

Student Project Quality Assurance In Academic Institutions Using Plagiarism Software Checker

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ABSTRACT

The wealth of resources made available on the internet through Information Technology has its limitations. The present trend among students is to download resources on the web and submit the same to their lecturers. The peak of it is downloading someone else's project from the internet and offering the same as the original owner. Plagiarism is a challenge presently facing most academic institutions, not only in Nigeria but in other parts of the world. Here, this paper proposes the introduction of Plagiarism software checker in all educational institutions for quality assurance purposes and promotion of originality among students and lecturers. A well-structured questionnaire was adopted and administered to two hundred participants randomly selected from Higher National Diploma (HND) II students and fifty academic staff of Federal Polytechnic, Ilaro which is the case study to gather information on the awareness and perception on the introduction of plagiarism software in tertiary institutions for quality assurance purposes. Also, statistical analysis was carried out on 50 samples of immediate past HND II projects within the Department of Computer Science. Plagiarism test was conducted on the randomly selected and digitised projects. The results of the test show 60% of the project with over 50% plagiarism, 20% with 35% and above plagiarism, 18% project with 25% and above plagiarism and only 2% project with less than 21% plagiarism result. The analysis from this study confirms the level of academic fraud being practised by the students which are a significant concern that cut across other institutions not only in Nigeria but across the globe. Plagiarism is like cancer that must be treated urgently to rescue the present economic situation of the nation from collapsing. Youths are the leaders of tomorrow and education is the bedrock of national growth and development.

Keywords: Information Technology, Internet, Quality assurance, Plagiarism, Plagiarism software

1. INTRODUCTION

Plagiarism is a common problem facing virtually all academic institutions at present. Plagiarism, especially in academic institutions, brings about the loss of integrity, values, honesty and downgrading institution of learning. The advent of the internet making so much resource available freely online has not been without its major challenges in the academia. Resources are carelessly plagiarized without due reference to the original owner. This situation is commonly found among students. Assignments, term papers and projects are downloaded word for word and submitted to their teachers. Students these days are very lazy and are not ready to think. They look for the easiest way out of every situation especially with the awareness that the internet is available for any resource required for their work. This will have been to their advantage if the resources downloaded are sieved out and put to use in their word.

Academic institutions are the bedrock and the power of any nation. Research and discoveries are meant to emerge from academia, and such findings are what serve as input to the industries for implementation. Therefore, if the backbone of scientific and technological innovations is decaying, then such nation is

heading for economic downgrading. According to Carroll and Zetterling (2009), plagiarism is presently an international issue, and many academic are realising the big challenge with digitised resources on the internet, global communication and search engines on the increase. The study by Heyman (2000), having 38% plagiarism among students at Rutgers University supported the fear. Unfortunately, the plagiarism challenge is not limited to students alone; it is also becoming incessant among researchers, teachers and academic.

This paper, therefore, proposes the introduction of plagiarism software in all Nigeria institutions for originality, innovations, quality assurance and escape route from the plagiarism. Nigeria is a developing country and still has a long a way to go as per economic growth and development.

2. LITERATURE REVIEW

2.1 Student's Projects

A project is an individual or joint study that is planned carefully and researched on by students (Thomas, 2009). It consists of honest and organised efforts motivated by perceived opportunity when facing a problem, a need or a desire (Turner and Müller, 2003). The completion and submission of a project is a requirement for graduation in any tertiary institution of learning. At the master's level, a dissertation is required, and at the PhD level, the thesis is a requirement. At these various levels, submission of a write up is a requirement. Unfortunately, it has been observed (Debnath *et al.*, 2012), that students are getting very lazy in carrying out their research work and most of the submitted research works are unoriginal to qualify them for the degree so desired. (Soyemi and Isinkaye, 2017). The trend is becoming more and more everyday as a result of the wealth of resources available online.

The economic growth and development of a nation depend on the research turnouts from the academics. The outputs of research work are meant to be inputs to the industries and firms from where final products are made. Therefore, having students presenting unoriginal research work is bad enough and inability to find an immediate solution would impact negatively on the nation. According to Cryer (1997), developing originality can be achieved through learning and the use of lateral thinking and creative skills to bring about innovation and also enabling a period of incubation of such skills to develop well. Therefore, innovation and creativity can be achieved in research through time and effort (Blaxter, Hughes and Tight, 1998).

