

## ROLE OF ANTI- PLAGIARISM SOFTWARE IN ACADEMIC ENVIRONMENT

**Amitesh Kumar Pandey<sup>1</sup>**

<sup>1</sup>Research Scholar Department of Library and information Sciences Central University of Punjab, India.

DOI: <https://www.doi.org/10.58257/IJPREMS35233>

### ABSTRACT

In the realm of academia, upholding the authenticity and integrity of scholarly work is of utmost importance. The rise of digital advancements has made it easier to disseminate information, but it has also opened the door to an increased risk of plagiarism. To combat this issue, anti-plagiarism software has emerged as a vital tool, providing robust mechanisms to detect and discourage academic dishonesty. This research delves into the role of anti-plagiarism software in fostering academic integrity, exploring its effectiveness, implementation, and the ethical considerations that come with its use. By conducting a thorough examination of existing literature, this study emphasizes how such software enhances the quality of education by encouraging original thinking and safeguarding intellectual property. Furthermore, this paper acknowledges the limitations and potential biases of these tools, advocating for a balanced approach that combines technological solutions with educational strategies to cultivate a culture of honesty and responsibility among students and scholars.

**Keywords** – Plagiarism, Academic, Scholarly, Integrity,

### 1. INTRODUCTION

In the current academic landscape, maintaining the integrity and authenticity of scholarly work is of utmost importance in upholding the credibility of educational institutions and the value of academic accomplishments. However, with the advent of digital technology, accessing and reproducing information has become easier than ever before, resulting in a surge in instances of academic dishonesty. Plagiarism, in particular, has emerged as a widespread problem, posing a challenge for educators and administrators to effectively detect and prevent such misconduct. To address this issue, anti-plagiarism software has emerged as a crucial tool, designed to identify and mitigate instances of copied or improperly cited content in academic submissions. The significance of anti-plagiarism software goes beyond mere detection; it serves as a deterrent, discouraging students and researchers from engaging in dishonest practices by emphasizing the importance of academic integrity. This software operates by comparing submitted texts against extensive databases of academic work, internet sources, and other relevant documents, thereby identifying potential cases of plagiarism and enabling institutions to take prompt action. The purpose of the study is to explore the multifaceted role of anti-plagiarism software in the academic environment. It will assess the effectiveness of these tools in promoting original thinking and safeguarding intellectual property, while also associated with their use. By comprehending the capabilities and challenges of anti-plagiarism software, educators can foster a culture of honesty and responsibility, ultimately enhancing the quality and credibility of academic work.

### 2. WHAT IS PLAGIARISM

According to Encyclopedia Britannica, "Plagiarism, the act of taking the writings of another person and passing them off as one's own. The fraudulence is closely related to forgery and piracy-practices generally in violation of copyright laws." According to Black's law dictionary, plagiarism is defined as "The act of appropriating the literary composition of another, or parts or passages of his writings, or the ideas or language of the same, and passing them off as the product of one's own". According to Merriam-Webster online dictionary plagiarism is an act or instance of plagiarizing or something plagiarized. According to oxford learner's dictionary plagiarism is "the practice of copying another person's ideas, words or work and pretending that they are your own". Plagiarism can generally be described as the unacknowledged utilization of someone else's work (such as writings, ideas, thoughts, inventions, etc.) without proper credit given to the original source. Teddi Fishman, former director of the International Centre for Academic Integrity, has proposed the following definition for plagiarism: "Plagiarism occurs when someone uses words, ideas, or work products, attributable to another identifiable person or source, without attributing the work to the source from which it was obtained, in a situation in which there is a legitimate expectation of original authorship, in order to obtain, in a situation in which there is a legitimate expectation of original authorship, in order to obtain some benefit, credit, or gain which need not be monetary"(Fishman,2009,p.5). Plagiarism poses a significant risk to the educational system as it allows students to gain credit for work that is not their own, potentially bypassing the intended learning objectives. Similarly, educators may also be recognized for content that they did not create themselves.

