A Comparative Study of Plagiarism Detective Software (PDS) Tools and Techniques

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Abstracts: *The Comparative Study of Plagiarism Detective Software (PDS) Tools and Techniques we compared eight tools for detecting plagiarism. The criteria we used for Check against Web, own database, Cross Check other students work, Check supported languages, extendibility presentation of results, usability, historical comparison, submission or file based rating, local or web-based and open source.*
Keywords: Plagiarism; Plagiarism Detective Software; PDS

Introduction:-

Plagiarism is the process of locating instances of plagiarism within a work or document. The widespread use of computers and the advent of the internet have made it easier to plagiarize the work of others. Most cases of plagiarism are found in academia, where documents are typically essays or reports. However, plagiarism can be found in virtually any field, including scientific papers, art designs, and source code. Badke, W. (2007).

Detection of plagiarism can be either manual or software assisted. Manual detection requires substantial effort and excellent memory, and is impractical in cases where too many documents must be compared, or original documents are not available for comparison. 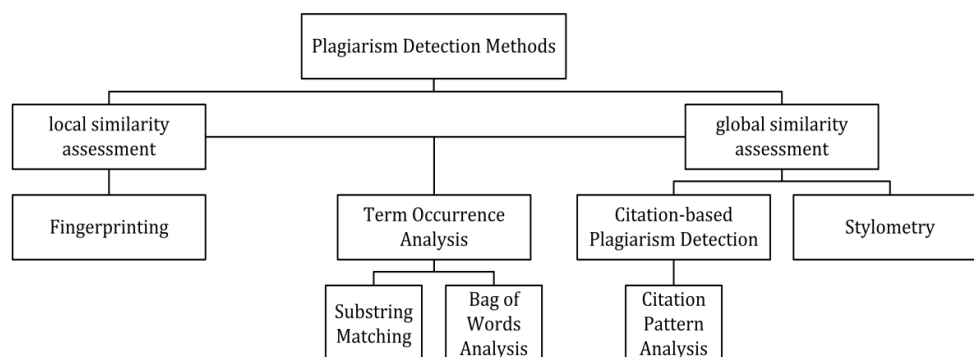Software assisted detection allows vast collections of documents to be compared to each other, making successful detection much more likely.

The practice of plagiarizing by use of sufficient word substitutions to elude detection software is known as regretting.

Structure of Plagiarism Detection Systems (PDS):-

Plagiarism Deection Methods: Academic dishonesty is one of the critical meausres to evaluate research papers, theses and students assignments. Therefore, plagiarism detection is an rea of concern for many researchers especially in the academic field. Other fields such as plagiarized news, magzine articles and web resources are also area of concern. In that regard, many detection techniques and tools have been developed to address the problem of palgiarism.

Talab, R. (2004)

- **Local Assessment**: Different types of texts require different techniques to detect plagiarism.

Documents to be retrieved, searched and thence judged

according to the existence of plagiarism.

- o **Finger Printing**: Existence of plagiarism can be classified into two types, Programming source code documents and natural language documents.
- o **Global Assessment**:The specific structure which is language dependent. The word language here refers to one of the programming languages such as FORTRAN, PASCAL, C, JAVA amd many more.
- ▪ **Citation Based :** Citing is one of the effective ways to avoid plagiarism. Following the document formatting guidelines (i.e. APA, MLA, Chicago, etc.) used by your educational institution or the institution that issued the research request. This usually entails the addition of the author and the date of the publication or similar information. Citing is really that simple. Not citing properly can constitute plagiarism.
- o **Stylometry   :** Citing a stylometry can be different that citing paraphrased material. This practice usually involves the addition of a page number, or a paragraph number in the case of web content.
- • **Term Occurrence Analysis**: There are two level of consider Substring Matching and Bag of words Analysis.