2.2 Plagiarism Detection and the Internet

The advent of the internet contributed tremendously to the act of plagiarism. Presently, the scholarly databases and the internet are quite rich and accessible to professionals (Richard, Saunders and Meek, 2016) as a means of presenting their work to the larger society for other to learn and probably take the work further. This means of communicating research work and other contribution has its numerous advantages, even though, the abuse in the form of plagiarism needs to be seriously tackled at the academic communities where students among others are the key culprit. Plagiarism in academics is considered as a serious offence of dishonesty and misconduct (McEvedy and Smith, 1990). Plagiarism is the act of using someone's work without giving the due credit to the owner of the work. This act is considered as academic fraud or theft of intellectual property.

According to Cavano, (2011), there are various types of plagiarism. Word-for-word plagiarising is a type of plagiarism where someone else's work or write up is presented as one's idea. Plagiarizing by paraphrasing is a type of plagiarism in which someone's idea is stated in one's own words without referencing the owner of the concept. A different kind of Plagiarism is Mosaic Plagiarism, here phrases and terms are taken directly from the source and then combined with one's prose. The lifted words are usually written in italics.

To curb the act of plagiarism, some software/checker tools have been developed to detect and look at similarity index between one's work and the wealth of resources available online. The software uses the internet to search through databases. An example of commonly used plagiarism software in institutions is the 'Turnitin'. Turnitin software works by making a comparison between the uploaded content and the database of digital content, papers, journals and publications. What the software does is to highlight detected sections of the materials uploaded that are duplicated in the other databases and the internet. Turnitin, however, is not a free plagiarism checker.

Other types of plagiarism software, which are free online tools are: Viper, Grammarly, Plagscan, Whitesmoke, Article checker, Duplichecker, Plagiarismcheck, SmallSEOTools, Plagium, Plagiarism checker, Paperrrter, Dustball, Plagiarism checker plugin for wordpress, CheckForPlagiarism.net, Copyscape, Search engine reports, Plagiarisma.net, Plagtracker, DMCA scan and webconf (DigitalGYD, 2018).

Virtually, all plagiarism software works the same way because the act of detecting plagiarism is more of similarity detection or text matching that seeks for similar words between two or more documents. The difference is in how each one of them carries out the check and the mode of presentation of the result.

3. METHODOLOGY

3.1 Data Collection Method

Survey method and statistical analysis of immediate past HND II students' projects from the department of computer science were adopted in carrying out this study. The past HND II students' project was digitised and checked against plagiarism. The method of data collection was through structured questionnaire containing awareness and perception of participants on the introduction of plagiarism software in academic institutions for quality assurance purposes.

Distribution of questionnaire was made to 40 HND II students randomly selected from five different schools within the institution, a case study of Federal Polytechnic, Ilaro (FPI) making a total of two hundred (200) participants. Also, the same questionnaire was administered to fifty (50) academic staff randomly selected from the institution to seek their views on the adoption of the software for quality assurance.

3.2 Method of Data Analysis

Descriptive Statistics method of data analyses was applied to scale statements and examine the order of importance through pictorial representation.

4. RESULT AND DISCUSSION

4.1 Analysis of Results from Survey

In this section of the paper, graphical representations of analysis were employed to present the distribution and opinion of the sample on the issues raised in the administered questionnaire.