## 2.1 Types of Plagiarism

According to Grammarly.com there are commonly 7 types of Plagiarism which are mentioned in the table 1. below:

Serial No.	Types of Plagiarism	Definition
1.	Complete Plagiarism	It happens when an author submits another person's entire work under their own name. The author pays for the writing of the document and present it as their own creation.
2.	Direct Plagiarism	This refers to the act of directly selecting sentences or paragraphs from someone else's work and incorporating them into one's own without proper attribution.
3.	Paraphrasing Plagiarism	It involves altering certain words or expressions from someone else's work without providing proper credits.
4.	Self-Plagiarism	It means utilizing one's own previously published material without giving credit.
5.	Patchwork Plagiarism	In this type of plagiarism writer's original work is intertwined with the plagiarized work.
6.	Source-based Plagiarism	It occurs when author mention a secondary source in their writing but acknowledge only the primary source from which that secondary source originates, or they may incorrectly format the citation and reference.
7.	Accidental Plagiarism	It occurs unintentionally when the writers duplicate the content without providing proper citations and acknowledgements. Lack of awareness regarding plagiarism could also contribute to this issue.

## 2.2 Plagiarism based on language:

There are basically two types of plagiarism on the bases of language:

1. Monolingual
2. Cross-lingual

**Monolingual Plagiarism** – Monolingual plagiarism refers to the act of replicating or closely mimicking the work of another author in the same language without giving proper credit. In contrast to other types of plagiarism that may involve translating content from one language to another, monolingual plagiarism entails extracting text, ideas, or data from a source in the same language and presenting it as one's own creation.

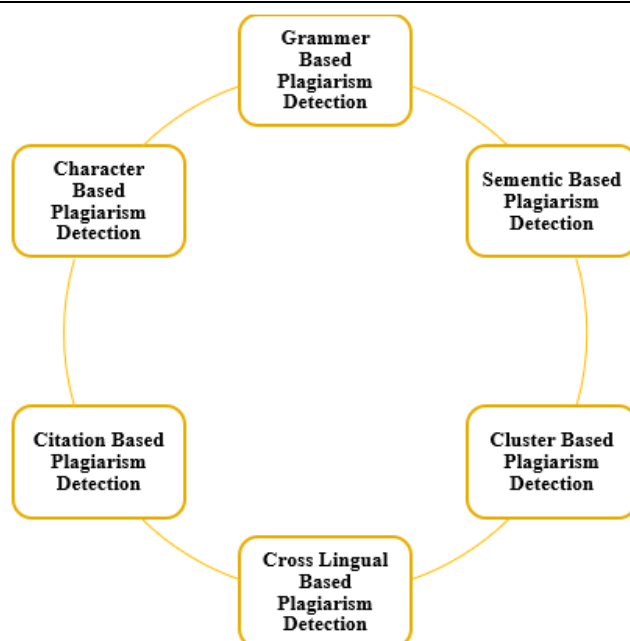
**Cross-lingual Plagiarism** – Cross-lingual plagiarism refers to the act of extracting information from a source in one language, converting it into another language, and presenting it as one's own creation without giving credit to the original author. Detecting this form of plagiarism can be quite difficult as it encompasses multiple languages, making it challenging for conventional text-matching algorithms to recognize the resemblances accurately.