Plagiarism Detective Software (PDS)

- ♦ **Glatt Plagiarism Screening Programme**: - Its uses the fingerprints method. It exploits the uniqueness of each individual's linguistic patterns. Cloze techniques. It eliminates every fifth word of a student's paper and replaces the words with a blank which the student is asked to fill in. The number of correct responses is one of the

factors considered in the production of a final probability score. (http://www.plagiarism.com/)

- ♦ **Turnitin.com**:- The technology used is called document source analysis. It uses a set of algorithms to make a digital fingerprint of any text document, and them compares it against Internet sources and against an in-house database. Results are compiled into an originality report which colour codes and underlines text passages showing similarities to other sources, and gives the URLs of the sources. (http://www.turnitin.com/en_us/)
- ♦ **EVE2**:- It performs searches to find Internet sites with similarities to the submitted text. Produces report underlining text passages possibility plagiarised. (http://www.canexus.com/)
- ♦ **Plagiserve**: - A system which checks the originality of reports by comparing students work with its own database and the internet. It provides an originality report that colour codes possibly plagiarised passages and provides direct links to the original source.(http://www.plagiserve.com/index.html)
- ♦ **Moss**: - It is an acronym for Measure of Software Similarity an internal system at Berkeley developed specifically for computer Programming fields. (http://moss.stanford.edu/general/scripts.html)
- ♦ **SIM**: - Another computer code plagiarism detector. SIM tests lexical similarity in a number of languages including java, Pascal, lisp, and Miranda. IT detects potentially duplicated code fragments in software projects.(http://www.similix.com/)
- ♦ **JPlag**: - System that finds similarities among multiple sets f source code files. Designed for

detecting plagiarism in computer programming but can support plain text as well satisfactory results.(https://jplag.ipd.kit.edu/)

♦ **Viper**: - The free plagiarism detection software from scanmyessy.com is great for both students and lecturers. It provides quick, accurate scans for free. It will provide comprehensive report, which compares potential areas of plagiarism against online sources and it will be able to see any instances of plagiarism for ourselves.(http://www.scanmyessay.com/)

How Effective work: Plagiarism Detective Software (PDS)

The first thing to note about plagiarism detection software is that much of it is ephemeral. The available software tends to come and go: New software and website surface and then disappear. It is difficult to predict how many stable products will emerge.

Batlett, T. (2009, March 20) on the whole, plagiarism detection software can make a useful contribution to minimising plagiarism. The visible use of such software is a strong deterrent to students who are considering plagiarising material. Blum, S. (2009) It should be recognised, however, that the software provides no magical answers. Gallant, T. (2008) some is expensive, most is time consuming. No software seems to discriminate between quotations which are properly cited and those which are unacknowledged. What the software detects and notifies is duplications. So reports issued by plagiarism software alert the user to what may appear to be

Comparison of PDS

plagiarised material that is in fact appropriately referenced. Manual checking and human judgement are still needed.

Howard, R. A. (2009, March) Some plagiarism detection schemes require students to submit their work electronically directly to the software company. The company then sends a report on submitted student work to the university. It is important to note that assignment formatting may be lost during the detection process. As a consequence, students must also submit either an electronic copy or hard copy of their work to the university as well raising the question of how it can be ensured the two versions are identical. If students submit electronic copy, lecturers have to print out the assignment time consuming operations in cases where lecturers are assessing large number of students.

Jaschik, S. (2009, March 13) some software programs concentrate n comparing the material submitted within a defined group of students; others compare the material submitted with either an in house database or the web, or both. A number of software plagiarism detection companies offer as part to their service the archiving of student essays, which in turn gives lecturers a specialised in house database and in some cases, the possibility of a secure web environment which can be accessed by students for purposes related to group assessment and peer review.

Young, J. (2008) it is worth remembering, of course, that traditional plagiarism text copied from books rather than downloaded from the web may well persist, but cannot be electronically detected.

	Glatt (GPSP)	Turniti n.com	EV E2	Plagi Seve	Mo ss	Sim	JPl ag	Viper
Check against Web	X	Y	Y	Y	X	X	X	Y
Check against own database	X	Y	X	Y	Y	Y	Y	Y
Cross Check other students work	X	Y	X	Y	X	Y	Y	Y
Purchase	Y	X	Y	X	X	X	X	X

Subscription	Y	Y	X	Y	Y	X	Y	X
Free	X	X	X	Y	Y	Y	Y	Y
Check Ordinary Text	Y	Y	Y	Y	X	X	Y	Y
Check computer Programming	X	X	X	X	Y	Y	Y	X
Students site test	Y	X	X	X	X	X	X	X
Designed for use by students	X	Y	X	X	X	X	X	X
Designed for use by Teachers	Y	Y	Y	Y	Y	Y	Y	Y
Instant Response	X	X	Y	X	X	Y	X	Y

Way to Avoid Plagiarism

♦ **Paraphrase:** - which we are finding information that will be perfect our research paper but we should read and put into our own words. Make sure that we do not copy verbatim more than two words in a row from the text we have found. If we do use more than two words together we should hat to use quotation marks. We will get into quoting properly soon.

