

Role of Turnitin in E-Learning

Imran Ghaffar Sulehri

Pakistan Institute of Fashion and Design, Lahore, Pakistan

igsulehri@hotmail.com

Dr. Muhammad Shahzad Chaudhry

University of Central Punjab, Lahore

Shereen Qadeer

Pakistan Institute of Fashion and Design, Lahore

Abstract: Emergence of internet, creation of electronic resources and usage of electronic medium for learning purposes are some core elements of technology which are getting worth in academia. These technological tools are being accepted and their use is also increasing day by day for learning purposes. Academic institutions are widely shifting to technology based learning by using different mediums of e-devices and softwares. In this study, multi-dimensional software “Turnitin” was examined as a source of e-learning tool in large size universities of Lahore, Pakistan. Turnitin is being utilized all over the world mostly for text matching services. However, it has some learning based factors therefore the researcher(s) strive to explore the role of “Turnitin” in e-learning. Four universities from Lahore, Pakistan were selected. Purposive sampling technique was adopted to gather the data from those faculty members who have instructors’ accounts in Turnitin. Results of this study indicate, that “Turnitin” plays an imperative role in certain aspects of e-learning and the majority of respondents use it for multiple purposes.

Key Words: E-Learning; Usage of Turnitin; Educational Consultancy; Online Learning; Learning through Turnitin; Turnitin

Introduction

Academics, teachers and researchers are aware of the utilization of “Turnitin”. It is basically software which matches text. It has raised awareness among academics about e-learning and promotion of skills. With the emergence of internet and digital resources, it has become easier for the students and researchers to get knowledge about their topics through online resources. In this age of Information and Communication Technologies (ICTs), students are keen to attend sessions through using some electronic devices or softwares. So it is imperative to identify the sources which can be proved helpful tools to accelerate the learning of students as well as researchers. Academic institutions are more attentive in preparing policies to promote students’ awareness related to e-learning so that they might be able to get familiarities with such innovative emerging technologies. Turnitin is being used in Pakistan mostly for detecting plagiarism. Plagiarism is also one of the factors which is being thought in academic institutions as unacceptable and shameful academic approach. The existence of Turnitin guides to the students

regarding purity of work. The study aims to know the role of Turnitin in e-learning with respect to different aspects like e-learning about plagiarism, e-learning about citations/ references, e-learning about online marking, e-learning through medium of communication etc.

Statement of the Problem

Szabo and Underwood (2004) explored that more than 50% students prepared their assignments by using internet which indicate the e-learning ratio among the students. As e-learning is increasing in the present times so it is pertinent to explore the role of softwares in e-learning which are being used for this purpose and as a mediums for e-learning. In this context, the role of Turnitin needs to be explored as an e-learning software. Turnitin is mostly being used for plagiarism checking but this research strives to explore some other features which are supportive for e-learning process.

Literature Review:

Ali, Ismail and Cheat (2012) stated that Plagiarism is a disgraceful act. It should be discouraged in students' mind and work. It is not only harmful for the students' career but also damages the integrity of the institutions. Shirazi, Jafarey and Moazam (2010) prescribed that Plagiarism was an increasing phenomena in Pakistani educational institutions which was affecting academic integrity so it was important to minimize the problem for the improvement of quality in academic institutions.

It is usually agreed that plagiarism is committed due to high family expectations, course time limit, scholarship, hatefully opted course, employ pressures for requisite score, and feeling invincible. Students do not manage their time well therefore they face problems. In the present age of Information and Communication Technologies (ICTs), it is not easy to hide plagiarized work. The reasons of copying are associated with the organization/union, making parties and increased extra-curricular activities. (Thompson, 2006). Turnitin reveals the similarity in a specific work which is uploaded and clarifies the cheating which assists the supervisor to assess the originality. (Walker, 2010).

Ramzan, Munir, Siddique and Asif (2012) discovered the level of understanding about plagiarism between graduate and post graduate students. They found that they did not have adequate understanding about the plagiarism, strategies to avoid it and punishments as accused. They suggested a full credit course on research ethics and plagiarism in the universities.

Batane (2010) in his study wrote that "Turnitin reports from various institutions" in which he stated that it was found in University of Colorado that academic integrity was distressed due to plagiarism. They proposed to make honour code and implementation of the TURNITIN as plagiarism detecting software in their university.

Turnitin is considered as the most admired and famous anti-plagiarism software opted by half million of faculty members and more than one hundred and ten countries worldwide. It is aimed to inspect

matches from 100 million student papers, over 12 million pages of indexed web contents, and over 80,000 professional, educational and practitioner publications. It has been reported that due to Turnitin there was reduction in online plagiarism up to 35%. It was also opted as e-Blackboard for instructions and also included learning system programmes (Lee, 2011).

