MINIMIZING CYBER-PLAGIARISM THROUGH TURNITIN: FACULTY'S & STUDENTS' PERSEPCTIVES

استخدام Turnitin لتقليل الانتحال الادبي الالكتروني من منظور هيئة التدريس و الطلاب

Holi Ibrahim Holi Ali

Rustaq College of Applied Sciences-Oman

Department of English Language & Literature

PO.BOX: 10 PC: 329 –Rustaq

E-mail: howlli2@yahoo.com

ABSTRACT

This paper attempts to investigate and evaluate students' and faculty's experiences and understanding to the strengths and limitations of anti-plagiarism software, specifically, Turnitin and how it could best be used to promote academic integrity among their students. 50 engineering students and 20 professors were surveyed and interviewed. The paper argues that although Turnitin is widely used these days to tackle and minimize plagiarism practices, however cyber-plagiarism is increasing and the software might be inadequate in fighting such practice. The paper also questions the effectiveness and limitations of the software in relation to current practices. The findings revealed that most of the respondents perceive Turnitin positively; but the majority of the students believed that they found difficulty in understanding Turnitin originality report. Further, instructors asserted that the limitations of the software are not many and they reported that the software is effective in detecting and curbing plagiarism incidents and practices among their students. The study recommends that the software should be integrated into instructions, and students and teachers should be trained on how to use the software and how to interpret the software originality report in an effective manner.

Key Words: Cyber-plagiarism, Turnitin, anti-plagiarism software**,** digital cheating**,** academic integrity.

1 INTRODUCTION

Plagiarism has become a common phenomenon among students since the emergence of the internet and the influx of information technology round the globe. The internet age has brought a remarkable opportunity for students and teachers to learn, but it also brought challenges to academic integrity and good practices. Literature indicates that there is a relationship between the digital age and the decline of ethical values among students in terms of plagiarism and cheating [Rawul, 1:179]. *'Widespread to the internet and other electronic media has served as something of a double-edged sword with respect to plagiarism'* [Youmans 2:750]. The internet allows students to plagiarize with cut-and-paste ease, but also enables instructors to identify plagiarism in an easily manner of the source of the plagiarized materials [Lyon, Barrett, & Malcolm, 2006, cited in Youmans 2: 750]. However, there are many electronic detection softwares for eliminating the problem in place. A range of software packages have now become available for tracking down and minimizing plagiarism among students. One of the most popular of these packages is Turnitin [Gabriel, 2010 as cited in Stapleton 3:126] which is widely used nowadays for combating plagiarism practices. Turnitin was launched by iParadigms, LLC, in 2008 and it claims that as cited in Stapleton [3] Turnitin is licensed in 126 countries and available in 12 languages and it is widely

used round the world. Turnitin compares student papers against a large number of sources including peer-reviewed articles, web pages, textbooks, essay banks, etc. [Youmans2]. This study is primarily interested in investigating students' and faculty's experiences, perceptions and understanding of the efficiency and effectiveness and limitations of anti- plagiarism detection software (Turnitin) and to find some possible solutions for minimizing plagiarism practices among students.