♦ **Cite:** - Citing is one of the effective ways to avoid plagiarism. Following the document formatting guidelines (i.e. APA, MLA, Chicago, etc.) used by your educational institution or the institution that issued the research request. This usually entails the addition of the author and the date of the publication or similar information. Citing is really that simple. Not citing properly can constitute plagiarism.

♦ **Quoting:** - When quoting a source, use the quote exactly the way it appears. No one wants to be misquoted. Most institutions of higher learning frown on "Block quotes" or quotes of 40 words or more. A scholar should be able to effectively paraphrase most material. This process takes time, but the effort pays off! Quoting must be done correctly to avoid plagiarism allegations.

♦ **Citing Quotes:** - Citing a quote can be different that citing paraphrased material. This practice usually involves the addition of a page number, or a paragraph number in the case of web content.

♦ **Citing our own material:** - If some of the material we are using for our research paper was used by us in our current class, previous one, or anywhere else we must cite ourselves. Tear the text the same as we would if someone else written it. It may sound odd, but using material we have used before is called self plagiarism, and it is not acceptable.

♦ **Referencing:** - One of the most important ways to avoid plagiarism is including a reference page or page of works cited at the end of our research paper. Rampell, C. (2008).

Conclusion

Ultimately, the issues of plagiarism are not a student issue but a teacher one. Information guider can assist teachers in considering the nature of assignments and help to structure tasks that require critical thinking. Following an inquiry research model focused around essential questions can guide this process. Students need to understand the role of research and information gathering and receive direct instruction into the nature of using and citing the work of others and its philosophical, culturally grounded foundation. They also need input in their education and need to value their role as agents in the process of learning about the world around them. This new paradigm would make plagiarism annexes carry and even pedestrian to the inspired, self directed 21st century learner.

Reference:

Badke, W. (2007). *Give plagiarism the weight it deserves*. Retrieved January 27, 2016, from http://search.ebscohost.com.proxybz.lib.montana.edu

Batlett, T. (2009, March 20). *Cheating Goes Global as Essay Mills Multiply, Chronicle of Higher Education*. Retrieved January 27th, 2016, from http://www.Academicsearchpremierdatabase.com

Blum, S. (2009). *Academic Integrity and Student Plagiarism: a Question of Education, Not Ethics. Chronicle of Higher Education, 55(24).* Retrieved March 27th, 2015, from http://www.search.ebscohost.com.proxybz.lib.montana.edu

Gallant, T. (2008). *Twenty-First Century Forces Shaping Academic Integrity. ASHE Higher Education Report, 33(5), 65-78.* Retrieved October 5th, 2015, from http://www.search.ebscohost.com.proxybz.lib.montana.edu

Howard, R. a. (2009, March). *Plagiarism in the Internet age.* Retrieved October 10, 2015, from http://www.Academicsearchpremierdatabase.com

Jaschik, S. (2009, March 13). *False Positives on Plagiarism inside Higher Education.* Retrieved Feb 4, 2015, from Chronicle of Higher Education, 54(33): http://www.insidehigh-ered.com/news/2009/03/13/detect

Rampell, C. (2008). *Journals may soon use Anti Plagiarism Software on Their authors.* Retrieved Nov 21, 2015, from Chronicle of Higher Education, 54 (33): http://www.search.ebscohost.com.proxybz.lib.montana.edu

Talab, R. (2004). *A Student Online Plagiarism Guide: Detection and Prevention Resources.* Retrieved Nov 23, 2015, from TechTrends:Liking Research and Practice to improve Learning, 48 (6) 15-18.: http://search.eb- scohost.com.proxybz.lib.montana.edu

Young, J. (2008). *Judge Rules Plagirasm-Detection Tools Falls under 'Fair Use'.* Retrieved January 24, 2016, from Chronicle of Higher Education, 54 (33): http://search.eb-scohost.com.proxybz.lib.montana.edu