## 3. PLAGIARISM DETECTION METHODS

There are mainly two types of Plagiarism detection methods:

1. External Plagiarism Detection Method
2. Intrinsic Plagiarism Detection Method

**External Plagiarism Detection Method** – Utilizing tools and techniques to compare a provided text with books, and websites is known as external plagiarism detection. The purpose of these methods is to determine whether any portion of the text has been plagiarized or closely resembles content that already exists elsewhere. The external plagiarism detection method consists of six general techniques which are represented in the figure below:



**Figure 1.** Six techniques of External plagiarism Detection Method

**Intrinsic Plagiarism Detection Method** – Intrinsic plagiarism detection method entails examining the inherent characteristics of a document in order to pinpoint discrepancies that could indicate plagiarism. In contrast to external plagiarism detection, which involves comparing a text with external sources, intrinsic techniques concentrate exclusively on the text's content. These techniques search for irregularities in writing style, word choice, sentence structure, and other linguistic elements that may suggest certain sections of the document were authored by distinct individuals. The Intrinsic plagiarism detection method consists of three general techniques which are represented in the figure below:



**Fig 2.** Three techniques of Intrinsic plagiarism Detection Method

#### 4. RESEARCH METHODOLOGY

This paper is based on extensive review of the literature. A extensive literature review involves a detailed and thorough analysis of existing research and academic work on a specific subject. To ensure comprehensive coverage of plagiarism detection, the researcher investigated essential keywords such as “anti-plagiarism software” as well as related terms like plagiarism detection, research integrity, academic work and scholarly research during their literature search. Various databases were utilized for this literature review, including Google Scholar, ResearchGate, Web of Science, Scopus etc. which included journals like Emerald Publication, ScienceDirect, Pathfinder, Elsevier inc. Additionally, the researcher also went through various websites like Wikipedia, Grammarly, Black Law dictionary etc. to gather relevant information for their research.

#### 5. ANTI- PLAGIARISM SOFTWARE

Anti-plagiarism software is a valuable tool that serves the purpose of identifying and preventing plagiarism in written content. Its functionality involves comparing submitted texts with extensive databases of academic papers, books, websites, and other sources to detect instances of copied content or similarities. These tools play a crucial role in upholding the originality and integrity of academic and professional writing by highlighting unoriginal text and providing comprehensive similarity reports. They offer various features, including text matching, paraphrase detection, and real-time checking, making them widely utilized in educational institutions, publishing, and content creation.

Prominent examples of such software include Turnitin, Grammarly, and Copyscape. In addition to preventing intentional and unintentional plagiarism, anti-plagiarism software also proves to be a time-saving resource for educators and reviewers, as it swiftly identifies potential issues with large volumes of text. Despite certain limitations such as the possibility of false positives and database constraints, it remains an indispensable tool for maintaining the highest standards of academic and professional writing.

List of Some Anti- Plagiarism Detection Tools					
Serial No.	Logo	Name	Year	Paid/Free	Website/URL
1.		Turnitin	1998	Paid	<a href="https://in.turnitin.com">https://in.turnitin.com</a>
2.		iThenticate	2004	Paid	<a href="https://www.ithenticate.com/">https://www.ithenticate.com/</a>
3.		Docoloc	2006	Paid	<a href="https://www.docoloc.de/">https://www.docoloc.de/</a>
4.		Plagiarism Checker X	2012	Free	<a href="https://plagiarismcheckerx.com/">https://plagiarismcheckerx.com/</a>
5.		Grammarly	2009	Free	<a href="https://app.grammarly.com/">https://app.grammarly.com/</a>
6.		Copyscape	2004	Free	<a href="https://www.copyscape.com/">https://www.copyscape.com/</a>
7.		Ginger	2007	Free	<a href="https://www.gingersoftware.com/">https://www.gingersoftware.com/</a>
8.		PlagScan Online	2009	Free trail up to 2000 words	<a href="https://www.plagscan.com/en/">https://www.plagscan.com/en/</a>
9.		Plagiarisma	2011	Free	<a href="https://plagiarisma.net/">https://plagiarisma.net/</a>
10.		Dupli Checker Plagiarism	2011	Free	<a href="https://www.duplichecker.com/">https://www.duplichecker.com/</a>
11.		CopyLeaks	2015	Free	<a href="https://copyleaks.com/">https://copyleaks.com/</a>
12.		Quetext	2016	Free	<a href="https://www.quetext.com/">https://www.quetext.com/</a>
13.		PaperRater	2009	Free	<a href="https://www.paperrater.com/">https://www.paperrater.com/</a>
14.		Plagium	2006	Free	<a href="https://www.plagium.com/">https://www.plagium.com/</a>
15.		Plagly	2017	Free	<a href="https://plagly.com/">https://plagly.com/</a>