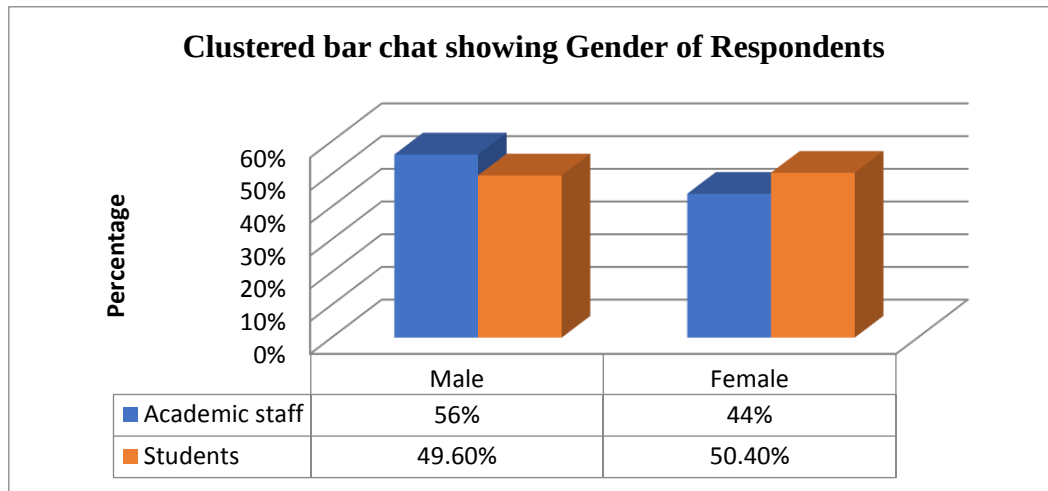


Figure 1: Distribution of the two participants by sex

Figure 1 depicts the gender distribution of the two categorised participants with about 56%, 49.6% of them being male academic staff and students while 44%, 50.4% were female academic staff and students respectively. This indicates that majority of the participants were male.

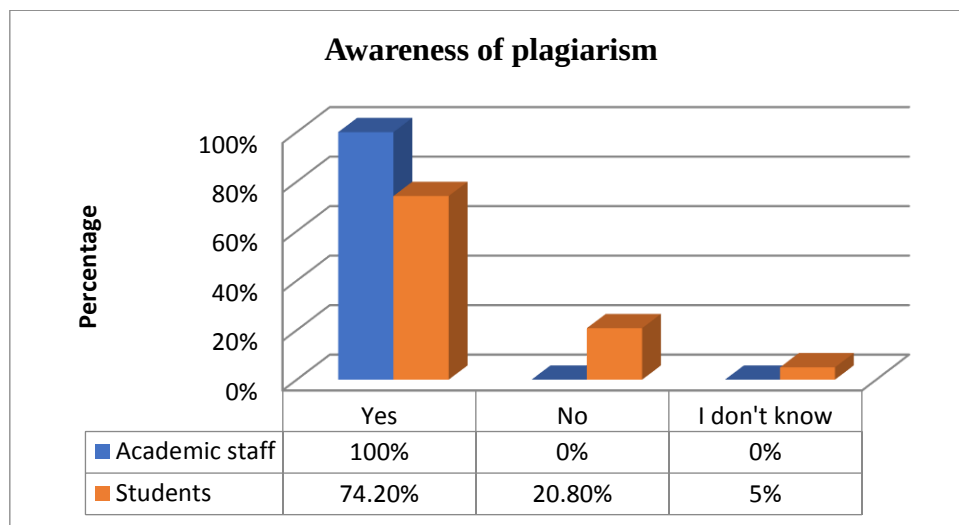


Figure 2: Distribution of participants on awareness of plagiarism

It is evident in figure 2 that all the academic staff of the institution are aware of plagiarism, but few (20.8%) of the students claimed ignorance of the existence while 5% of them said they are unaware of whether plagiarism exists or not.

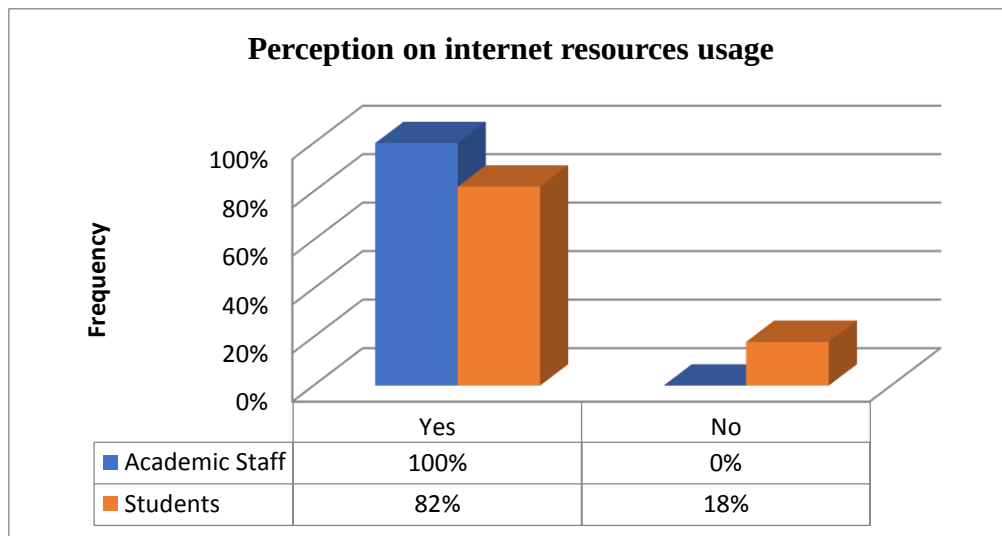


Figure 3: Distribution of participants with respect to internet usage

Figure 3 shows that all the randomly selected academic staff download resources from the web, 82% of the students do the same while 18% do not. This implies that information technology has been a viable tool of use in academic institutions in the world. Since the majority of the respondents are aware of the item analysed, then the analysed item had exerted a positive response.

