

# ASCE and E – Journals Impact on Learning in GMRIT Knowledge Resource Centre

T. Venkata Rao



**Abstract:** *The present study envisages the usage of e-journals and ASCE journals by the faculty members and students of GMRIT Institute of Technology (GMRIT). Today information technology plays a vital role in every field of life especially in education and also proposes to determine the resolution of using of e-journals, entree place for probing e-journals, ideal format for accessing it and proposals for promoting the use of e-journals. The present engineering college libraries are subscribing different packages as per the AICTE norms. The present paper explains about usage reports of the e-resources journal of the ASCE (American society of civil engineers) and its impact on learning.*

**Keywords:** *Electronic Resources, GMRIT Digital Library, ASCE Journal, and Usage report, ASCE Digital Library.*

## I. INTRODUCTION

Library, a chief resource, and central part of any edifying institution, which is the pivot of the schooling, and learning activities where students, teacher and scholars get their obligatory information rendering to their need. In the old-fashioned libraries users have to depend on library staff to locate any piece of information from my book or magazine or journal. They have to search physically for the information he/she wants. The AICTE strongly recommends the engineering colleges to subscribe the electronic journals through INDEST-Consortium for their Libraries. This consortium is managed by AICTE and IIT Delhi. They are providing different packages of e - Journals for engineering college Libraries. In fact, individual e- packages are available at very high prices. The management of engineering colleges are not able to spend amount on the individual e- journals subscriptions. Due to this situation, the engineering college libraries should develop a consortium to overcome this problem. The present publishers like GIST, WILEY BLACK WELL, BSB and INFORMATICS INDIA are available in the society.

Education is one of areas that have been affected from technology. In recent years, by development of information and communication technologies, new forms of education appeared namely web or online learning. A digital archive is a library in which assortments are warehoused in digital setups (as opposed to print, microform, or other media) and reachable by workstations. Digital imaging is an inter-linked scheme of hardware, software, image database, and entree sub-system with each consuming their own components.

Tools used for the digital library embrace several core and peripherals systems like hardware (such as scanners, computers, and data storage), software (image apprehending and editing), network (data transmission), and display/printing technologies. In digital libraries journals,

Proceedings, books, multimedia and etc. are organized for remote accessibility. Digital library is not a just collection of electronic resources and involves browser interface, but also forms a virtual community and space. In this technology, data is available quickly for each person at any place in the world via communication networks. Digital library is not solitary entity and is related to lots of resources and collections which must be managed.

Digital technology has made it more informal, immediate and contented to apply the stored intellect. Electronic possessions are reachable information resources, including bibliographic databases, electronic reference books, search engines for filled text collections, digital collections of data and data sets. Non reference eBooks and e-journals will be referred to as e-resources in this report. Nowadays, libraries are ever-changing their role from the custodian of outdated information resources to the benefactor of service concerned with digital information assets. The advent of technological advance in the context of workstation, telecommunication, electronic, reprography and micrograph have been espoused in libraries. E-Resources frequently comprise of e-books, e-Journals, tutelages, weekly, thesis, dissertation, catalogues and CD-ROMs, which are probable to be the substitute to the print media. Emerald, Ebsco, Scopus are specific of the samples of online databases.

## II. GMRIT DIGITAL LIBRARY

The student community at GMRIT is offered a broad spectrum of technical courses in tune with industry requirements. The KRC supports students and faculty of nine departments in their research pursuits. They can easily access the library amenities on taking a membership. All the 50 workstations of digital library are connected on LAN. Permission has been given to use internet for this academic purpose. Subscription have been made to IEEE (ASPP), ASME, ASCE, SPRINGER, ELSEVIER (Science Direct), MC GRAW HILL (Access Engineering Library), ASTM DIGITAL LIBRARY, J- GATE (Engineering and Technology) and Developing Library Network (DELNET). The accessible journals are retrieved through DELTA R5 Server. Digital Library also has 1241 general educational CDs, DVDs and 475 SONET CDs, 5000 E-Books including 553 Pearson Education Publishers. The Organization has been providing a technology empowered teaching-learning environment (Wi-Fi) since 2005.

