## Turnitin-Plagiarism Software and its usage in National Institute of Engineering, Mysore-A Study

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*Abstract:*

*The higher education landscape is change at the faster level due to the technological impact and which is having its result in academic and research excellence related. The copying is not a new thing it is there since from early time also but the rule was to acknowledge the creator or source. The abundant of sources available in the cyberspace has made easier in the task of plagiarize the article, chapter, when the audio and video. The media is so fast that the deterrent the plagiarism has become more complex task. There tools available to prevent and bring the stringent measure to uplift the quality of the academic learning and research. In India the apex body in the higher education UGC has identified this malice and brought out the plagiarism policy to be adopted at all levels and also provided software at the free of cost the The plagiarism check is not only adopted in the Ph.D level but also at the MTech and project level also where the quality matters. The AICTE premier body in the technical education has adopted the policy and same is been followed all over the country. In this background this paper is an overview study of the usage of plagirarism software, Turnitin a commercial based in the National Institute of Engineering, Mysore.*

*Keywords: Engineering, Turnitin, AICTE, Higher Education, Plagiarism*

**Introduction:**

The Academic Integrity is the buzz word where the publication ethics is coming at the forefront. It is not only for the students but also to the trainer also. The research is now no longer called as herculean task. The advantage is that it easy to get the resources which are available both in print and electronic. The electronic medium has given ample opportunity to search for the resources which are available in books, journals, reports, chapters, proceedings, blogs, e-newspaper and e-zines. But the problem is that to identify the authoritarian sources, how to acknowledge the authors, creators. Proper documentation skill is essential to cite the articles, references phrases and also understanding the structure of the paper. The computer has been involved in

every-day life. The computer programing has helped to build checking software which identifies the similarity in text and cautions to reduce the percentage of similarity and alerts the users to develop the writing skills and bring more originality to the work.

According to the Merriam-Webster online Dictionary to plagiarize means; to steal and off the ideas or words of another as one own. The idea is been presented as the original and words can be stolen meaning the phrases are stolen and copied as own because original ideas always has the copyright it not only applies to text, but for audio and video . The level of plagiarism depends on the intent and the context in which the work has been produced.

There are different type of plagiarism direct plagiarism, indirect plagiarism, self-plagiarism, accidental plagiarism, mosaic plagiarism, paraphrasing and complete plagiarism.

**Review of Literature:**

Chew and Blackey (2010), in their study stated that the using of Turnitin, Anti-plagiarism tool in Glamorgan, UK , also in the Tufts University enhanced the learning and teaching experience for students. Malka (2017) In her research on The use and analysis of anti-plagiarism software: Turnitin tool for formative assessment and feedback found that students are benefited by using Turnitin as an educational writing tool than a totally

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plagiarism preventing tool. The similarity shown by the software helped the students to improve the academic skills and the tool helps to avoid the high level plagiarism. Students and Instructors perceptions of Turnitin study by Saba(2017) showed that although majority found that the Turnitin is a good tool to prevent plagiarism but it is not the complete solution and not all the faculty were committed to use , and some of the reasons were lack of citation skills, laziness and students are not abide by ethical writing norms. A systematic literature survey on Plagiarism detection tools (Sneha, Anuja, 2018) revealed that the Turnitin is the software very much useful to improve student writing and research and effectively used in research domain and advantage is deep level plagiarism detection with machine learning approach.

**NIE-Mysore:**

The National Institute of Engineering (NIE), established in the year 1946, today stands 196th  place among top engineering colleges in the country that include IITs and NITs as per National Institution Ranking Framework (NIRF-2021) announced by Ministry of Human Resources Development (MHRD). It is ranked 13 among India's top Engineering Colleges, as per survey conducted by India Today (July 2021). NIE is managed by a Registered Society and nine out of ten current directors are distinguished alumni of the Institute.

NIE is a grant-in-aid institution and approved by the All India Council for Technical Education (AICTE), New Delhi. NIE got autonomous status from Visvesvaraya Technological University, Belagavi in 2007. It has been accredited by NAAC. Four Undergraduate Programmes – Civil Engineering, Mechanical Engineering, Electronics & Communication Engineering and Industrial & Production Engineering and one PG Programme – Structural Engineering have been accredited by the National Board of Accreditation, New Delhi, under Tier-I. It is one of the 14 colleges in Karnataka that has been recognized under MHRD-World Bank sponsored Technical Education Quality Improvement Programme (TEQIP) in all the three phases. All the Departments of NIE are recognized as Research Centre under VTU and AICTE for QIP. Currently, NIE offers 7 UG and 12 PG Programmes. Faculty has been the main strength of NIE. They impart their vast knowledge to the students by using conventional methods of teaching-learning process as well as contemporary ones.