Easy access to internet is the main reason of plagiarism while people are unaware of the plagiarism and its kinds. Those who had already published their research are well aware of proper citation, referencing, paraphrasing and plagiarism (Shirazi, Jafarey and Moazam, 2010). A number of books, research articles and research journals exist which provide insight about the various aspects of plagiarism. Online discussions, workshops/ conferences, presentations and blogs are also affective for getting awareness about issues related to plagiarism (Piracha, 2011).

Sara and Sheila (2011) communicated in their study which was conducted on a college “Queensborough Community College” that 50% of participants were unaware of the academic integrity, plagiarism and guidelines about the cheating. The researchers suggested faculty development programmes to maintain the academic integrity and reduction of plagiarism. Zulfiqar, Tariq, Azhar and Makhdoom (2011) prescribed in their study that due to un-awareness about plagiarism, its kinds and Intellectual Property Law, researchers fall a victim to plagiarism which is done sometimes intentionally or unintentionally.

McCabe (2003) investigated that plagiarism is mainly extensive matter today as students do not consider the copying from internet as plagiarism. Park (2003) said that growing access of internet and digital resources encourage the plagiarism among students which need a careful attention. Mulcahy and Goodacre (2004) defined that plagiarism hurt the academic integrity and Turnitin helps to uphold the academic integrity.

Zehry, Halder and Theodosiou (2011) prescribed that e-learning is related to the use of internet or integral software learning through electronic tools. Rolfe (2010) stated that during cohort study it was seen that with the use and awareness of Turnitin students are learning much more for the improvement of their work. Ilka and Veronika (2016) stated in their studies that Turnitin was a good tool for learning the second language and this tool has also many features of learning.

Research Questions:

In this study, it would be strived to address the following questions.

- What is the purpose (s) of using Turnitin?
- What kind of e-learning (s) can be learnt through Turnitin?
- Is Turnitin useful for improvement in writing skills?
- Is Turnitin is being used to deliver online lectures?

- To what extent Turnitin is being used to check assignments?
- What kind of e-learning outcomes that can be attained through Turnitin?

Methodology

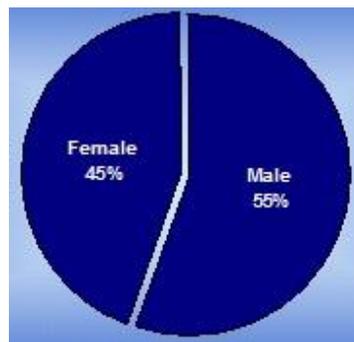
Quantitative research method followed by survey design was opted to conduct this study. Four degree awarding universities from Lahore were selected to get the data from their faculty members. Two universities were from public sector (University of the Punjab (PU) and Government College University (GCU) Lahore while two were from private sector University of Central Punjab (UCP) and University of Management and Technology (UMT) recognized by HEC: Pakistan. The population of the study was the faculty member of these selected universities having Turnitin Account. Purposive sampling technique was adopted and SPSS (Version 17) was used for data analysis. Data was collected by self structured questionnaire developed on the basis of literature and objectives of the study. To find out the reliability and validity of the tool, expert opinion and pilot testing from 11 faculty members who were not part of the study was conducted. 35 questionnaires to each university were distributed personally and through email and followed up by telephones to get more responses. The response rate of the study was 68.57% (n=96).

Significance of the Study

This study possesses an important value because of its nature. The population of this study also makes it valuable. Through this study the role of Turnitin will be examined for e-learning purposes and other aspects of academia. E-learning outcomes through Turnitin, its usage, e-learning and other aspects of the study also make it significant.

Data Analysis

For analysis of the data Statistical Package for Social Sciences (SPSS) was used and following is the frequency analysis. There were 53 (55.2%) male respondents who participated in this study while 43 (44.8%) were female respondents.



There were four universities whose faculty members participated in this study. 96 out of 140 responses were received from all the universities. From Punjab university (PU) 30 (31.3%) responses were received, from Government College University (GCU), Lahore 18 (18.8%) responses were received, from University of Central Punjab 18 (18.8%) responses were received and from University of Management and Technology (UMT), Lahore 21 (21.9%) responses were received. There were 8.3% professors, 10.4% Associate Professors, 33.3% Assistant Professors, 42.7% Lecturers and 5.2% other (Research Fellows, researchers etc.) who participated in this study.

