

# Use of Anti Plagiarism Software for Detection of Plagiarism in Research Work in the North East Region with Special Reference to Gauhati University

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## Abstract

*This paper discusses the uses of the anti plagiarism software and its impact on research work. This paper attempts to make an extensive study of its use in the NE region with special focus on Gauhati University. The study would show how Urkund has been highly used by the University of Gauhati and the Central University of Tezpur compared to other universities of the NE Region, where it is still in a preliminary stage. Importantly the use of Urkund, as our study shows, has been highly beneficial to almost 85% research scholars in Gauhati University for improving their research work.*

**Keywords:** Plagiarism, Urkund, Theses, Dissertations, INFLIBNET

## 1. Introduction

Due to the technical development in the past few decades, we have entered into a new standard of life which may well be termed as “Digital age”. The developments in the field of electronics are engendering a way to make our devices smarter. During the last few decades, these development have changed the educational institutions as well as the most essential pillar of an educational institution i.e. libraries. The libraries have evolved a lot from mere “Storehouse of books” to “Digital Libraries” which may be considered as an ocean of knowledge having surpassed the physical boundaries of the institute. With the wide spread of computers and the advent of the internet, it has become easier to plagiarize. In this respect anti plagiarism software plays an important role in locating instances of plagiarized work and thereby enable original and legal work to come in the field of higher education.

That would definitely enhance the betterment of the society.

## 2. Methodology

Information has been collected by follow up telephonic interview with librarians to get the relevant information about anti plagiarism software uses and present status from Universities of NE region. Some information has also been received by email.

The present work is mainly based on data gathered from the research scholars and faculty member of Gauhati University. The data was collected with the help of a questionnaire. The questionnaire was prepared to find out the uses of Anti-plagiarism for research and development (R&D) as well in the attitude of researchers towards Urkund. A comparison has been made amongst 7 universities of NE India who use the Anti-plagiarism Software for R&D.



### 3. Sample Design and Sampling Method

120 researchers have been contacted for filling the questionnaires. Sample was framed by multistage sampling method. At the first stage, total respondent have been divided on the basis of streams. At the second stage respondent have been divided on the basis of subjects and at the 3<sup>rd</sup> stage 100 respondent have been divided into Research Scholars and faculty members. The ultimate sample was selected on the basis of convenience-cum-judgment sampling.

### 4. Tools and Analysis

Collected data were analyzed in table and figure with percentage method. SPSS software has been used for analyzing the collected 150 filled in questionnaire.

### 5. Review of Literature

A few studies relating to plagiarism have been reviewed from different countries during the course of this research paper.

Karabag & Berggrem analyzed the current situation and policies concerning academic dishonesty, plagiarism, and paper retractions, generally in academia, and business and economics discipline in particular four databases, Ebsco Business Source Premier, Emerald, JSTOR, and Science Direct had been examined.

Cheema et al tried to find out the conceptual awareness of research student (Ph.D. and M. Phil) of plagiarism through different aspects. Finding that most of the students had general conception of plagiarism but research student are largely unaware of the types of plagiarism and penalties thereof.

### 6. Purpose

The main aim of this case study is to investigate the formative effectiveness of the anti plagiarism software used in Gauhati University as well as NE India. The research questions are in regard to the use of the anti plagiarism software and about making Urkund more effective for checking plagiarized research works. The purpose of this paper is to know how the institution has been using the anti-plagiarism software based on predetermined parameters. It also seeks to know the attitude of research scholars towards the issue of plagiarism, and accepted norms. Ultimately it emphasizes upon the need for awareness programme amongst research scholars and faculty members in using plagiarism detection services.

### 7. Significance

Students are made cautious in taking ideas from others since it would be considered illegal and likely to be punished if it is pursued by the authority. This research paper will help the education and research particularly in dealing with the plagiarism occurrence. This research paper will also help evaluate the intentions of students on plagiarism, and analyze the frequency of plagiarism.

### 8. Discussion

Every aspect of anti-plagiarism mechanism should be given due importance in order to develop the research output. It is an ethical issue and proactive approach requires that it should be closely related to academic ethics. There are still some unanswered question related with plagiarism, for example-

- ❖ What should be the percentage of accepting as normal limit?

- ❖ Should it be different from arts, science, commerce, law and engineering?
- ❖ Should it be different for review papers and research papers?

Perhaps, there are no final answers for these harassing questions as yet.

It seems in India a national level system to track and access the thesis and dissertation has not been implemented to its full potential as yet. There are some advisory bodies like National Task Force on IT & Software Technology (1998) and National Knowledge Commission (2009) which helped in setting up and maintaining ETDs. In this regard a good initiative has been taken by INFLIBNET centre through Shodhganga which also covers plagiarism related issues. It mentions here that there has been no success to bring out a complete national policy covering this area under the scope of field of LIS in contrast to Science & Technology and IT policies.

