RESEARCH PAPER

Know the Unknown Crime Plagiarism: An Approach to Improve Academic Integrity (A case study of IBB University, Lapai)

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ABSTRACT

In recent times, the easy access to the web documents, large databases, and telecommunication in general, has turned plagiarism into a serious problem among the students and researchers in educational institutions. People always turns to internet for readymade solutions for their assignments and research projects with or without knowing they are committing plagiarism. The present study investigates the level of awareness and perceptions on plagiarism among students of IBB University, Lapai, Niger state, and some twelve (12) concepts of plagiarism were considered in this study. In this research a questionnaire survey was used for the collection of primary data. In total, two hundred and fifty (250) undergraduate students from 100 to 400 levels in five different departments were randomly selected to participate in this study. After collection of data, the frequency count table was used to present the data which was analyzed using a technique called Relative Importance Index (RII) to determine which among the twelve instances of plagiarism considered occurs most frequently, and the result was presented graphically. The analysis revealed that the most frequently occurred instances of plagiarism are "adapting other people's ideas", "substituting words/sentences" and "summarization". Based on the outcomes marked out in this study, recommendations were given on how plagiarism can be combated in the University.

Keywords: Plagiarism, Researches, Crime, Documents and Data.

INTRODUCTION

The issue of plagiarism is well-known for many years and it has been a challenge for universities staffs and all other institutions as well. It has plagued academia where students and researchers involve in the electronic crimes and intellectual thefts of stealing other researcher's work and claim the ownership.

There are many definitions of what constitutes plagiarism. According to (Rabiu et al., 2014) plagiarism occurs when the word, ideas, diagrams, designs, photographs, maps, graphs, verbal communication of information, derived equations, computer programs, illustrations, tables and primary data of anothe, is passed off as your own, unless the source is acknowledged and properly documented. This definition applies regardless of which medium the source material is published, including any material copied from soft copy publications (i.e. Internet, email attachments, e-journals, etc.) and hard copy publications (such as textbooks, these, journals etc.). The figure 1 shows the diagram definition of plagiarism (Almquist, 2011).

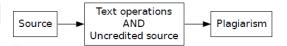


Figure 1. Diagram showing definition of plagiarism

Although the most common type of plagiarism is the document text in which the plagiarized copy is made by copying some parts or all of the original copy, plagiarism can also be found in many aspects which includes the program source code and technical drawings or figures in scientific documents (I. Rabiu et al, 2014). The easy access to the web documents, large databases, and telecommunication in general, has turned plagiarism into a serious problem in educational institutions. Students always turned

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to the internet for readymade solutions for their assignments and research projects.

Before the era of internet, the act of plagiarizing was tedious because students would have to copy manually from the source (such as text books, encyclopedia, newspaper etc.) to their plagiarized documents. With the technology development, the hard labor of copying manually is now simplified and replaced by two simple commands "ctrl+C" and "ctrl+V", the famous "copy and paste" (Diana., 2011).

The Internet has provided extensive opportunities of plagiarism because of its easy access to an enormous amount of knowledge and learning materials. This provides an opportunity to the students to easy cut paste, download and plagiarize information (Stebelman 1998; Evans 2000; Galus 2002).

Dawson and Overfield (2006) determined that students were aware that plagiarism is bad but they were not clear of what constitutes plagiarism and how to avoid it. Students required that teachers should also observe the rules to avoid plagiarism and they should be consistently reminded of awareness about plagiarism to enforce the university resolve to control this academic sin. Students also desire the knowledge and practice of good referencing, especially of Internet resources to avoid to be labeled as cheating, which is considered as a criminal offense (Adebayo, 2011).

From the above discussion, it can be implied that plagiarism is a behavioral construct and a moral offense against the body of knowledge. Students always turned to the internet for readymade solutions for their assignments and research projects with or without knowing what is considered right or wrong. Therefore, students' awareness regarding what constitutes plagiarism, the plagiarism acceptability level and university academic integrity should be in the spotlight.

On that node, many academic institutions are continuously creating awareness in their campuses for the students to know about everything that constitute plagiarism and highlighting the rules of citations and references because this alone can go a long way to minimize plagiarism among their students and researchers. Some researchers are of the view that awareness exercises be given high priority as they observe that the impact of very low level

of awareness of academic writing amongst the students was principally responsible for their acts of plagiarism from their research work (Orim, et al., 2012).