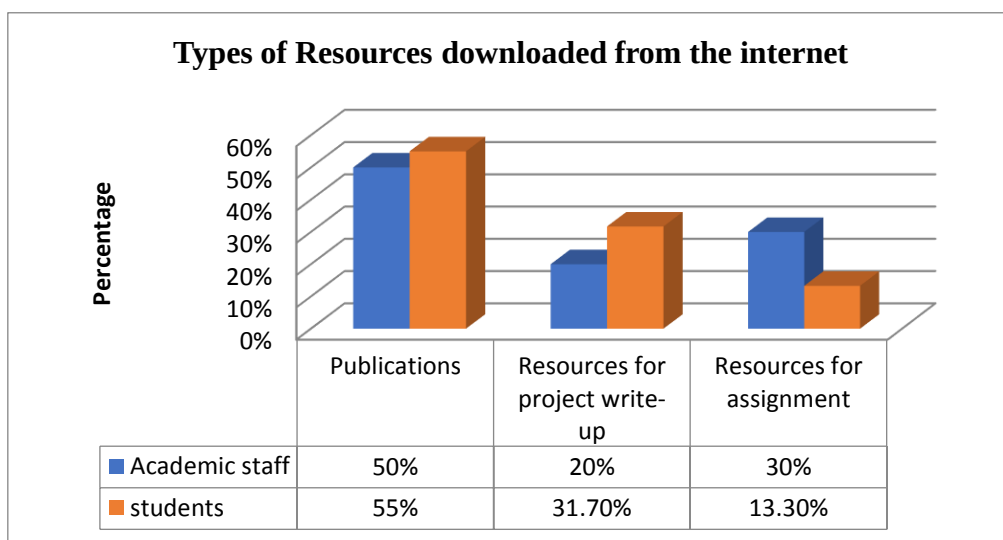


Figure 4: Distribution of participants on types of resources downloaded from the internet

Figure 4 showed that majority of the randomly selected participants (both academic staff and students) downloaded publications from the internet, indicating 50% and 55% respectively compared to project write-ups downloads (20% and 31.7%) and resource for assignments (30% and 13.3%) downloads.