2 STATEMENT OF THE PROBELM

The use of technology has enhanced the convenience, flexibility, and efficiency of education; however, it increases academic dishonesty such as plagiarism Harper [4]. *"Because of technology, it is simply easy to plagiarize"* [Stowers & Hummel 5: 164] .Therefore, the majority of higher institutions in Oman have embedded in their practices and instructional programmes anti-plagiarism detection software to minimize cyber-plagiarism among their students. This research problem is formulated from a practical experience in the field that digital cheating has become prevalent among college students, particularly non-native speakers of English students despite the effort made by institutions to cut down plagiarism rates. According to Todd, [6] there are many techniques and packages that teachers could use to detect plagiarism incidents such as research engines (i.e. Google), to find matches on the internet. Second, there are those which find similarities between files on a single computer, these are intended primarily to detect collusion. Finally, there are those, of which Turnitin is the best-known software which provides students and teachers with tools to defeat plagiarism from any source whether printed or digital one by matching them against its own archives [Todd 6]. However, it would be a great mistake to assume that plagiarism detection software is effective in combating all *'epidemics of internet plagiarism'* Lee: [7] among students. Therefore, this study is conducted to examine experiences and perspectives of students and teachers towards anti-plagiarism software, specifically, Turnitin by addressing some questions given to staff members' and students with regard to plagiarism detection software, specifically, Turnitin, and its efficiency and effectiveness in decreasing plagiarism rate among engineering students in a private college in Oman, as well as its limitations in combating plagiarism incidents among students. The present study strives to address the following core questions: Does the use of Turnitin curb plagiarism practices among engineering students? What are the strengths and limitations of Turitin according to students' and faculty? How is Turnitin perceived by faculty and engineering students? What are some of the other possible strategies for minimizing cyber-plagiarism among students? The findings of this study are expected to serve as practical tips along with its pedagogical implications in shaping both teachers' and students' understanding of digital cheating and plagiarism and the use of its digital detection packages.

3 METHODS

This study adopts a combination of quantitative and qualitative approaches by employing both questionnaire and interview with students and engineering faculty along with a follow up interview with some of the members of staff in engineering departments**.** Frequencies and percentages were used to analyze data.

3.1 Participants

This study took place in a private university college in the Sultanate of Oman. The participants of the study comprise 50 students and 20 instructors in a private engineering university college in Oman. The vast majority of the students are Omani and they are coming from similar socio-cultural and linguistic backgrounds. They are studying in different engineering departments such

Mechanical, Civil, Electronics, Mechatronics, Electrical, etc. They have been studying English since their primary schooling and have substantial proficiency in English language because English is the medium of instruction in their ongoing engineering education. The majority of instructors are from India and few from countries like Iraq and Egypt. All of them have been teaching and instructing in Oman for at least a couple of years and they have been using Turnitin software for several years. Moreover, a follow up interview with 5 engineering instructors was conducted to back up the questionnaire data.

3.2 Instruments & Procedures

In order to answer the above mentioned research questions, the currently adopted questionnaire and interview were reviewed critically and analytically against the research questions. For establishing validity of the questionnaire, it was given to instructors for checking the wording and clarity of the instructions and its items. In view of their feedback, some irrelevant questions were taken out and all the wrinkles were iron out. Both teachers' and students' questionnaires contain three parts which are: their perceptions about the current use of Turnitin, their views about the strengths and limitations of the software and how could it be used in combating cyber-plagiarism among students

4 Defining Plagiarism

Plagiarism is defined by the Council of Science Editors as *"a form of piracy that involves the use of text or other items (figures, images, tables) without permission or acknowledgement of the source of these materials"* [cited in Cross, 8]:96.Plagiarism is a controversial term and it threatens the very heart of academia [McLafferty 9]. *Plagiarism is a problematic and widely misunderstood concept for students…* [Scanlon 10:163]. Moreover, faculty is not in universal agreement on what constitutes plagiarism or what faculty response to student plagiarism should be [ibid: 10]. Gerding [11] claims that in countries like China, India and Iran they view what constitutes plagiarism is markedly different from our own interpretation and they may consider intellectual ownership as a Western concept only. *"...Because in Eastern cultures, it is an honor and expectation that work will be copied* and *Asian students are taught to memorize texts as a sign of respect for authors. If an author writes an idea particularly well, then it would be disrespectful for a student to alter the original author's words in a paper'* [Stowers & Hummel 5:165]. Some of them feel that as long as the author is included in their footnotes, they can "cut and paste". Therefore, it is difficult to be precisely defined, because there are arrays of definitions in the literature. Plagiarism can take a form *'Blatant plagiarism'* [Braumoeller & Gaines 12] of copying an entire essay or significant portions of the easy have been copied or paraphrased without reference or quotations [Warn 13:195]. Plagiarism is taking another person's ideas and using them as one's own [Austin & Brown, 1999, p. 21 cited in Warn 13:196].