Instances of Plagiarism

Plagiarism is moral offense against the body of knowledge and it takes different forms ranging from direct copy-pasting to modifying the source document. Direct copy-paste plagiarism or exact copy plagiarism is an act whereby the plagiarist takes the whole or some part of the figure directly, with little or no changes without citing the original figure. A modified type of plagiarism is the one in which the plagiarist tries to hide the practice by way of rewording the text in the figure or restructuring of the shape of the source figures. (Salha M. A. et al., 2012) presented a comprehensive taxonomy on the instances of plagiarism. He divides plagiarism in two types: literal and intelligent plagiarism. The instances of plagiarism are presented in figure 2.

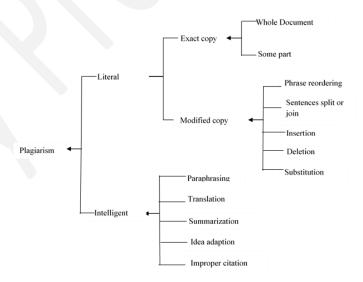


Figure 2. Taxonomy of Plagiarism

Literal plagiarism: this is the form of plagiarism in which the plagiarist copies directly from the source document without much alteration on the copied material. The plagiarists don't take much time to hide their criminal act. In most cases, they copy the original document verbatim with a slight or no modifications. The literal plagiarist engages in this nasty act by copying verbatim from the source in two ways: either by copying the whole document or some part of the document. He may also decide to slightly hide the plagiarism by modifying the

original text such as phrase reordering, sentence split or join, insertion, deletion and substitution.

Intelligent plagiarism: the intelligent plagiarist takes time to hide the dubious act by changing the original document intelligently. Intelligent plagiarism includes paraphrasing, translating, summarizing, idea adoption and improper citation.

This research considers twelve different instances of plagiarism that are more common and were listed as follows:

- Copy-pasting the whole document: or verbatim (word-for-word) plagiarism, in which the textual contents are copied from one or multiple sources.
- Copy-pasting some part of the document verbatim.
- Phrase Reorder: this involves changing the order of words in the source documents, keeping the same contents.
- Sentence Split or join: The source document can be modified by taking only some sections from a document to plagiarized one in order to make it original, or adding some section to the plagiarized one in order to make it more original.
- Insertion: This is one of the methods which plagiarists may apply to the plagiarize a document by adding some words or sentences to the source document in order to steal its ownership
- Deletion: This involves deleting some words or sentences from the source document in order to steal its ownership.
- Substitution: This involves adding or deleting some words or sentences from the source document in order to steal its ownership.
- Paraphrasing plagiarism: changing grammar, using synonyms of words, reordering sentences in original work, or restating same contents in different semantics.
- Translated Plagiarism: also known as cross-language plagiarism, in which the contents are translated and used without reference to original work.
- Adapting similar idea: this involves using similar topic or ideas which are not common knowledge

• Improper citation: the plagiarist copies the source document without properlyacknoleding the source document.

METHODOLOGY

This section describes the techniques and procedures used in conducting the research and accumulating the data for the study. It comprises of the description of the population of the study, sampling techniques, sample size, sources of data, method of data collection and method of data analysis and testing hypothesis.

The population used in this study was taken from five different faculties in the university, namely: Faculty of Natural Science, Language and Management Communication. Science. Education and Art and finally Applied Technology. Two hundred and fifty (250) undergraduate students were approached in five departments from each of those faculties selected, which comprise of Mathematics and computer science, English Language, political science and Geology departments. The participants were requested to respond to questions on various instances of plagiarism. Twelve (12) different instances were considered in the questionnaire which received different responses from students. On each of the 12 instances or plagiarism patterns, student participants were asked to indicate the level to which they perceived it to be plagiarisms which are based on five points weighting scales, namely: 5 for Strongly agree, 4 for Agree, 3 for Undecided, 2 for Disagree, 1 for Strongly disagree. After collection of data, the frequency count table was used to present the data. In order to empirically ascertain the level of awareness on the concept of the plagiarism among the student of the university, the Relative Importance Index (RII) technique was used to analyze the data received so as to determine which among the twelve instances of plagiarism that occurs most frequently, and the result was presented graphically. According to Somiah, et al., (2015), Relative Importance Index is a type of relative importance analyses. In the calculation of the Relative Importance Index (RII), the formula below was used

RII = Sum of weights $(W1 + W2 + W3 + \dots + Wn) / A \times N$

Where W = weights given to each level of acceptability by the respondents and it ranges from 1 to 5where '1' is less significant and '5' is extremely significant. A = highest weight which is 5 in this case, and N = total number of respondents, which is 250.