**Revised Manuscript Received on January 30, 2020.**

\* Correspondence Author

**T Venkata Rao\***, GMR Institute of Technology, Rajam, Andhra Pradesh, India. Email: venkatarao.t@gmr.it.edu.in

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an [open access](https://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC-BY-NC-ND license [http://creativecommons.org/licenses/by-nc-nd/4.0/](https://creativecommons.org/licenses/by-nc-nd/4.0/)

All courses existing on-campus are available on Local Area Network (LAN) augmenting the classroom teaching. The GMR Institute of Technology has subscribed the following different packages. Figure 1 and Figure 2 shows the home pages of GMRIT technology oriented learning website and Contents of digital library.

## A. IEEE (International Electrical, Electronics Engineers) ASPP 145 journals + Back files to2000:

It covers electrical, Electronics and Computer Science Engineering online journals. And also covers partially cover other branches like civil, Mechanical, Chemical etc. The package supports the back volumes from 2000 onwards. It is a multi-user package. Access to full text PDF pictures of over 143,000 pupillages from IEEE Journals, magazines, and transactions. And also able to examine and assessment abstracts for more than two million papers obtainable through the IEEEExplore Digital Library

## B. ASME (American Society for Mechanical engineers) Journals package 26 journals + Back file to 2000:

This package covers 26 mechanical engineering journals. It supports back volumes from 2000 onwards. It is a multi-user package

## C. ASCE (American Society for Civil engineers) Journals package 34 journals + Back file to 1983:

ASCE package covers 34 civil engineering Journals. It supports back volumes from 1983 onwards. It is a multi-user package and useful to civil engineering students.

## D. Springer Electrical, Electronics and Computer Science Engineering 149:

It covers 149 journals and useful to electrical, Electronics and Computer Science Engineering. It is a multi-user package.

## E. McGraw Hill Access Engineering Digital Library:

This package covers 10,000 e-books and also covers journals and useful to all branches. It is a multi-user package. It organizes international webinar's for Access Engineering by McGraw Hill.

## F. ASTM Digital Library (BSP):

This package covers 1700 e-books and also covers 13000 e- journals articles can access for all branches. It is a multi-user package.

## G. J-GATE:

It covers Engineering and Technology journal articles for all branches. J-Gate plus helps increase journal usage by allowing scholars and researchers to find articles across J-Gate full text or subscription journals from single discovery interface. J-Gate plus indexes the widest set of journals globally – about 32000 full text journals and stores metadata, abstract and full text links for over 33 million articles going back to the year 2001, and earlier for many journals.

## H. ELSEVIER (Science Direct) Engineering and Computer Science 275 e journals:

It covers 275 journals and useful to electrical, Electronics and Computer Science Engineering. It is a multi-user package.



Figure 1: Home page of GMRIT technology oriented learning website

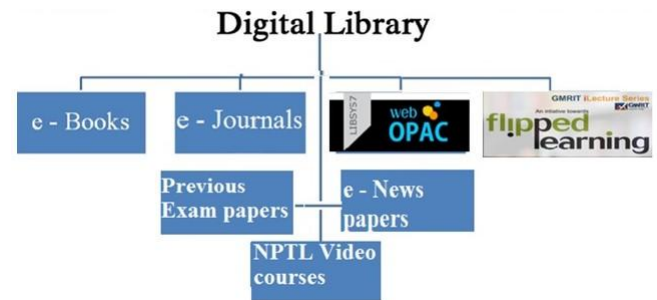


Figure 2: Contents of digital library

## III. ASCE LIBRARY & JOURNAL

It has been a prime mission of ASCE to provide important information to civil engineers. In 1867, James P. Kirkwood, then head, ASCE lectured on the membership related issues spread out side the city of New York City. The American Society of Civil Engineers (ASCE) is renowned universally for their momentous role and commitment to the upgrading of knowledge and edification in the civil engineering occupation. Figure 3 shows the ASCE home page.