The anti-plagiarism software “URKUND” has been developed by PrioInfo, a Swedish Company. URKUND has been provided to the universities under the Shodhganga project. The software is at the KKH Library and the faculty members and users can use the software simply by logging in with their username and password.

## 9. Plagiarism

### 9.1. Why People Plagiarize?

To avoid the hard work of putting their own thoughts and ideas and words together in a coherent form, to appear more accomplished than they are and to be admired are the reasons.

- i. Lack of time /planning
- ii. To influence others

- iii. Pressure to publish (for career development)
- iv. Competition (peer pressures)
- v. Fear of failure
- vi. Lack of knowledge
- vii. Laziness

### 9.2. Which of these situations constitute Plagiarizing?

- i. Writing or copying a short piece from a source precisely without stating who the original author is.
- ii. Using someone’s exact words without using quotation marks in citation.
- iii. Reading several texts and reworking the contents of these into a new text that isn’t like any of the original sources other than a few words or a sentence being the same, without citing any of the sources.
- iv. Translate another’s text into a different language and using the result without citing the source.
- v. Making use of an existing text without stating who the original author is, replacing words with synonymous terms, removing, or adding individual words and so on. Whatever the reason, Plagiarism is risky work.

### 9.3. How can plagiarism be avoided?

- i. Giving credit to the author from where you read, and not taking credit for it.
- ii. Attribute references
- iii. Give acknowledgments
- iv. Provide footnotes
- v. Always note the source

**9.4. How can plagiarism be detected?**

- ❖ Manual detection requires substantial effort and excellent memory.
- ❖ Computer assisted detection allows vast collections of documents to be compared to each other.

**9.5. Plagiarism can be avoided by deploying following strategies:**

- ❖ Citation management tools / citation Managers-
- ❖ Zotero, EndNote, CiteULike, Papers rater RefWorks, Mendeley,
- ❖ Writing and checking tools to avoid errors-
- ❖ Grammarly, Spellchecker.net, Online correction, Spellcheck online, Paper Rater, etc.
- ❖ Proper citations and-Standards Like MLA, APA, Chicago, Harvard, Oxford, etc.
- ❖ Plagiarism detection tools-Anti plagiarism software's / tools

**Anti-plagiarism tools-**

- ❖ Urkund
- ❖ Turnitin / iThenticate
- ❖ Viper
- ❖ Plag Tracker
- ❖ Unplag
- ❖ PlagScan and
- ❖ Compilatio

**10. Plagiarism Policies of Indian Universities:**

The UGC Regulation “Minimum standards & procedure for award of M.Phil / Ph.D degree”, 1<sup>st</sup> June 2009, mandated all universities to check

plagiarism using detection tools of all the theses and dissertations which are uploaded into Shodhganga. This would overcome severe problem of duplication of research and poor visibility and hidden factor in research output. So, all universities of India are bound to check the plagiarism before uploading the thesis into Shodhganga. The universities are also mandated to set up an IR which would host all theses and dissertation, permitting anyone to access, browse, and view.

For the research scholars at the Ph D level it is necessary to have two publications in peer reviewed journals before they are awarded doctoral degree by the university. So, the researchers at the university have no option but to follow good practices of scholarly community.

The universities like JNU, Pune University, Jamia Millia Islamia, etc have made mandatory for its students and research scholars to check their theses and dissertations using anti plagiarism software before final submission so that they may be able to check originality and quality of their work submitted for acquiring a higher degree. All of IITs have devised a very strict policy against plagiarism.

**10.1 Gauhati University Plagiarism Policy**

Gauhati University has made it necessary to check the submitted PhD theses through anti-plagiarism software; with a provision for disciplinary action against if plagiarism is found, including cancellation /rejection of their Ph.D. regular training of the Research Scholar and faculty is done. All research scholars' theses should be uploaded and verified by the supervisors /guides, and are expected to share the report with the Coordinator of Shodhganga. Accordingly a certificate for similarity report is issued.

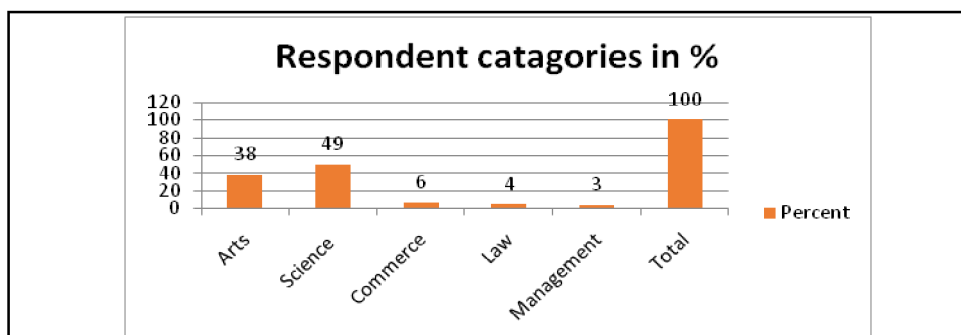
## 11. Data Analysis and Interpretation

Collected data are analyzed with help of SPSS software.