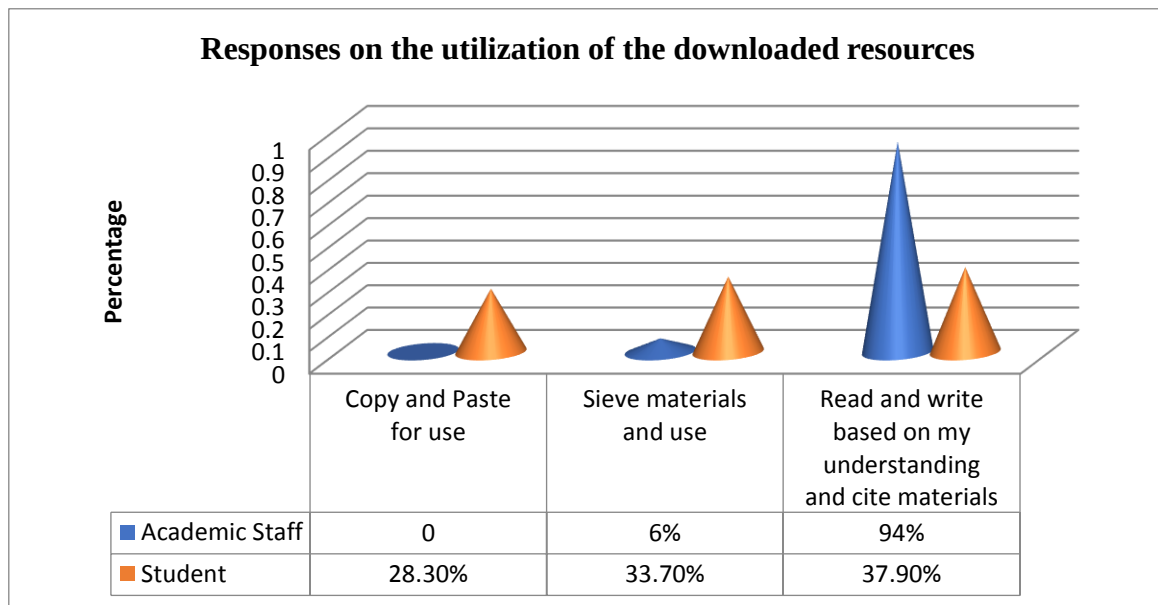


Figure 5: Distribution of participants on how they use the downloaded resources

The result generated here indicates that majority of the academic staff (94%) read and write based on their understanding and cite materials, 37.9% of the students do same, 28.3% of students “copy and paste materials for use” and 33.7% of the students “sieve materials and use” in order to enhance the quality of their project write-ups as depicted in figure 5 respectively. .

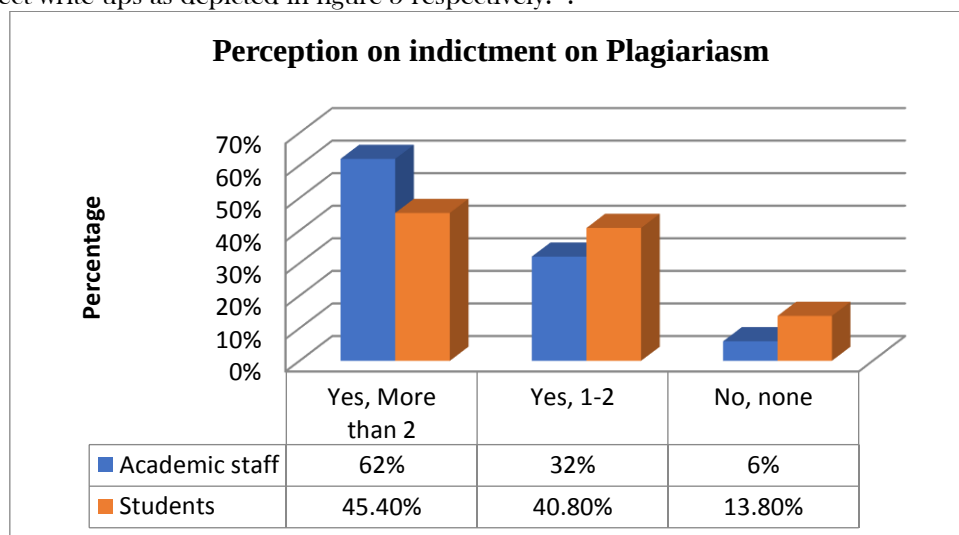


Figure 6: Distribution on the perception of participants towards indictment on plagiarism

The participants (both academic staff and students) were asked if they knew of anybody who they thought might have been indicted of plagiarism and as it can be seen in figure 6, 62% of the academic staff pointed out that knew more than two people who might have plagiarised. And for the students, 13.8% knew no persons that might have plagiarised.

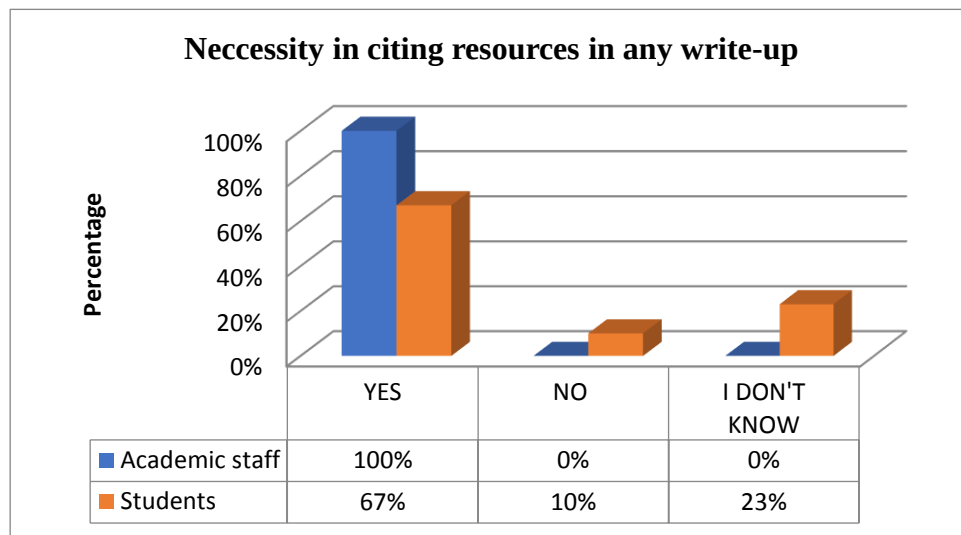


Figure 7: Distribution on the perception of participants towards necessity in citing resources in any write-up