The Library was established in the year 1946, it has collection of more than lakh volumes. The library has rich collection of Abstracts, Dictionaries, Yearbooks, Textbooks, , Encyclopaedias and other General books including Kannada novels. The library is also subscribing for more than 54 Technical Journals, 30 general magazines and has

full text online database like IEEE ( ASPP+PoP), ASCE, ASME, Springer, Elsevier, Taylor and Francis, Emerald (Publishing) , Emerald (Business) ProQuest ( e-Journals) , Lanquill,( Writing grammar Tool), MAP Systems: Cloud hosted Remote Access services, Turnitin (Plagiarism Check Service)

**Objectives of Anti-Plagiarism:**

1. Inculcate the habit of respecting the academic integrity and discipline.
2. To identify any act of dishonesty in academic work constitutes academic misconduct.

**The proposed workflow:**

1. The research scholar should submit the soft copy of the thesis for the plagiarism check to the examination section through a CD.
2. Checking shall be done excluding the bibliography, index and references.
3. During the initial plagiarism check the thesis shall not be added to the data repository.
4. The anti-plagiarism report will be generated and mailed back to the student, guide, co-guide and the Registrar (Evaluation).
5. A letter from the office of Registrar (Evaluation) to this effect will be sent to the guide, co-guide and student. **Permitted Similarity index <= 25%.**

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6. The thesis can be printed and submitted to the examination section only if a letter to this effect is issued to the candidate, guide and co-guide.

7. The candidate shall mandatorily produce the anti-plagiarism report as a part of the thesis.

8. If the similarity index is > 25% the modified thesis has to be resubmitted following the step no.1 of the process with the fee of Rs. 5000/-.

9. The student can submit the thesis for the third time with the fee of Rs. 7500/-.

10. The third chance shall be considered as the final submission failing which the thesis shall not be accepted.

**Methodology:**

The methodology consisted of analysing the uploaded projects by downloading the statistics of the usage report and same has been computed and graph has been drawn.

**Table-1: Percentage of Total No. of M tech Thesis submitted to the Turnitin Check From March 2022 to February 2023**

| SL.No | Date | Similary Check | Percentage (%) |
|---|---|---|---|
| 1 | 01-03-2022 | 40 | 1.54 |
| 2 | 01-04-2022 | 59 | 2.27 |
| 3 | 01-05-2022 | 82 | 3.16 |
| 4 | 01-06-2022 | 273 | 10.54 |
| 5 | 01-07-2022 | 1002 | 38.70 |
| 6 | 01-08-2022 | 262 | 10.11 |
| 7 | 01-09-2022 | 175 | 6.75 |
| 8 | 01-10-2022 | 138 | 5.33 |
| 9 | 01-11-2022 | 171 | 6.60 |
| 10 | 01-12-2022 | 147 | 5.67 |
| 11 | 01-01-2023 | 144 | 5.56 |
| 12 | 01-02-2023 | 96 | 3.70 |
| **Total** | | **2589** | **100%** |

Table -1 Indicates the Similary check of the Project reports done by the Turnitin from March 2022 to Feb 2023. Highest number of Similarity check of reports are done in the month of July 2022 , 1002(38.70%) followed by 273(10.54%) in the month of June 2022 and 262 in the month of August. This shows that the total 59.35% of submission done in this three month.
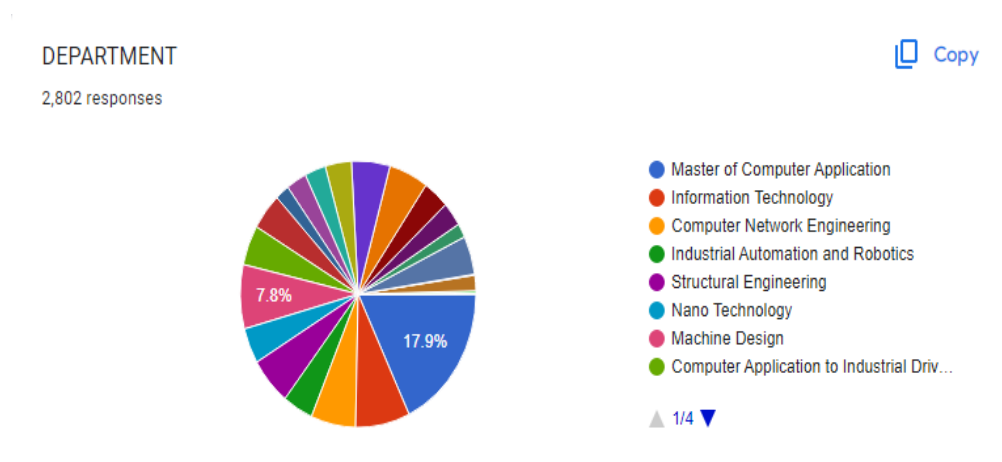
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### Table-2 Similarity Check done by Turnitin