### 5.1 Need of Anti-Plagiarism Software

The use of anti-plagiarism software in academia is of utmost importance in upholding academic integrity, ensuring authenticity, and improving the quality of education. These software tools, such as Turnitin and Grammarly, aid in identifying and preventing plagiarism by comparing students' submissions with vast databases of academic papers, books, and online content. This detection process encourages honest academic practices and proper citation, which are vital for students' intellectual growth and the credibility of educational institutions. Moreover, anti-plagiarism software simplifies the task of educators by automating the plagiarism detection process, enabling them to concentrate on teaching and offering constructive feedback. This not only saves time but also fosters a culture of originality and ethical scholarship, which are indispensable for the advancement of knowledge and academic excellence.

## 6. DIFFICULTIES ENCOUNTERED IN IDENTIFYING PLAGIARISM

Several research papers have been focusing on the topic of plagiarism, conducting extensive research on various types and techniques of plagiarism. Nowadays, most plagiarism detection tools are capable of:

1. Differentiate between plagiarism in source code or in-text documents, with or without citations.
2. Extract semantic or salient syntactic features
3. Detect plagiarism in both cross-lingual and monolingual documents.

However, despite the availability and effectiveness of these tools, they still fall short in addressing the unattended research challenges. In this era of technological advancements, new algorithms are being developed to tackle various problems, including the pervasive issue of plagiarism, particularly with the scientific community. The field of computer science can play a crucial role in addressing these challenges by leveraging advancements in information and communication technology (ICT). Some of the key challenges that need to be addressed include:

1. The absence of a proof for the correctness and completeness of scientific works, whether they are in the form of text documents or source code
2. The lack of a highly accurate framework for detecting plagiarism that can identify specific text segments for both intrinsic and extrinsic plagiarism.
3. The difficulty in developing plagiarism checking systems that do not rely on external references and yet maintain high accuracy
4. The need of a comprehensive system that combines the works of all authors and references to their works in single repository for scientific works.

## 7. ROLE OF ANTI-PLAGIARISM SOFTWARE IN ACADEMIA

Anti-plagiarism software is essential in academia as it promotes originality, maintains academic integrity, and supports educational processes. Tools like Turnitin and Grammarly compare student submissions with extensive databases of academic materials to detect similarities and potential instances of plagiarism. This ensures that students and researchers produce authentic work, thus upholding the credibility of academic qualifications and institutional reputation. For educators, anti-plagiarism software streamlines the detection process, allowing them to focus on providing valuable feedback and enhancing student learning. The detailed reports generated by these tools not only identify unoriginal content but also educate students on proper citation practices and the significance of original writing. Moreover, these tools help maintain research integrity by screening submissions for scholarly journals, preventing the spread of plagiarized research and preserving the quality of academic literature. By providing concrete evidence of plagiarism, anti-plagiarism software also supports institutional policies on academic honesty, reinforcing the commitment to integrity. Advanced features like real-time feedback and cross-lingual detection further improve the effectiveness of these tools in diverse academic environments. Nevertheless, anti-plagiarism software is a crucial element in creating a culture of academic excellence and integrity when modern educational institutions.