On whether to cite resources in any write-up, 63% of the students said “Yes” 10% said “No” while 23% of them said they “they don’t know”. All the academic staff participants (100%) said it is necessary to cite resources used. This can be seen in figure 7.

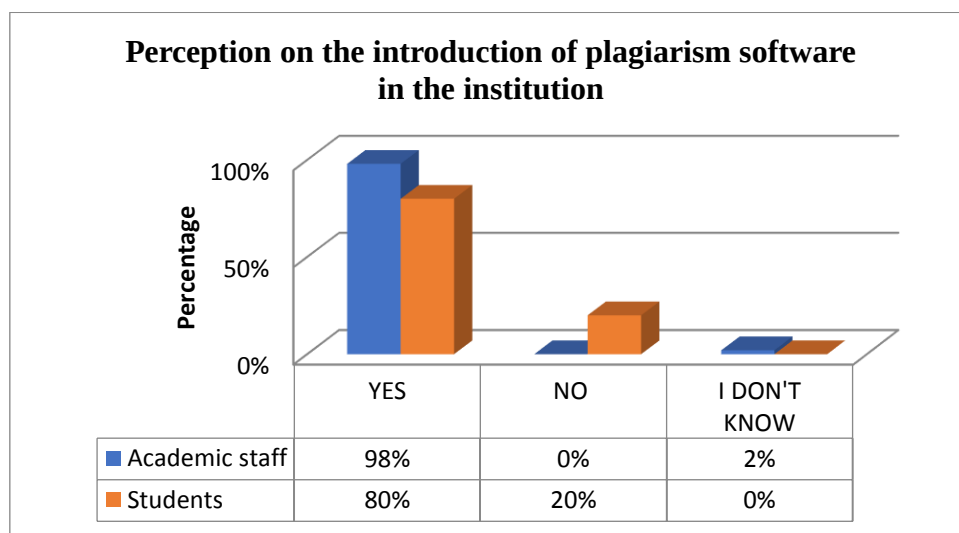


Figure 8: Distribution on the perception of participants towards necessity in citing resources

Analysis of figure 8 demonstrated that majority of the respondents have a positive opinion on the introduction of plagiarism software in the institution as 98% and 80% of the academic staff and students said “Yes” while 20% of the students have a negative perception on its introduction.

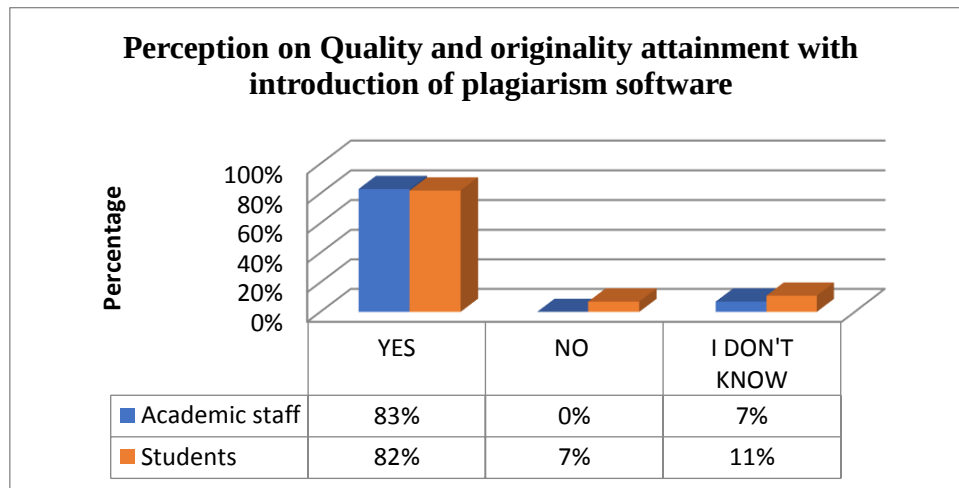


Figure 9: Distribution of participants’ perception of Quality and Originality

Figure 9 indicates that majority of the participants, both academic staff and students are of the opinion that quality and originality of work could be attained with the introduction of plagiarism software checker in tertiary institutions. The result here shows that 7% of the students have negative perception about it while 7% and 11% of the academic staff and students neither have positive or negative perception on quality and originality attainment.