4.1 Effectiveness of Turnitin

Turnitin is an institutional plagiarism *"detection service and is becoming the defacto tool in plagiarism identification, and recognized as a tried and trusted system in use round the world, especially with its links to Virtual Learning Environment such as Blackboard"* [Jones & Moore 14 : 425]. It is considered one of the most popular and well-known anti-plagiarism software which has been adopted at a half-a –million faculty member and in more than one hundred ten countries worldwide [Lee, 2011, Neil & Shanmuganthan 15] *"Turnitin is the global leader in electronic plagiarism detection, and is tried and trusted systems over 80% of UK universities have adopted it*"

[Heather 16: 648]. It was designed by John Barrie, a biophysicist in 2008 at University of California (UC) Berkeley to identify the cheating within his classes [Stowers & Hummel 5]. It examines matches over 12 million pages of indexed web content, 100 million students' papers , and over 80,000 professional, academic and practitioner journals and publications. It has reported successfully reduce online plagiarism up to 35%. It has adopted e-Blackboard as an instructional tool, and it is integrated with the learning system programmes [Lee 7: 305]. It dramatically increases the ease by which verbatim copying can be discovered and detected by the tutors [Park, 2003 as cited in Warn. 13:196]. Moreover, Turnitin originality report may help all students learn about ethical standards regarding dishonesty [Zeman et al. 17] Moreover, it could provide proof if it comes to disciplining a student [Donald 18].

4.2 Limitations of Turnitin

Turnitin is considered as one of the well-known means of detecting student plagiarism. The use of plagiarism detection software is now widespread in higher education, but caution is needed because instructors and students need to be familiar with the software before mandating its use [Ford & Hughes 19]. Firstly, the instructor has to create 'a class'. The software ignores a submission by the same author for the same class when cross-checking text. For self-plagiarism detection, the records for each author therefore needed to be entered into two separate classes. However, the high percentage of text-match is not necessarily an indicator of any form of plagiarism. Nevertheless, anti-plagiarism technology is criticized because some of the detected word matches are not instances of plagiarism [Mulcahy & Goodacre, 2004, cited in Warn 13].*'The software doesn't detect whether the matching word string is contained within quotation marks or whether a stated reference is the correct one or not''* [Warn 13: 200].The tutors need to check these aspects and this can be time-consuming. Moreover, the efficient use of anti-plagiarism software demands that a software package line WebCT be used as an electronic platform for receiving and downloading essays. Further, the software designed to detect only fairy exact word string matches and unattributed paraphrase may be detected [ibid:13].The quantitative output from the report needs to be treated with care and should be analyzed along with the qualitative judgment in order to know whether there was a deliberate attempt to plagiarize or not. In addition, Turnitin requires all papers must be in digital format in order to be used by the software [Bristol 20]. Lee [7] asserts that Turnitin is costly and it does not do well with current in-print books. Further, software may be considered by students as policing mechanism and these plagiarism checkers could cause faculty to avoid engagement with pedagogical and ethical issues involved and they divert them from the real problem. Using software may destroy trust between students and instructors and introduce mutual distrust and students may feel sensitive to the lack of trust [Williams, 21, Scanlon 10:164].

5 ANALAYSIS of RESULSTS & DISCUSSION

5.1 Faculty's Positive Views & Reflections about Turnitin

Questionnaire Items 4-13 were designed to examine the faculty members' views about their positive experiences with Turnitin. As for 4, whether they believe that Turnitin has helped them to curb plagiarism practices among their students or not. (70%) believed that it did help them to minimize plagiarism rates among their students, (15%) responded by 'I don't know', and only (10%) 'disagreed'. Concerning item (5) whether they view Turnitin as an effective tool for combating plagiarism practices or not**,** (55%) 'agreed' that is an effective tool for fighting plagiarism incidents, while (25%) responded by 'I don't know', and (15%) 'disagreed'. Therefore, it could be argued that the vast majority of the staff (55%) believed that Turnitin is effective tool for combating plagiarism