| SL.No | 0% Similarity | 1-24% Similarity | 25-49% Similarity | 50-74% Similarity | 75-100% Similarity |
|-------|---------------|------------------|-------------------|-------------------|--------------------|
| 1.    | 0             | 20               | 16                | 3                 | 1                  |
| 2.    | 1             | 36               | 16                | 6                 | 0                  |
| 3.    | 0             | 55               | 21                | 3                 | 3                  |
| 4.    | 8             | 142              | 91                | 16                | 16                 |
| 5.    | 0             | 623              | 273               | 67                | 39                 |
| 6.    | 1             | 171              | 68                | 13                | 9                  |
| 7.    | 4             | 105              | 51                | 13                | 2                  |
| 8.    | 1             | 42               | 48                | 25                | 22                 |
| 9.    | 0             | 88               | 52                | 22                | 9                  |
| 10.   | 4             | 46               | 67                | 23                | 7                  |
| 11.   | 2             | 60               | 66                | 11                | 5                  |
| 12.   | 3             | 44               | 35                | 10                | 4                  |
|       | **24**        | **1432**         | **804**           | **212**           | **117**            |

**N=2589**

Table -2 gives the similarity check done by the software the similarity has been categorized into five section the similarity showing 0% is 24(0.92%) the similarity between 1-24% is 1432(55.31%), 804 (31.05%) is the similarity in the range of 25-49% .This indicates that even though the similarity less than 25% is more but more than 25% similarity shown in the project indicates that the students need to more cautious about writing their project report. The similarity between 50-74% is 212(8.18%), 75-100% is 117(4.51%).
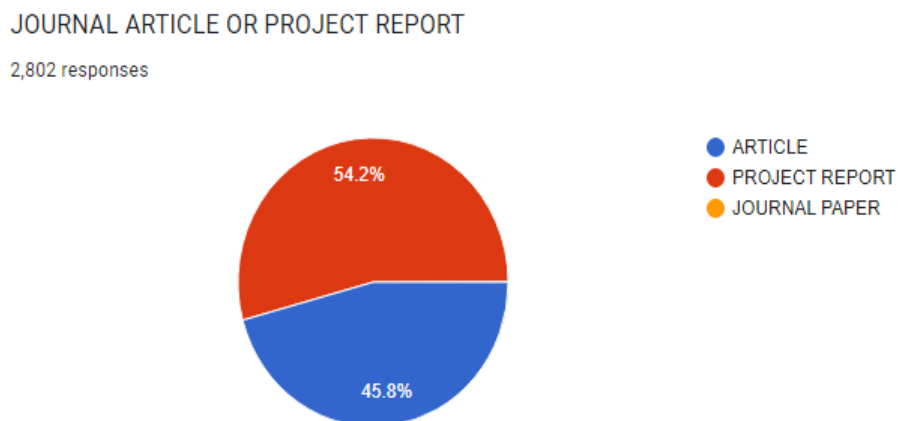
### Figure.1 : Department wise submission of M.Tech. Project

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The figure 1 shows that Nano Technology 17.9% MTech project is the highest uploaded and submitted to the VTU followed by Information Technology 7.8%

**Figure.2 The type of documents submitted to the software**

JOURNAL ARTICLE OR PROJECT REPORT

2,802 responses



- ARTICLE
- PROJECT REPORT
- JOURNAL PAPER

54.2%

45.8%

The figure 2 shows that 54.2% project report submitted followed by article 45.8% so the software is mainly used for the detection of plagiarism in the submitted MTech report.

The MTech project have been continuously revised three or four times and then the final submission is done. First submission is always free, subsequent submission is charged with fee.

**Advantages and Disadvantages of Turnitin:**

This software saves time, and mainly useful for ethical writing. teachers can save time by cross-referencing students' submissions with cited and un-cited portions of their works.

This database helps to detect plagiarism and reduce it by identifying different colors and ranking of the existing sources.

The software is helpful in time saving for the faculty to grade and evaluate the student work.

This software has the option of Feedback and also identifies the grammatical errors. This feed-back helps the students to identify the errors and help the students to improve their writing.

This software does not cover all the databases of works where students may plagiarize it and may not be cross-referenced by the system.

It is expensive for small institutions like colleges where every year they have to renew the subscription.

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The flag option of plagiarism identified by the software is not always true, there is the possibility of repletion and finally it the duty of the instructor to identify and cross-verify.

**Conclusion:**

The goal of the institution is to build up the future generation with skill and knowledge and library always plays the supporting role in inculcating the knowledge through its resources. Now librarian is not only disseminate resource but also helps in developing writing skills for the students and researchers. The cyber space helped for the cut and paste culture but it has also exposed the limitation of the writing skills and originality to be maintained. The plagiarism tool has helped to improve the academic and research activity by identifying the similarity. This helps the students to improve the presentation of references, in-citation styles and pharaprasing and avoiding grammatical mistakes. This helps in developing the writing ethics and avoiding the unnecessary copying and presenting as the original.

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