Bringing the global civil engineering community together.

We Represent:

Figure 3: ACSE homepage

ASCE journals are exceedingly cited and are most germane to the civil engineers for bartering technical and professional knowledge today. Information published in the journals of ASCE forms archival archives not only of the technical developments of the ASCE but of the civil engineering profession as a full. ASCE issues 34 periodicals over many civil engineering disciplines. Writers are ASCE associates and non-associates indistinguishable. The public neighboring each periodical is intercontinental and spread across all disciplines. Various types of ASCE journals are discussed below.



### A. Journals and Periodicals

The methodological and proficient periodicals of the Culture are the means through which sovereign scholars expose their involvements and the consequences of their studies for the improvement of the civil engineering profession. Technical content is cautiously peer-reviewed for probable publication in one of ASCE's journals and periodicals.

### B. E-books

The e-books of ASCE offer internationally updated material and supervision on today's engineering methods and technologies, from design and planning through presentation in their respective fields. The Titles of journals are available at <https://ascelibrary.org>. The assortment also comprises ASCE Standards, Manuals and Reports on Engineering Run through, Committee Technical Reports, and ASCE Press designations. ASCE e-books compromise no preventive DRM (digital rights management). They are available at a 25%-member discount.

### C. Standards

In 2016, many amendments were made to ASCE rules to oversee the lettering and consideration of standards, further they were accepted by board of directors and ASCE codes and standard committee (CSC). The practices are embraced by stable standards and they undergo a review during public comments period. These standards will be re-constituted or repeated periodically every five to ten years. All the information is available online and offline at ASCE book store or [ascelibrary.org](https://ascelibrary.org).at 25% rebate for members.

### D. ASCE 7 Online

It is a stage where one can search by subscribing. This enables the subscriber to access print types of ASCE 7 to 10 and 7 to 16. It is user friendly featured with great functionality. More information can be obtained by visiting <http://asce7online>.

### E. ASCE 7 Hazard Tool

This is a web-based submission that compromises a better way to look up main design parameters quantified by Standard ASCE 7. The tool permits quick recovery of loads, including elementary gust speed, seismic speeding up, overflow zone and base overflow elevation, earth zone weight, rain weight, tsunami weight risk, and ice thickness with simultaneous puff speed and temperature. Users can engender a unified, downloadable design loads report for addition in engineering proposals and reports. Visit <http://ascetools.online> for more information. The American Society of Civil Engineers signifies more than 150,000 members of the civil engineering profession in 177 nations. Created in 1852, ASCE is the nation's primogenital engineering society.

### F. ASCE Library

ASCE library is host of online home-base of journals, conference proceedings; e-books and standards. Full texts are accessible online from different journals existed since 1983. ASCE journal content is indexed in Google Scholar, Elsevier (Scopus and Engineering Village), Thomson Reuters (ISI, Web of Science, and SCI), ProQuest, Civil Engineering Database, TRID, and EBSCO. Data about each journal, such as the Aims and Scope, Editorial Board, Submission links,

etc., can be located on the home page of every journal at [ascelibrary.org](https://ascelibrary.org). It offers extraordinary online access to in excess of 145,000 Technical and professional papers -1.5 million folios of content. Over 7,000 papers are added annually. Access to the ASCE Library begins at <https://ascelibrary.org>. Individual access to full-text ASCE journal articles, symposium proceedings papers, and book chapters is possible through a paid ASCE Library Card based on present research needs. The subscriptions permit a predetermined numeral of article transfers over the progression of a 12-month period. Figure 4 shows the ACSE library homepage.