rates among their students. Regarding item (6), the questionnaire revealed that (35%) of the respondents 'agreed' that Turnitin should be made mandatory to all students, whereas, (25%) responded by 'I don't know', and (40%) 'disagreed' with the statement. The analysis of item (7) revealed mixed responses as it showed that (45%) of the respondents 'agreed' that Turnitin has promoted originality in students papers, and (35%) 'were not sure', and (25%) 'disagreed' with statement. This is supported by [Rolfe study cited in: 22] on students who used Turnitin and he found that the software formatively improved their abilities to rewrite their work; and they showed a reduction in the level of plagiarism that was because of poor paraphrasing [Rolfe 22:704]. Further, Turnitin originality report may help all students learn about ethical standards regarding dishonesty (Zeman et al, 2011). As for item (8), the results showed that (65%) of the faculty believed that Turnitin has helped their students to understand plagiarism in a better way, (35%) were 'not sure', and no one 'disagreed' with the statement. Moreover, item (9) indicated that (65%) believed that Turnitin could deter cheating among students, (15%) were 'not sure', and only (15%) 'disagreed' with the statement.

As for item (10) the result revealed the fact that (45%) of the faculty believed that Turnitin has helped improved students' citation rates and academic skills, while (40%) of the respondents were 'not sure', and (15%) disagreed. Concerning item (11), the result showed that (60%) of the staff members believed that Turnitin has helped their students to learn about ethical standards, whereas (35%) of the respondents were 'not sure', and only (5%) 'disagreed'. This accords with the argument Turnitin originality report may help all students learn about ethical standards regarding dishonesty [Zeman et al. 17]. It could be that Turnitin doesn't only help students to avoid plagiarism but it can help them to learn ethical standards and values of good practices. Regarding question (12) whether using Turnitin has helped students to rewrite their papers in a better way or not. (85%) of the respondents 'agreed' with the statement, while (10%) were 'not sure' and only (5%) 'disagreed'. It is quite obvious that the vast majority of the respondents believed that Turnitin has helped the students to rewrite their papers and the software is quite helpful to students in this respect. This is supported by this recommendation which says students should be encouraged to use electronic detection software as a tool for crafting, redrafting and trying their submissions in Turnitin before sending in their final papers [Bretag & Mahmud, 23]. Additionally, item (14) indicated that (85%) of the respondents 'agreed' that Turnitin is an effective method to educate students about the boundary of the internet plagiarism, while (10%) were 'not sure', and only (5%) 'disagreed' with the statement. It could be argued that Turnitin has many advantages and strengths according to the respondents' views and it could be used as instructional tool for helping students to learn many values of good practices.

5.2 Faculty's Negative Views & Experiences about Turnitin

This part depicts the faculty views and reflections about Turnitin limitations and shortcomings. As for item (14), this indicated that Turnitin does not detect all plagiarism cases among students' papers such as unattributed paraphrase. (70%) of the respondents 'agreed' that Turnitin is not effective to detect all plagiarism incidents, whereas (20%) were 'not sure' and (10%) disagreed with statement. This is consistent with the argument that the high percentage of text-match is not necessarily an indicator of any form of plagiarism. Nevertheless, anti-plagiarism technology is criticized because some of the detected word matches are not instances of plagiarism [Mulcahy & Goodacre, 2004, cited in Warn 13].*'The software doesn't detect whether the matching word string is contained within quotation marks, or whether a stated reference is the correct one or not''* [Warn 13: 200].

Moreover, item 15, indicates that (60%) of the respondents believed that Turnitin does not detect whether the used reference is the correct one or not, (35%) were 'not sure'. On the other hand only (5%) responded by 'disagree'. Regarding item 16, (45%) of the respondents 'agreed' that Turnitin can produce inaccurate reports, whereas (40%) were 'not sure', and (15%) 'disagreed' with the statement. These findings are consistent with research findings on Turnitin [Bishop, 2006, Royce, 2003, cited in Williams 21] which shows that Turnitin can produce inaccurate reports that indicate both plagiarism where it doesn't exist and miss plagiarism where it does. It could be argued that Turnitin reports should be handled with care before decision with regard to plagiarism is made.