### 7.1 Role of Librarian in Plagiarism Detection

The library, being the central hub for research in the university, is considered by librarians as the ideal place to take a leading role in preventing plagiarism and promoting academic integrity on campus. However, the methods employed by librarians in promoting academic integrity and deterring plagiarism have significantly evolved over the years. In recent times, librarians have positioned themselves as equal partners in educating students about plagiarism and upholding academic integrity on campus. As a result, librarians now have a unique opportunity to collaborate with faculty members in re-evaluating assignments and instructional sessions, as well as providing them with information on ethical information usage. This shift from a reactive to proactive role can be attributed to the combination of information literacy standards and the growing recognition of an academic integrity crisis in higher education. Additionally, the availability of services like Turnitin has relieved librarians from the burden of verifying matching text, enabling them



to adapt a more proactive approach in deterring plagiarism and promoting academic integrity. Librarians employ various instructional strategies to foster academic integrity and discourage plagiarism, including setting an ethical example in information usage, facilitating discussions on plagiarism and academic integrity, teaching students research skills and proper citation methods, creating citation style guides and tutorials (both in print and online), providing links to reputable plagiarism detection and prevention websites, and ensuring that all resources for studying information ethics are readily access to students.

## **8. ACADEMIC PLAGIARISM AND PENALTIES RELATED TO ACADEMIC PLAGIARISM**

Academic institutions impose various penalties for plagiarism, including failing grades, academic probation, suspension, or expulsion. In severe cases, individuals may face degree revocation and reputational damage. These measures are implemented to maintain academic integrity and ensure the credibility of educational programs. Plagiarism undermines the educational process and devalues the hard work of honest students. Therefore, universities and colleges have strict policies and utilize tools like Turnitin to detect and deter plagiarism, thus promoting a fair and honest academic environment.

### **8.1 University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018**

The University Grants Commission has implemented rules that incorporate a tiered penalty system for plagiarism. The UGC's new regulations for 2018, known as the "University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018," place a strong emphasis on upholding integrity and preventing misconduct, particularly plagiarism, in academic writing by students, faculty, researchers, and staff. These regulations aim to establish educational programs and training to support ethical research practices, thesis writing, dissertation work, and the promotion of academic honesty, while discouraging plagiarism. Additionally, the regulations outline procedures for detecting and preventing plagiarism, as well as for penalizing individuals within Higher Educational Institutions who engage in such misconduct. These regulations came into effect on July 23, 2018, and are applicable to all students, faculty, researchers, and staff at Higher Educational Institutions in India.

#### **8.1.1 Definitions under Regulations**

"Academic Integrity" is the intellectual honesty in proposing, performing and reporting any activity, which leads to the creation of intellectual Property;

"Author" includes a student or a faculty or a researcher or staff of Higher Educational Institution (HEI) who claims to be the creator of the work under consideration;

"Faculty" refers to a person who is teaching and/or guiding students enrolled in a HEI in any capacity whatsoever i.e. regular, ad-hoc, guest, temporary, visiting etc;

"Higher Educational Institution (HEI)" means a university recognized under section 2(f) of the UGC Act, 1956 or an institution deemed to be university under section 3 of the UGC Act, 1956 or an affiliating college / institution or a constituent unit of a university;

"Information" includes data, message, text, images, sound, voice, codes, computer programs, software and databases or microfilm or computer-generated microfiche;

"Plagiarism" means the practice of taking someone else's work or idea and passing them as one's own.

"Programme" means a programme of study leading to the award of a masters and research level degree;

"Researcher" refers to a person conducting academic / scientific research in HEIs;

"Staff" refers to all non-teaching staff working in HEIs in any capacity whatsoever i.e. regular, temporary, contractual, outsourced etc.;

"Student" means a person duly admitted and pursuing a programme of study including a research programme in any mode of study (full time or part-time or distance mode);