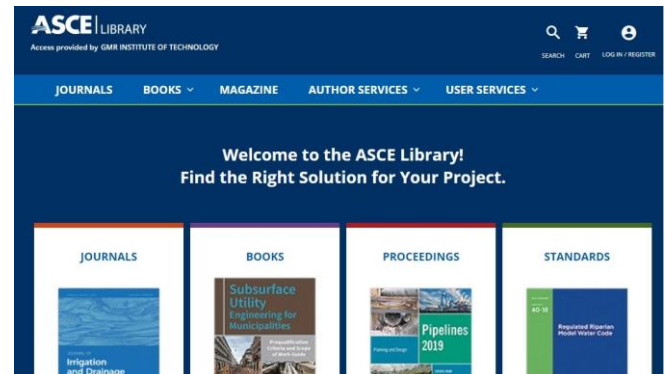


Figure 4: ACSE library homepage

### G. Civil Engineering Database

The civil engineering database (CEDB) is a database comprising 260000 bibliographic records. It contains books, journals symposium proceeding, periodicals published since 1872 to till date. Every year an average of ten thousand new arrivals are being added to this database. CEDB provides abstract pages to full text to its users with bibliographic data – author, title and periodical information which is linked to unique ID's. It helps all the researchers in civil engineering to view all ASCE periodicals is one platform,

## IV. RESULTS AND DISCUSSION

The present section of the paper highlights the usage of the different packages by faculty and students for the last six years (2013-2018). The following Table 1 shows the usage of the e-resources of Knowledge Resource Centre GMRIT, RAJAM. Figures 5 and 6 shows the statistics for ACSE library and journals usage in GMRIT. It can be seen that more number of periodical downloads and website visits are done in the months of December and January and in the months of July. This is due to the fact that academic years is divided in two semesters i.e. odd and even which commence from June and December respectively. In odd semester, term papers are scheduled for undergraduate students, which is the reason for the high number of downloads. In the even semester mini and major projects are scheduled which require more literature survey and upgrading of current knowledge by the undergraduate students, which is directly reflected on the more number of periodicals downloaded by the students. Overall, in other months also, a fair amount of usage can be observed which indicates the research culture existing in the institute.

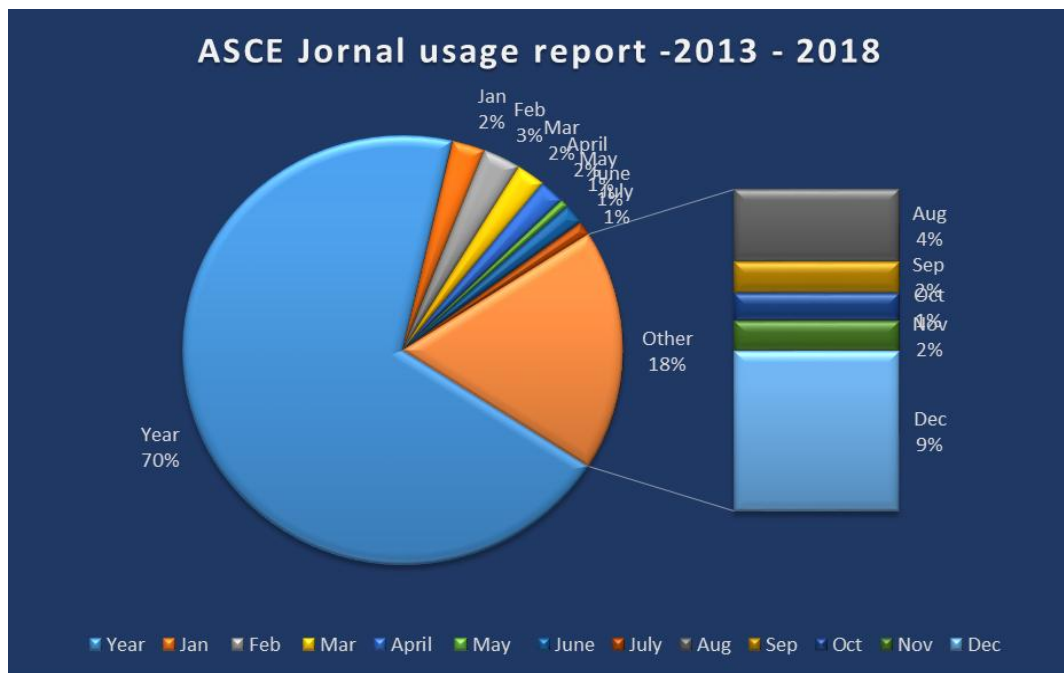
## ASCE and E – Journals Impact on Learning in GMRIT Knowledge Resource Centre