As for item 17, was designed to explore respondents' views about whether they believe or not that the use of Turnitin can create a poisonous atmosphere between teachers and students or not. (10%) only 'agreed, while (15%) were 'not sure' and (65%) 'disagreed' with the statement. This fining is supported by [Williams, 21, Scanlon, 10:164] who claimed that using anti-plagiarism software may destroy trust between students and instructors and introduce mutual distrust and students may feel sensitive to the lack of trust. Concerning item 18, (80%) believed that Turnitin should be used as instructional tool and should be integrated into instruction rather than to be used as a crime detection method. On the other hand, (10 %) were 'not sure', and only (5%) disagreed with the statement. These findings are supported by the literature [Warn 13: 206] suggests that cyber-plagiarism can be controlled if it is embedded within the teaching objectives of the course and become a part of the instruction. Plagiarism should be a part of pedagogy and it should be embedded within instruction [Lee 7]. Faculty should act as educators, rather than as detectives the, focus should not be diverted to detection than instruction [Scanlon 10:161]. In Response to item 19, (55%) of the respondents believed that Turnitin could generate only numbers which require further careful interpretations, (10%) responded by 'not sure', and (35%) 'disagreed'. As for item 20, (35%) of the respondents 'agreed' that learning to use Turnitin demands a considerable time to be mastered, (20%) were 'not sure', and (40%) 'disagreed' with the statement. These findings accord with [Barret & Malcolm 2006 cited in Bretag & Mahmud 23] maintain that the software could indicate *possible* plagiarism rather than providing a complete certainty. Therefore, 'manual verification' is needed to determine if text matches represent unethical or legitimate duplication [Errami et al. 2007, 2008 cited in Bretag & Mahmud 23]. Concerning item 21, (65%) believed that training students in using Turnitin could help in decreasing plagiarism practices, (15%) were 'not sure' , and only (10%) disagreed with the statement. It could be argued that training students in using software can help in decreasing plagiarism incidents among students because they would be aware of how use the software in an effective manner.

This part displays students' responses with regard to their use of Turnitin. As for question 1, students were asked whether they ever used Turnitin anti-plagiarism software or not. (70%) of the respondents responded by 'always', (10%) responded by 'sometimes', and only (8%) responded by 'never'. It is quite evident that the majority of the students 'always' use Turnitin. It could be argued that Turnitin is widely used by students and it is very popular among them. Regarding item 2, (20%) of the students said that they always receive training on how to use Turnitin, (64%) responded by 'sometimes' and (16%) never used the software. As for question 3, (80%) of the respondents said that they always change their papers after seeing the Turnitin originality report, while (8%) of the respondents responded by 'sometimes', and only (6%) said they never changed their reports they fed them to the system.

This section illustrates the respondents" positive views and experiences with the use of Turnitin. (70%) of the respondents 'agreed' that Turnitin has raised their awareness to avoid internet plagiarism and other academic offences, while only (6%) were 'not sure', and (14%) disagreed with the statement. As for item 5, (66%) believed that Turnitin has helped them to improve their referencing, reflection and academic skills, (12%) of the respondents were 'not sure', and (61%)

'disagreed'. Regarding item 6, the questionnaire revealed that (52%) of the respondents 'agreed' that Turnitin is useful and should be used by all students, on the other hand, (8%) were 'not sure', and (40%) 'disagreed' with the statement. Concerning item 7, whether Turnitin is an effective tool for detecting plagiarism and make them think about their writing, (64%) believed that Turnitin is effective tool for detecting plagiarism,(16%) were 'not sure', and (18%) 'disagreed'. It could be argued that Turnitin is effective tool in tackling plagiarism cases. As for item 8, whether Turnitin has helped students to learn about ethical standards regarding dishonesty, (42%) 'agreed' that with the statement, while (22%) responded by 'not sure', and only (16%) 'disagreed'. Moreover, item 9, (80%) of the respondents reported that Turnitin has helped them to detect plagiarism in advance and rewrite their assignments before their final submission, and (12%) 'disagreed' with the statement. Finally, as for item 10, (72%) of the respondents believed that Turnitin has helped them to understand what plagiarism in, (12%) of the respondents were 'not sure', and only (14%) 'disagreed' with the statement.