RESULTS AND DISCUSSION

A total of two hundred and fifty (250) questionnaires were administered to the students in five different departments which comprise of Mathematics and computer science, English Language, political science and Geology departments. After the questionnaires were filled by the respondents and collected back, they were screened and sorted out. Data analysis revealed that some of these instances were agreed by the students to be a plagiarism while some are not depending on their understanding. Table 1 shows the responses gotten from the students on the concepts on plagiarism based on their ideas.

 Table 1: Students Responses on the Concepts of Plagiarism

S/N	Different Pattern of plagiarism	Strongly Agreed	Agreed	Undecided	Disagree	Strongly Disagree	Total
1,	Copying whole doc. Verbatim	72	49	41	45	43	250
2.	Copying some part of doc.	60	52	41	51	46	250
3.	Phrase reordering	53	50	42	56	49	250
4.	Sentence split or join	46	51	43	60	50	250
5.	Inserting new words/sentences	48	48	44	61	49	250
6.	Deleting words/sentences	45	48	43	64	50	250
7.	Substituting words/sentences	46	50	44	62	48	250
8.	Paraphrasing	55	49	40	57	49	250
9.	Translating	48	51	41	49	61	250
10	Summarizing	57	54	40	50	49	250
11.	Adopting people's idea	43	45	41	61	60	250
12.	Improper citation	50	48	45	59	48	250

Analyzing the received data from the Table 1 above based on the technique discussed in the previous section, the relative importance for each of the plagiarism instance was calculated and ranked accordingly. It is observed that most of these instances are not regarded as the act of plagiarism by the students. As could be seen in the Table 2, only few of these instances were regarded to be a plagiarism by the students. These include: "Copying whole document verbatim", for which 48.4%(28.8% strongly, while 19.6% not strongly) agree it's a plagiarism; "Copying some part of the document" for which 44.8%(24% strongly, while 20.8% not strongly) agree it's a plagiarism; "summarizing" which for 44.4%(22.8% strongly, while 21.6%

strongly) plagiarism; agree it's a "Paraphrasing"41.6%(22% strongly, 19.6% not strongly) agree it's a plagiarism; and "Phrase reordering" for which 41.2%(21.2% strongly, while 20% not strongly) agree it's a plagiarism; which were ranked to have more importance index in the table. Other instances were ranked less importance indicating that they are not seen by the student as the act of plagiarism such as "Adopting peoples idea" for which 48.4% (24.4% strongly, while 24% not strongly) disagree it's a plagiarism; "Deleting words/sentences" for which 45.6%(25.6% strongly, while 20% not strongly) disagree it's a plagiarism, "Sentence split or join" for which 45%(24% strongly, while 21% not strongly) disagree it's a plagiarism, "Inserting or deleting

words/sentences" for which 44.4%(24.8% strongly, while 19.6% not strongly) disagree it's a plagiarism, "Substituting words/sentences" for which 44%(24.8% strongly, while 19.2% not strongly) disagree it's a plagiarism, and "Improper citation" for which 42.8%(23.6%)

strongly, while 19.2% not strongly) disagree it's a plagiarism. Figure 3 Shows the Ranking of Plagiarism Patterns (i.e. the relationship between the most important index and the patterns of plagiarism considered in this paper).

Table 2. Ranking of Plagiarism Patterns based on their Relative Importance.

S/N	Different Pattern of plagiarism	Sum of	RII	Rank
		weights		
1,	Copying whole doc. Verbatim	812	40600	1
2.	Copying some part of doc.	779	39050	2
3.	Phrase reordering	752	37600	5
4.	Sentence split or join	733	36650	9
5.	Inserting new words/sentences	737	36850	7
6.	Deleting words/sentences	724	36200	11
7.	Substituting words/sentences	734	36700	8
8.	Paraphrasing	754	37700	4
9.	Translating	726	36300	10
10	Summarizing	770	38500	3
11.	Adopting peoples' idea	700	35000	12
12.	Improper citation	743	37150	6