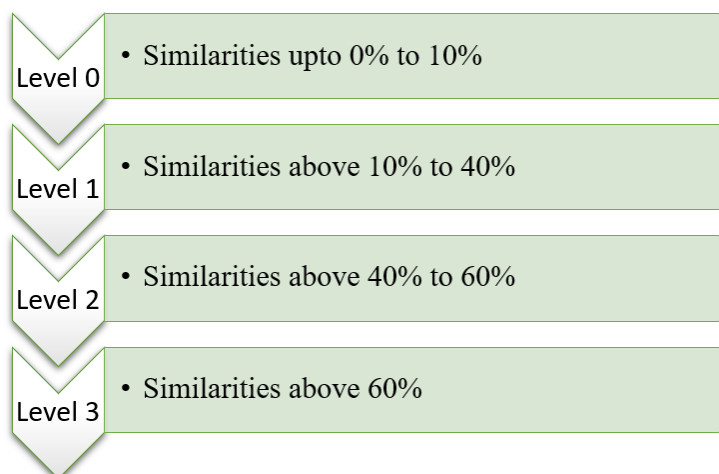
"University" means a university established or incorporated by or under a Central Act, a Provincial Act or a State Act, and includes an institution deemed to be university under section 3 of the UGC Act, 1956;

#### **8.1.2 Similarity checks for exclusion from Plagiarism**

The similarity checks for plagiarism shall exclude the following:

1. All quoted work reproduced with all necessary permission and/or attribution.
2. All references, bibliography, table of content, preface and acknowledgements.
3. All generic terms, laws, standard symbols and standards equations.

## 8.2 Level of Plagiarism



**Fig 3.** Level of Plagiarism

### 8.2.1 Penalties in case of Plagiarism in submission of thesis and dissertations

**1. Level 0: Similarities upto 10%** - Minor Similarities, no penalty.

**2. Level 1: Similarities above 10% to 40%** - Such student shall be asked to submit a revised script within a stipulated time period not exceeding 6 months.

**3. Level 2: Similarities above 40% to 60%** - Such student shall be debarred from submitting a revised script for a period of one year.

**4. Level 3: Similarities above 60%** - Such student registration for that programme shall be cancelled.

**Note 1: Penalty on repeated plagiarism** – Such student shall be punished for the plagiarism of one level higher than the previous level committed by him/her. In case where plagiarism of highest level is committed then the punishment for the same shall be operative.

**Note 2: Penalty in case where the degree/credit has already has obtained** – If plagiarism is proved on a date later than the date of award of degree or credit as the case may be then his/her degree or credit shall be put in abeyance for a period recommended by the IAIP and approved by the Head of the Institution.

### 8.2.2 Penalties in case of Plagiarism in academic and research publications

**1. Level 0: Similarities upto 10%** - Minor Similarities, no penalty.

**2. Level 1: Similarities above 10% to 40%**

i) Shall be asked to withdraw manuscript.

**3. Level 2: Similarities above 40% to 60%**

i) Shall be asked to withdraw manuscript.

ii) Shall be denied a right to one annual increment.

iii) Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Students/scholar for a period of two years.

**4. Level 3: Similarities above 60%**

i) Shall be asked to withdraw manuscript.

ii) Shall be denied a right to two successive annual increments.

iii) Shall not be allowed to be a supervisor to any new Master's, M.Phil., Ph.D. Students/scholar for a period of three years.

**Note 1: Penalty on repeated plagiarism** – Shall be asked to withdraw manuscript and shall be punished for the plagiarism of one level higher than the lower level committed by him/her. In case where plagiarism of highest level is committed then the punishment for the same shall be operative. In case level 3 offence is repeated then the disciplinary action including suspension/termination as per service rules shall be taken by the HEI.

**Note 2: Penalty in case where the degree/credit has already has obtained** – If plagiarism is proved on a date later than the date of benefit or credit obtained as the case may be then his/her benefit or credit shall be put in abeyance for a period recommended by the IAIP and approved by the Head of the Institution.

## 9. CONCLUSION

In conclusion, the use of anti-plagiarism software is essential within the academic sphere as it plays a critical role in maintaining the integrity and standard of education. Tools like Turnitin and Grammarly are highly effective in identifying and preventing plagiarism by cross-referencing academic submissions with extensive databases of existing content, thereby ensuring that students submit original work. This promotes a culture of honesty and ethical academic practices, which are fundamental for the progress of knowledge. Moreover, by automating the plagiarism detection process, these software tools help educators save valuable time, enabling them to concentrate on teaching and providing constructive feedback. In essence, anti-plagiarism software contributes to academic excellence, intellectual growth, and the reputation of educational institutions, establishing itself as an indispensable element of contemporary academia.