5.2 Students' Negative Views & Experiences about Turnitin

Items (11-17) were designed to explore students' views about students' respondents with regard to the use of Turnitin has caused distrustful relationships between them and their instructors. (28%) 'agreed' with the statement, while (16%) were 'not sure', and (50%) 'disagreed'. As for item 12, (78%) 'agreed' that they find it difficult to understand Turnitin originality report, (8%) were 'not sure', and (10%) 'disagreed' with the statement. It could be argued that understanding Turnitin originality report is not an easy task; therefore, teachers need to help their students to understand the reports in details. Concerning item 13, a considerable number of the students (56%) 'agreed' that it took a considerable amount of time and effort learn how to use Turnitin, whereas (20%) responded by 'not sure', and only (22%) 'disagreed' with the statement. Moreover, item (14) indicates that (20%) of the respondents' 'agreed' that Turnitin doesn't allow them to check their papers in advance before the submission, (34%) were 'not sure', and (68%) of the respondents 'disagreed' with the statement. It is quite clear that the great majority of the students believed that Turnitin has helped them to check their papers in advance. As for item (15%) 'agreed' that plagiarism detection doesn't change their learning behavior, 42 of the respondents' were 'not sure', and (20%) 'disagreed'. Concerning item 6, students were surveyed whether Turnitin could detect all plagiarism matches and cases or not, (64%) 'agreed' with the statement, (32%) were 'not sure', and only (4%) 'disagreed'. Finally, item 17, is designed to explore whether the students are capable of deceiving and misdirecting the software or not, (56%) 'agreed', and (15%) were 'not sure' , (32%) disagreed with statement. These findings are supported by the literature that Turnitin can be deceived and misdirected to reduce the similarity score by replacing a single letter throughout a document with an alternative, such as all instances of 'a' are replaced by 'a', then the user creates a macro linked to the document such that when the file (containing the replaced characters such as 'a') is opened the macro automatically replaces the altered character to the original form. This would disable the system from detecting the matches [Jones, & Moore 14: 427].

4 CONCLUSION & REMMENDATIONS

The present study has several limitations such as the sample size. The survey of 20 instructors and 50 students may not yield solid results. Secondly, using a follow up interview along with the questionnaire could have been helpful in strengthening the research data and findings.

Based on the study findings, it could be concluded that the vast majority respondents perceive the software positively and most of the teachers assume that the software has helped them to curb plagiarism practices among their students. Therefore, the study puts forward some

recommendations which might help practitioners to use anti-plagiarism software in an effective manner which would help in minimizing cyber-plagiarism practices among students. Firstly, anti-plagiarism software should be integrated into instruction and teachers, students and practitioners are advised to train their students on how to use them and how to interpret originality reports of their papers. Secondly, students should be encouraged to use anti-plagiarism software to check their papers in advance before their final submissions. Finally, it is recommended that teachers shouldn't act as detectives instead help their students to understand what plagiarism is and cultural issues and images that associated with plagiarism practices in their teaching context.

7 REFERENCES

[1] Rawul, R. (2009). "Minimizing Plagiarism". *The Proceedings of the Tenth Annual ELT Conference: Responding to Challenges in Curriculum, Assessment and Independent Learning*, pp., 179-186, 22-23 April, 2009, Oman.

[2] Youmans, R. J. (2011). "Does the Adoption of Plagiarism-Detection Software in Higher Education Reduce Plagiarism?" *Studies in Higher Education Journal*, Vol.36 /7, pp., 749-761.

[3] Stapleton, P. (2011)."Gauging the Effectiveness of Anti-plagiarism Software: an Empirical Study of Second Language Graduate Writers". *Journal of English for Academic Purposes*, Vol. 11, pp., 125-133.

[4] Harper, M.G. (2006). "High-Tech Cheating". *Journal of Nurse Education Today*, *Vol.*26, pp., 672-679.Available on intl.elserierhealth.com/journals/nedt. Retrieved on 15th October, 2012.