In a nutshell, both faculty and students across all branches of engineering in GMRIT use ASCE library fairly to upgrade their skills. Faculty use is related to upgrading their teaching and research skills and while student's usage is to upgrade

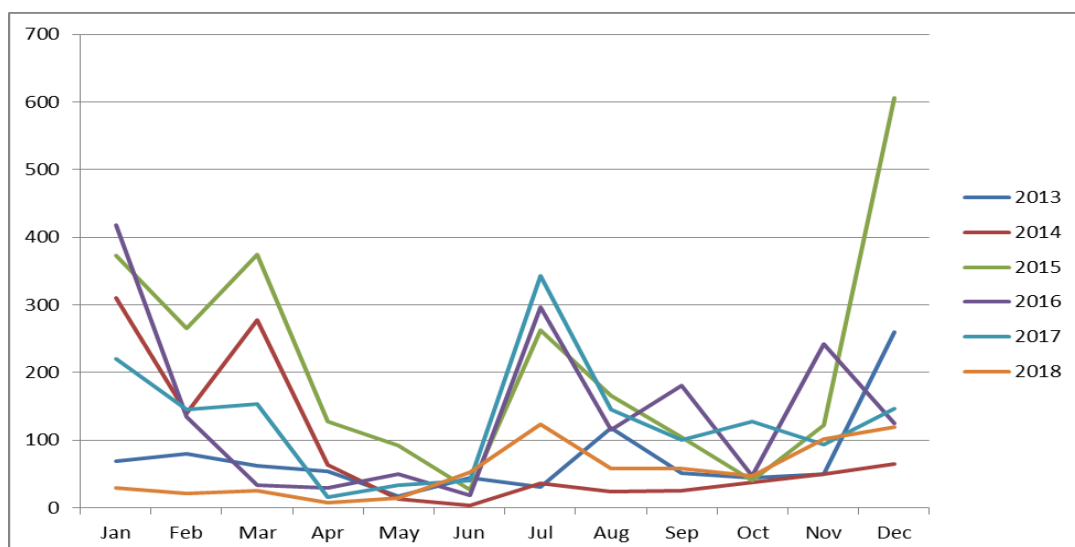
their knowledge levels and keep themselves abreast of current technological advances in their respective fields of engineering.

**Table 1 shows the usage of the e-resources of Knowledge Resource Centre GMRIT, RAJAM**

S No	Year	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1	2013	69	80	62	54	17	44	31	118	51	45	50	260
2	2014	310	140	278	64	13	03	36	24	26	38	50	65
3	2015	373	266	375	128	92	27	262	166	105	41	122	606
4	2016	418	134	33	29	50	19	297	115	181	47	242	125
5	2017	220	145	154	16	33	41	343	145	101	128	94	147
6	2018	30	22	25	08	14	53	123	58	58	47	102	120



**Figure 5: Pie chart for ASCE journal and library usage**



**Figure 6: Statistics for ASCE journals and library usage**

## V. CONCLUSION

The data concerning ASCE (American Society for Civil Engineers) package consumed by civil staff, students has been explored in this paper. To be suitable for publication in the journals, a copy must be of importance and attention to civil engineers. It must be a novel review of past run-through, present information of current attention, or investigation new fields of civil engineering commotion. It would be a thought-provoking schoolwork that underwrites to the planning, analysis, design, construction, management, or maintenance of civil engineering mechanism. User response headed for the survey directs that there is so much of cognizance about the deployment of e-resources in the institute. User friendly attitude towards the information desires of the users helped us in educating the services in the digital library. Many of the respondents are accessing e-resources from the digital library itself. College Academic committee suggested the library to use social media as an academic resource to the users. This library is in planning of taking the advantage of Social media to our users. User orientation towards usage of e-resources helped in bringing the awareness among the users to maximum utilization of e-resources procured for the purpose of academic excellence.

