammarly, Turnitin, Plagiarism Checker, iThenticate, Viper, Academic plagiarism, PlagScan, Blackboard, etc, have been developed to check this menace of plagiarism. Most of the anti-

plagiarism software provide for the details of similarity index, which is also a reflection of the use of internet data by a researcher, for having carried out a research assignment based on the existing secondary data with the data bank of such software.

Such software cannot determine the degree of plagiarism itself. It is also very difficult for an ordinary person to draw any logical inference from any reports of anti-plagiarism software. It requires the support of an expert teacher, having a very good understanding of plagiarism and subject matter, for detection of plagiarism in any assignments and also seeking accountability of plagiarism in research assignments.

It is also emphasised that there is a need to sensitise all the stakeholders about the menace of plagiarism and the inherent weaknesses of internet data. It's for sure that meticulous compliance of the anti-plagiarism regulations would certainly be in a better position to take cognisance of plagiarism and also to seek the accountability of the academic theft.

#### **4.4. Accessibility & maintenance of IT tools**

It is also observed that due to non-availability of quality access to paid sources of information such as West Law, Lexus-Nexus, Jestor, Turnitin, Grammarly or any other quality software has adversely affected access to authentic, accurate and updated information and control over plagiarism.

In order to provide accessibility to the pertinent anti-plagiarism software and online paid sources, the state higher legal education regulating agencies must financially support the installation of quality IT infrastructure for the promotion of research culture in legal education and research.

If we are really serious about any development in legal education and research, then IT 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.

#### **Concluding remarks**

It is well recognised that IT has great potential to enhance teaching and learning methodology and research culture in any profession in any country across the globe. IT is a good servant to supplement quality research but everything should not be left to the mercy of IT tools. It is also very germane to mention that no system of legal education and research can survive with low-quality research and teaching. A researcher must use his research and subject skills for the advancement of research culture across the world.

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