## 10. RECOMMENDATIONS

- 1) It is essential for every university to have an anti-plagiarism policy that is readily available on the university website. Additionally, it is advisable to provide clear instructions and guidelines on the website to educate visitors about the ethical and legal implications of plagiarism.
- 2) University supervisors must ensure that scholars are well-informed about the consequences of plagiarism. There is a necessity to raise awareness among supervisors to effectively carry out this task. By being knowledgeable about plagiarism, they can effectively guide their research scholars in avoiding plagiarism.
- 3) Organizing seminars and conferences annually is essential to raise awareness about plagiarism among research scholars.
- 4) Many research scholars lack the knowledge of how to use anti-plagiarism software, therefore, it is crucial to provide hand-on training to help them learn how to utilize such software effectively.

## 11. REFERENCES

- [1] Adamu, R., & Dan-Iya, S. M. (2020). Awareness and utilization of anti-plagiarism detection software among academic staff of Yusuf Maitama Sule University. *World Research Journal of Library and Information Science*, 4(2), 9–21.
- [2] Ali, A. M. E. T., Abdulla, H. M. D., & Snasel, V. (2011). Overview and comparison of plagiarism detection tools. *Dateso*, 161–172. [https://www.researchgate.net/profile/Nirmala-Svsg/post/Is\\_there\\_a\\_difference\\_in\\_results\\_between\\_plagiarism\\_checker\\_program\\_Turnitin\\_and\\_Plug\\_Scan/attachment/5c1f2d31cfe4a764550af6cb/AS%3A706889746747392%401545547057426/download/poster22.pdf](https://www.researchgate.net/profile/Nirmala-Svsg/post/Is_there_a_difference_in_results_between_plagiarism_checker_program_Turnitin_and_Plug_Scan/attachment/5c1f2d31cfe4a764550af6cb/AS%3A706889746747392%401545547057426/download/poster22.pdf)
- [3] Awasthi, S. (2019). Plagiarism and academic misconduct: A systematic review. *DESIDOC Journal of Library & Information Technology*, 39(2). [https://www.researchgate.net/profile/Shipra-Awasthi/publication/332568987\\_Plagiarism\\_and\\_Academic\\_Misconduct\\_A\\_Systematic\\_Review/links/602d249c92851c4ed57abb5e/Plagiarism-and-Academic-Misconduct-A-Systematic-Review.pdf](https://www.researchgate.net/profile/Shipra-Awasthi/publication/332568987_Plagiarism_and_Academic_Misconduct_A_Systematic_Review/links/602d249c92851c4ed57abb5e/Plagiarism-and-Academic-Misconduct-A-Systematic-Review.pdf)
- [4] Chowdhury, H. (2020). Plagiarism: Concept and Tools for Detection. *RAY: International Journal of Multidisciplinary Studies*, 5(2), 9–22.
- [5] Fishman, T. & Clemson University. (2009). “We know it when we see it” is not good enough: toward a standard definition of plagiarism that transcends theft, fraud, and copyright. In 4th Asia Pacific Conference on Educational Integrity (4APCEI) (pp. 1–5) [Conference-proceeding]. <https://www.bmartin.cc/pubs/09-4apcei/4apcei-Fishman.pdf>
- [6] Foltýnek, T., Dlabolová, D., Anohina-Naumeca, A., Razi, S., Kravjar, J., Kamzola, L., Guerrero-Dib, J., Çelik, Ö., & Weber-Wulff, D. (2020). Testing of support tools for plagiarism detection. *International Journal of Educational Technology in Higher Education*, 17(1), 46. <https://doi.org/10.1186/s41239-020-00192-4>
- [7] Hussain, I., Nath, H., Saikia, D., & Borah, N. (2023). Awareness on Plagiarism Among Research Scholars of Selected University of Assam: An Investigative Study. *HIV Nursing*, 23(2), 833–839.
- [8] Khaled, F., & Al-Tamimi, M. S. H. (2021). Plagiarism detection methods and tools: An overview. *Iraqi Journal of Science*, 2771–2783.
- [9] Mansoor, M. N., & Al-Tamimi, M. S. (2022). Computer-based plagiarism detection techniques: A comparative study. *International Journal of Nonlinear Analysis and Applications*, 13(1), 3599–3611.
- [10] Naik, R. R., Landge, M. B., & Mahender, C. N. (2015). A review on plagiarism detection tools. *International Journal of Computer Applications*, 125(11). <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=11fe048dc955307c2924850ff91e6f223238b3ff>
- [11] plagiarism. (2024a). In Merriam-Webster Dictionary. <https://www.merriam-webster.com/dictionary/plagiarism> (accessed on 24.05.2024).