## REFERENCES

1. Ganiyu Oluwaseyi Quadr (2012). Impact of ICT Skills on the Use of E-Resources by Information Professionals: A Review of Related Literature, Library Philosophy and Practice 2012. <http://www.webpages.uidaho.edu/~mbolin/quadr.htm>. accessed on 9/3/2015
2. S. Dhanavandan Mohammed Esmail and Dr. M. Nagarajan (2012). Use of Electronic Resources.
3. B. J. Bamgbade1, B. A. Akintola1, D. O. Agbenu1, C. O. Ayeni1, O. O. Fagbami2, H. O. Abubakar3 "Comparative analysis and benefits of digital library over traditional library" WSN 24 (2015) 1-7, EISSN 2392-2192
4. Fahime Abbasi a \*, Solmaz Zardary "Digital libraries and its role on supporting E-Learning" AWERProcedia Information Technology & Computer Science (2012) 809-813.
5. Rakesh Kumar Mishra "Digital Libraries: Definitions, Issues, and Challenges" Innovare Journal of Education, Vol 4, Issue 3, 2016, 1-3.
6. Dr. Pardeep Mittal, Monu Bala "A Study of Various Types of E-Resources Used by Research Scholars" International Journal of Research in Computer and Communication Technology, Vol 2, Issue 3, March-2013.
7. Kaladhar Arnepalli "The Use of E-Resources at Shri Vishnu Engineering College for women (Autonomous): A Case Study
8. T.Venkata Rao, N.Govinda "The Impact of Smart Mobile Apps on Libraries: A Study", Proceedings of Library and Information Science Trends and Innovations, Organized by Dept. of Library Science, Andhra University, Visakhapatnam, during 29-12-2017.
9. Naqvi Shehbaz Hussain: Use of Electronic Resources at Jamia Millia Islamic: A Case Study, In: NACLIN, 2007, pp. 320-324.
10. AICTE Handbook for 2015-2016 page No.126
11. <https://www.asce.org/>
12. [www.pubs.asce.org](http://www.pubs.asce.org)
13. [www.asce.org/bookstore](http://www.asce.org/bookstore) | [ascelibrary.org](http://ascelibrary.org)
14. [www.gmr.it.org](http://www.gmr.it.org)
15. Ana M B Pavani "The Role of Digital Libraries in Higher Education" International Conference on Engineering Education – ICEE 2007, September 3 – 7, 2007
16. Rakesh Kumar Mishra\* "Digital Libraries: Definition, Issues, and Challenges" Innovare Journal of Education, Vol 4, Issue 3, 2016, 1-3.
17. Dr.T.Venkata Rao "Scope and Importance of ASME Journals In Mechanical Engineering Research– A Survey Through GMRIT Library Resources International Journal of Mechanical Engineering and Technology (IJMET) Volume 10, Issue 01, January 2019, pp. 594-599, Article ID: IJMET\_10\_01\_060. and Technology (IJMET) Volume 10, Issue 01, January 2019, pp. 594-599, Article ID: IJMET\_10\_01\_060.

## AUTHOR PROFILE



**Dr. T. Venkata Rao**, M.A., M.L.I.Sc, Ph.D. from Andhra University and working as a Librarian (completed 30 years' service) in GMR Institute of Technology, Rajam, Srikakulam Dist. Andhra Pradesh. He was awarded Ph.D. degree for his thesis "User Information Literacy in Engineering College Libraries affiliated to JNTUK Kakinada: A Survey". He is a life member of Grandhalaya Sarvaswasam, Vijayawada. He has published six Articles in journals and seventeen Articles in National and International Conferences and seminars. He has attended trainings and workshops of various Institutions of India. He is the coordinator of "A Two Day National Workshop on Information Technology and its Impact on Engineering College Library" organized by Central Library, GMRIT, Rajam in Feb, 2008 and he is also editor of National Conference of "Changing Perception of Library Users and their Expectations in Digital Era" organized by Knowledge Resource Centre, GMR Institute of Technology on 23<sup>rd</sup> – 24<sup>th</sup> April 2016.