### 11.1 Different Categories of Respondent

**Table:1. Respondent Categories**

Category	Frequency	Percentage	Valid Percent	Cumulative Percent
Arts	38	38	38	38
Science	49	49	49	87
Commerce	6	6	6	93
Law	4	4	4	97
Management	3	3	3	100
Total	100	100	100	



**Figure: 1**

### 11.2. Software used for Anti-Plagiarism in Gauhati University

The GU has checked the originality by Turnitin /Urkund

**Table: 2. Anti Plagiarism software in Gauhati university**

Software Name:	Year	Number of Scholars Thesis
Turnitin /i-Thenticate	2013-2014	239
Urkund	2015-2016	590

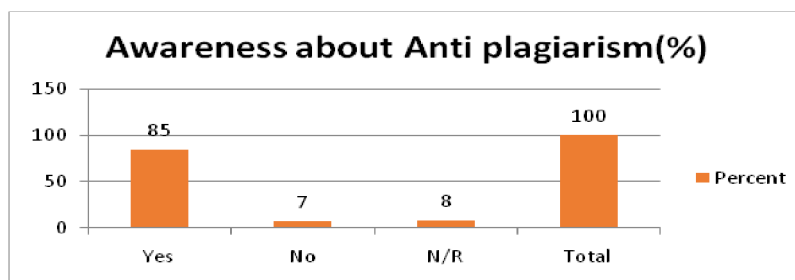
### 11.3 Comparison of Universities using Anti-Plagiarism Software of NE-Region

**Table: 3. Anti Plagiarism software and 7 universities of NE Region**

Name of University	Software used	Year of starting	Policy/Action taken
Gauhati University	i-Thenticate/Turnitin, Urkund	2014, 2016	The researchers are asked to polish the research works. Central Library issues a Plagiarism verification certificate. This certificate is submitted with the thesis for acquiring Ph. D degree. Ph D scholars are allowed to take content from other sources not exceeding 20%.
Dibrugarh University	Turnitin (trial)Urkund	2013,2015	Formation of a Committee to take measures against plagiarism
Assam University	Turnitin (Trial),Urkund	2013,2015	No policy formed yet
Tezpur University	Turnitin Urkund	2008 2015-15	One incident of a Degree withdrawn. Ph D students are allowed to take content from other sources not exceeding 20%.
Mizoram University	Turnitin,Urkund	2013, 2015	No Information
Manipur University	Urkund	2015	No policy formed yet
NEHU	Turnitin/i-Thenticate (Trial)Urkund	2013-2014 2015	No fixed percentage have been work out with reference to similarity with other sources.

### 11.4. Anti Plagiarism and Awareness among the Users

#### 11.4.1 Awareness about Anti-Plagiarism Software



**Figure: 2**

From figure 2, it is found that 85% respondent aware about anti-plagiarism software at Gauhati University.



11.4.2 Initiative of providing plagiarism by KKHL

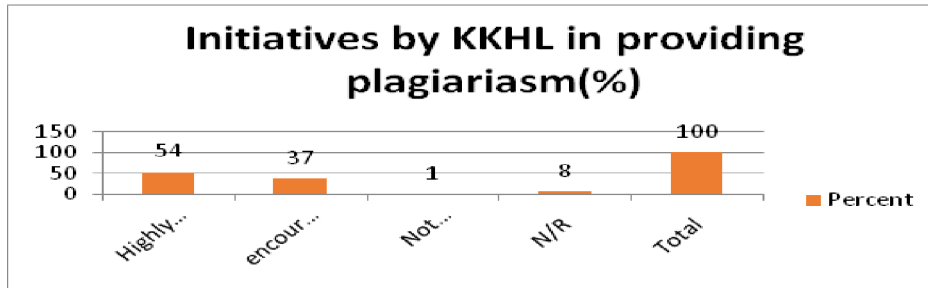


Figure: 3

For exploring the use of urkund software in Gauhati University, role Co-ordinator/Technical Coordinator has been highly encouraging.