- [12] plagiarism. (2024b). <https://dictionary.cambridge.org/dictionary/english/plagiarism> (accessed on 24.05.2024).
- [13] plagiarism noun - Definition, pictures, pronunciation and usage notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com. (n.d.). <https://www.oxfordlearnersdictionaries.com/definition/english/plagiarism?q=plagiarism> (accessed on 22.05.2024).
- [14] The Editors of Encyclopaedia Britannica. (2024, May 3). Plagiarism | Academic integrity, copyright infringement, Self-Plagiarism. Encyclopedia Britannica. <https://www.britannica.com/topic/plagiarism> (accessed on 27.05.2024).
- [15] The Law Dictionary. (n.d.). You searched for plagiarism - The Law Dictionary. <https://thelawdictionary.org/?s=plagiarism> (accessed on 14.05.2024).
- [16] The perfectly acceptable practice of literary theft: plagiarism, copyright, and the eighteenth century. (n.d.). Writing-World.com. <https://www.writing-world.com/rights/lynch.shtml> (accessed on 21.05.2024).
- [17] Ugbede, E. O., Ikani, V., Attah, A. H., & El-Kalash, K. I. (n.d.). APPRAISAL OF AVAILABILITY AND UTILIZATION OF ANTI-PLAGIARISM SOFTWARE BY ACADEMIC STAFF AMONG THE PUBLIC COLLEGES OF EDUCATION IN NORTH-CENTRAL NIGERIA. Retrieved May 21, 2024, from [https://www.globalacademicgroup.com/journals/the%20nigerian%20academic%20forum/V28N1P34\\_2021\\_NAF.pdf](https://www.globalacademicgroup.com/journals/the%20nigerian%20academic%20forum/V28N1P34_2021_NAF.pdf)
- [18] Washaya, S. (2022). Plagiarism and its effects on the quality, credibility and integrity of student research at GZU. <http://ir.gzu.ac.zw:8080/jspui/handle/123456789/635>
- [19] Wikipedia contributors. (2024a, March 22). Content similarity detection. Wikipedia. [http://en.wikipedia.org/wiki/Plagiarism\\_detection](http://en.wikipedia.org/wiki/Plagiarism_detection) (accessed on 23.05.2024).
- [20] Wikipedia contributors. (2024b, May 20). Plagiarism. Wikipedia. <https://en.wikipedia.org/wiki/Plagiarism> (accessed on 12.05.2024).
- [21] Zimba, O., & Gasparyan, A. (2021). Plagiarism detection and prevention: A primer for researchers. *Reumatologia/Rheumatology*, 59(3), 132–137.
- [22] Živković, D. (2015). Anti-plagiarism software: Usage, effectiveness and issues. *Synthesis 2015-International Scientific Conference of IT and Business-Related Research*, 119–122. <https://portal.sinteza.singidunum.ac.rs/paper/248>