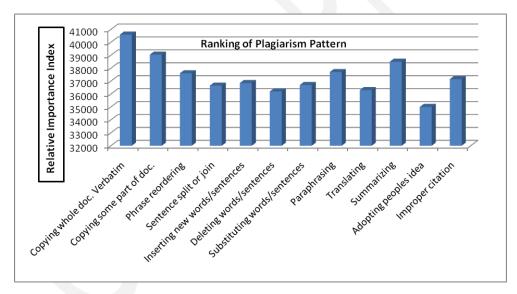


Figure 3. Ranking of Plagiarism Patterns

Conclusion and Recommendation

This paper is aimed to highlight the various instances of plagiarism and to access the level of awareness and perceptions on plagiarism among students of IBB University, Lapai, Niger state. From the analysis of the data in relation to the research questions such as exact copying and paste or verbatim, using similar topic/idea, translating the source document, paraphrasing,

merge two or more sources, reordering of words, splitting the source document, addition, deletion and substitution of words; some major findings were identified and discussed in the previous section. The result shows that most of the students are unaware of the concepts of plagiarism. Many of them perceived that the only things that are considered to be plagiarism

are anything that relates to copy-paste other peoples' work without giving acknowledgement to the source document, translating to other language, and paraphrasing. This research work data revealed that only 40.7% of the students are aware of the concept of plagiarism, about 59.3% of the students claimed they had not been aware of plagiarism as well as the existing university policies on plagiarism. The Lack of awareness on the existence of plagiarism, as observed from our findings needs serious attention by the university community. With this paper and given the relative lack of awareness amongst many students in the university, it is recommended that the awareness should be created in the two campuses so that the students should know about the concepts of plagiarism and to avoid it as much as possible. Students should be encouraged to participate in the change oriented intervention programs so that they would be guided and not to fall the victim of engaging in the act plagiarism such as Training and Educating them on the instances of plagiarism, attending Conferences Seminars, as well as Publications and Media Relations programs, Research and Advisory programs, Alliance and Partnerships, as well as Evaluation and Recognition programs. In addition to creating awareness, there is need also to have other mechanisms in place for checking and controlling plagiarisms such as Antiplagiarism software (TurnItIn, iThinkate, SafeAssignment, Docol©c, Urkund, Copycatch, WCopyfind, Eve2 - Essay Verification Engine, GPSP - Glatt Plagiarism Screening Program, MOSS - Measure of Software Similarity, JPlag etc.) and to spell out punitive measures for those engaging in the act of plagiarism.

REFERENCES

- Adebayo, S. (2011). Common Cheating Behavior Among Nigerian University Students: A Case Study of University of Ado-Ekiti, Nigeria. World Journal of Education, Vol. 1, No. 1; April 2011, 144-149.
- Almquist, P. (2011). Experiments to Investigate the Utility of Linguistically informed features for detecting textual plagiarism. Master's Thesis in Computer Science at the School of Computer Science and Engineering Royal Institute of Technology year 2011.
- Dawson, M. M., & Overfield, J. A. (2006). Plagiarism: Do Students Know What It

- Is? *Bioscience educationjournal*, 8. DOI:10.3108/beej.8.1.
- Diana R. (2011). Awareness, attitude and perception of plagiarism among students and teachers at Stockholm University. Master of Science Thesis, Stockholm, Sweden.
- Evans, J.T. (2000). The new plagiarism in higher education: From selection to reflection [Electronic Version]. *TELRI Project*.
- Galus, P. (2010). Detecting and preventing plagiarism. The Science Teacher, 69(8), 35–37.
- Higher Education Commission. HEC plagiarism policy (http://hec.gov.pk/Pages/main.aspx)
- International School of Management (2015).

 White Paper: Academic Integrity & CulturalSensitivity Hits and Pathway to the Future.

 Available at www.ism.edu.ng/brochure/academic-integrity.pdf.
- Orim, S-M, Glendinning, I., & Davies, J., (2012), 'A Phenomenographic Exploration of theperception of plagiarism: Case Study of Nigerian students in a UK University, CoventryUniversity UK.
- Rabiu, I., & Salim, N. (2014). Textual and Structural Approaches to Detecting Figure Plagiarism in Scientific Publication. *Journal of Theoretical and Applied Information Technology*, 70(2).
- Salha M. Alzahrani, Naomie Salim, & Ajith Abraham, (2014). Understanding Plagiarism Linguistic Patterns, Textual Features, and Detection Methods. *IEEE TransactionsonSystems, Man, and Cybernetics—Part C: Applications and Reviews*, Vol. 42, No. 2
- M. K. Somiah, G. Osei-Poku, &I. Aidoo. (2015). Relative Importance Analysis of Factors. Journal of Building Construction and Planning Research, 117-126.
- Stebelman, S. (1998). Cybercheating: Dishonesty goes digital. American Libraries, 29(8), 48–50.
- Zaka, B. (2009). Theory and Applications of Similarity Detection Techniques (Doctoral dissertation, Graz University of Technology).