11.4.3 Have you got an Account on URKUND ?

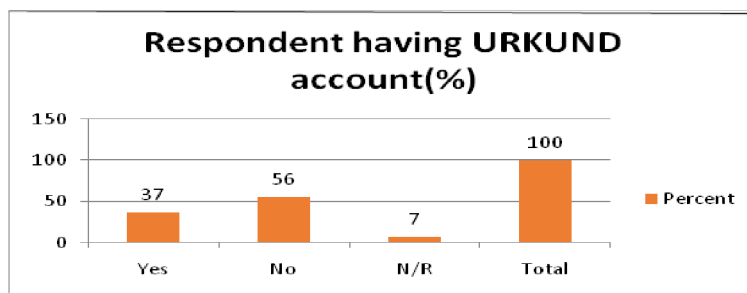


Figure: 4

From the above Figure 4 shows that about 37% have got account on Urkund.

11.5. Analysis of Similarity Report

Table: 8 Analysis of Similarity Report by Urkund (from table:7)

Range of Percentage	No. of Research scholar	Percentage	Valid Percentage	Cumulative Percentage
1—5	46	46.0	46.0	46.0
6—10	20	20.0	20.0	66.0
11—15	19	19.0	19.0	85.0
16—20	5	5.0	5.0	90.0
More than 20	10	10.0	10.0	100.0
Total	100	100.0	100.0	

From the table-8 it is found that 46 research students got the similarity report between 1-5%, 20 got the similarity report between 6-11%, 19 got the similarity report between 11-15%; 5 got the similarity report between 16-20%, and 10 got it more than 20%. It clearly showed the necessity of Urkund for improving the research work. (I have taken only the 100 researchers for analysis purpose for better result.)

#### 11.6. Does originality reports help to improve in research work?

**Table: 9 Originality Reports**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	84	84.0	84.0	84.0
	No	4	4.0	4.0	88.0
	N/R	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

It is found that about 84% scholars are benefited by this type of software. The responses reflect that the originality /similarity report helps them in improving the research work.

## 12. Findings and Summary

The study found the following:

- i. There should be proper training system for the research scholars and faculty members at pre determined intervals. The researchers also need transformation and tuning through training and retraining activities, so that they may be able to maintain their poise and productivity.

- ii. From the study it is found that maximum research scholars and faculty members are using anti-plagiarism software before the final submission of Ph D theses. It is used on demand depending

#### 11.7. Guide/supervisor provide feedback through URKUND

**Table: 10 Guide/supervisor feedbacks**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	29	29	29
	No	31	31	31	60
	N/R	40	40	40	100
	Total	100	100	100	

Only 29% guides provided feedback through Urkund, where 40% of respondents opted for NR option. In the survey it is found that research guides /supervisors are not in habit of using this type of software.

upon the intensive nature of their research works.



- iii. Majority of the research scholars and faculty members use URKUND for research purpose and they are highly satisfied.
- iv. Use of anti plagiarism software is in the preliminary stage in the NE Region except in Gauhati University and Tezpur University.
- v. At the same time it is believed by scholars and faculty members that the authority should be stricter about the use of URKUND and provide full support in order to enhance high quality or Research produced from the University.
- vi. Majority of the respondents are of the view that they are not informed about Urkund by guides / supervisors. They have got the information from the university library.

### **13. Suggestion**

It has been already stated in the paper earlier that there are many factors relating to the use of anti plagiarism software which still remain unsolved. In this sense an important point, which we believe needs to be paid attention to, is on the detection of borrowings done not only from the uploaded theses and from the sources available on the internet but also from the books and unloaded M. Phil. and MA dissertations.

### **14. Conclusion**

From the data, discussion, and findings, it can be concluded that in researchers' perception, the use of anti plagiarism software is much encouraging. About 84% of the respondents' were found satisfied regarding some component of Urkund. Only a few of the respondents were found indifferent. An overview of issues related to plagiarism may give the impression that the danger of plagiarism would

be reduced by different ways. It may be stressed that plagiarism is not only the researcher's accountability rather it is a shared one.

It is concluded that the issue of plagiarism is not separate from ETD process, and following certain basics of academic ethics and integrity can lead researchers towards successful completion of research works. Plagiarism is measured as an act of untruthfulness and researchers' misconduct. It is also a violation of Copyright Act. Today, it has gained so much importance that it has become necessary to deal with it at the level of schools and colleges by authorities. Moreover, awareness programmes should be there for the researchers and faculty at higher education. Apart from the above, the plagiarism tools also provide a chance for both the researcher as well as the supervisor to correct the statements /quotes, rectify the citations, trace the original contents and authors, reduce the percentage of similar content, and avoid plagiarism towards improving originality of the research.

Finally, it is important to fight against plagiarism, the main aim being the improvement of the originality of the research output. Urkund is one of the most widely acknowledged software. A national level policy should be thought of and formulated.

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