[5] Stowers, R.H. & Hammel. (2011). "The Use of Technology to Combat Plagiarism in Business Communication Classes". *Business Communication Quarterly Journal*, Vol.74, 2, pp.

[6] Todd, P. (2010). "Plagiarism Detection Software: Legal and Pedagogical Issues". *The Law Teacher Journal*, *Vol.44*/2, pp., 137-148.Available on http://dx.doi.org/10.1080/03069400.2020.486165. Retrieved on 21 October, 2012.

[7] Lee, Y. (2011). "Understanding Anti-plagiarism Software Adoption: An Extended Protection Motivation Theory Perspective". *ELSEVIER Journal*, Vol. 5, pp.361-369.Availble on www.elservier.com/locate.dss. Retrieved on 20th October, 2012.

[8] Cross. M. (2007). "Policing Plagiarism". *BM Journal, Vol.* 334, pp., 963-964.

[9] McLafferty, C.L. & Foust, K. M. (2004). "Electronic Plagiarism as a College Instructor's Nightmare-Prevention and Detection". *Journal of Education Business, Vol.97/3, pp., 186-190.* Available on http://www.tandfonline.com/loi/vjeb20.Retrieved on16th October 2012.

[10] Scanlon, P.M. (2007). "Student Online Plagiarism: How do We Respond?" *Journal of College Teaching, Vol.51/No.4.*

[11] Gerding, A. B. (2012). "Ethical Dilemmas in Publishing: a rising Tide of Plagiarism?" *Journal of Prosthodontics*, Vol.21, pp., 431-432.

[12] Braumoeller, B.F & Gaines, B.J. (2001). "Actions do Speak Louder than Words: Deterring Plagiarism with the Use of Plagiarism–Detection Software". *PSOnline Journal*, pp., 835-837.Available on www.apsanet.org.Retrieved on 20th October, 2012.

[13] Warn, J. (2007). "Plagiarism Software: No Magic Bullet!" *Journal of Higher Education Research & Development*, Vol. 25/2, pp.195-208.

[14] Jones, K.O. & Moore, A. (2010). "Turnitin is not the Primary Weapon in the Campaign against Plagiarism". *International Conference on Computer Systems & Technologies*, pp., 425-429, Sofia Bulgaria.

[15] Neil, C. & Shanmuganthan, G. (2004). "A web-enabled plagiarism detection tool". *Published by IEEE Computer Society*, pp., 19-23.

[16] Heather, J. (2010). "Turnitoff: identifying and fixing a hole in current plagiarism detection software". *Assessment & Evaluation in Higher Education Journal*, Vol. 35/6, pp., 647-660.

[17] Zeman, L.D. et al. (2011). "Originality detection software in a graduate policy course: a mixed method evaluation of plagiarism", Journal of Teaching in Social Work, Vol. 31/4, pp431-441.
[18] Donald, M. (2006). "Education: Higher: publish and be damned: plagiarism via the internet is growing problem-but academics are fighting back with their own technology". The Guardian [London (UK)], 13 June 2006.

[19] Ford, P.J. & Hughes, C. (2011). "Academic integrity and plagiarism: perceptions and Experience of staff and students in a school of dentistry: A situational analysis of staff and student perspectives". European Journal of Dental Education. Retrieved from doi:10.1111/j.1600-0579.2011.00695.x.

[20] Bristol, T.J. (2011). "Plagiarism prevention with technology". *Teaching and Learning in Nursing Journal*, Vol. 6, pp., 146-149.

[21] Williams, B. (2007). "Trust, betrayal, and authorship: plagiarism and how we perceive students". *Journal of Adolescent & Adult Literacy*, Vol. 51/4, pp., 350-354.

[22] Rolfe, V. (2011). "Can Turnitin be used to provide instant formative feedback?" *British Journal of Educational Technology*. Vol. 42/4, pp.701-710.

[23] Bretag, T & Mohmud, S. (2009). "Self-plagiarism or appropriate textual re-use". *The proceedings of the 3rd International Plagiarism Conference*, Northumbria University, UK, 21-23 June, 2008.