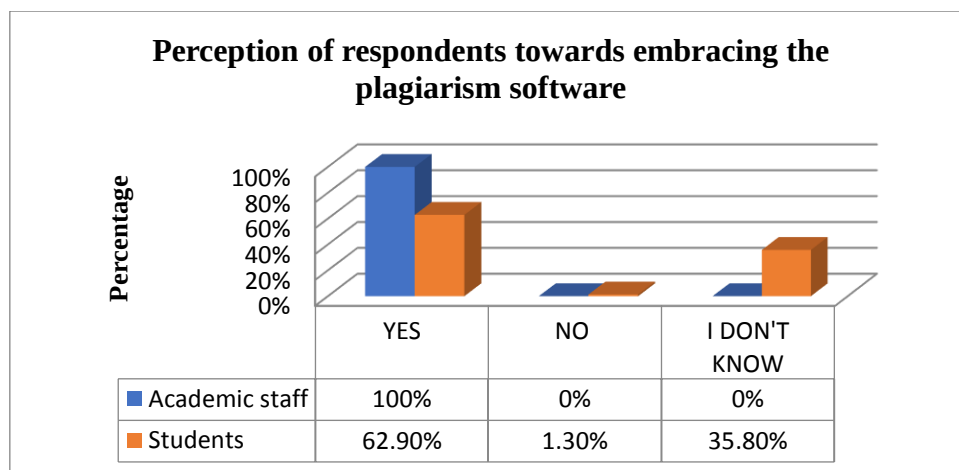


Figure 10: Distribution of participants’ perception of Quality and Originality through introduction of Plagiarism checker

Evidence from figure 10 shows that all the academic staff (100%) are ready to take advantage of the plagiarism checker as it will reveal the originality of their supervised students’ work and create goodwill for the institution locally and internationally in the aspect of research. Meanwhile, 35.8% of the students never had a positive nor negative opinion on the introduction of the software in question.

4.2 Analysis of the Immediate Past HND II Students' Project

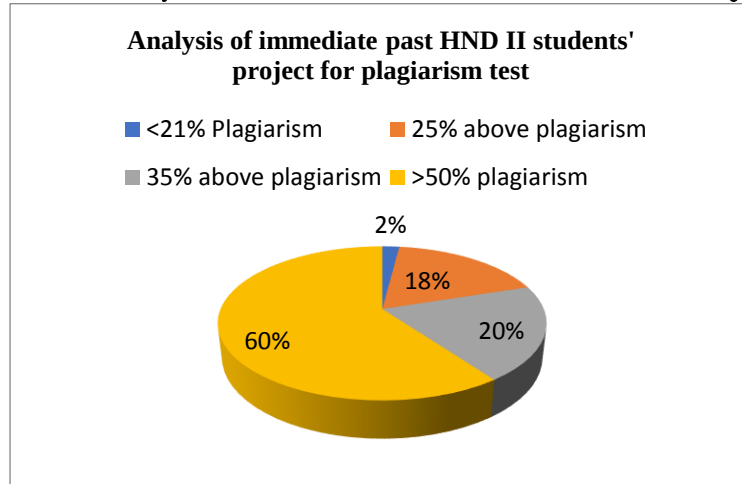


Figure 11 depicts the plagiarism test carried out on immediate past HND II students in the Department of Computer Science. The result of the test shows 60% of the students' project with over 50% plagiarism, 20% with 35% and above plagiarism, 18% project with 25% and above plagiarism and only 2% project with less than 21% plagiarism result.

Figure 11: Analysis of Digitized Projects scanned for plagiarism

5. CONCLUSIONS

Information technology and the internet are viable tools used in academic institutions across the world because of the wealth of resources available, and that is free of charge. Many in academics take advantage of this resources to better their lot. The students, however, have taken advantage of this in a wrong way. The result from this study shows the level of plagiarism decadence among the students with quite a number unaware of the crime. Promoting quality, originality, innovation and academic excellence can only be achieved through creative thinking and hence the proposal to introduce Plagiarism software checker in all academic institution.

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