Table 1: Date for universities and Academic Status

| | Variable | Frequency | Percentage | Cumulative Percentage |
|-------------|---------------------|------------------|-------------------|------------------------------|
| University | PU | 30 | 31.3 | 31.1 |
| | GCU | 18 | 18.8 | 50 |
| | UCP | 27 | 28.1 | 78.1 |
| | UMT | 21 | 21.9 | 100 |
| Designation | Professor | 8 | 8.3 | 8.3 |
| | Associate Professor | 10 | 10.4 | 18.8 |
| | Assistant Professor | 32 | 33.3 | 52.1 |
| | Lecturer | 41 | 42.7 | 94.8 |
| | Other | 5 | 5.2 | 100 |

There were 3 (3.1%) participants who had less than 1 year of teaching experience, (20 (20.8%) had 1-3 years of teaching experience, 26 (27.1%) had 4-6 years of teaching experience, 16 (16.7%) had 7-9 years of teaching experience and 31 (32.3%) had more than 9 years of teaching experience. There were 16.6% participants who did not publish any research paper during last three years, 46.9% respondents published 1-3 research papers during last three years, 18.8% published 4-6 research papers during last three years, 5.2% respondents published 7-9 research papers during last three years and 13.5% respondents published more than 9 research papers during last three years.

Table 2: Date related to research experience and published research articles

| | Variable | Frequency | Percentage | Cumulative Percentage |
|--------------------------------|-----------------|------------------|-------------------|------------------------------|
| Teaching Experience | Less than 1 Y | 3 | 3.1 | 3.1 |
| | 1-3 Y | 20 | 20.8 | 24 |
| | 4-6 Y | 26 | 27.1 | 51 |
| | 7-9 Y | 16 | 16.7 | 67.7 |
| | More than 9 Y | 31 | 32.3 | 100 |
| Published Res. in Last 3 Years | None | 15 | 15.6 | 15.6 |
| | 1-3 | 45 | 46.9 | 62.5 |
| | 4-6 | 18 | 18.8 | 81.3 |
| | 7-9 | 5 | 5.2 | 86.5 |
| | More than 9 | 13 | 13.5 | 100 |

There were 13 (13.5%) respondents who were using Turnitin from last 1 year, 15 (15.6%) respondents were using Turnitin from 1-2 years, 35 (35.5%) respondents were using Turnitin from 2-3 years, 16 (16.7%) respondents were using Turnitin from 3-4 years and 17 (17.7%) respondents were using Turnitin from more than 4 years. There were 45.8 % respondents who responded that their students were aware of the functions of Turnitin while 54.2% respondents replied that their students were unaware of the functions of Turnitin.

Table 4: Use of Turnitin and student awareness

| | Variable | Frequency | Percentage | Cumulative Percentage |
|----------------------|-----------------|------------------|-------------------|------------------------------|
| Using Turnitin Since | Less than 1 Y | 13 | 13.5 | 13.5 |
| | 1-2 Y | 15 | 15.6 | 29.2 |
| | 2-3 Y | 35 | 35.5 | 65.6 |
| | 3-4 Y | 16 | 16.7 | 82 |
| | More than 4 Y | 17 | 17.7 | 100 |
| Students' Awareness | Yes | 44 | 45.8 | 45.8 |
| | No | 52 | 54.2 | 100 |

There were 54.2% respondents who strongly agreed that “Turnitin is helpful for e-learning about plagiarism or cheating” 21.9% agreed, 3.1% neither agreed nor disagreed, 13.5% disagreed and 7.3% strongly disagreed, hence majority of respondents agreed that Turnitin was helpful for e-learning about

plagiarism or cheating. There were 37.5% respondents who strongly agreed that “Turnitin can be used as a source of teaching device”, 42.7% agreed, 13.5% neither agreed nor disagreed, 3.1% disagreed and 3.1% strongly disagreed, so the majority of respondents agreed that Turnitin can be used as a source of teaching device. There were 35.4% respondents who strongly agreed that “Turnitin is helpful for e-learning about plagiarism or cheating?”, 44.8% agreed, 9.4% neither agreed nor disagreed, 9.4% disagreed and only 1% strongly disagreed, the majority of respondents agreed that Turnitin was helpful for e-learning about plagiarism or cheating. There were 14.6% respondents who strongly agreed that “Turnitin helps to locate the sources, used to complete the assignment or research work”, 25% agreed, 25% neither agreed nor disagreed, 19.8% disagreed and 15.6% strongly disagreed. There were 22.9% respondents who strongly agreed that “Turnitin has raised awareness among students/ researchers, about plagiarism”, 44.8% agreed, 19.8% neither agreed nor disagreed, 11.5% disagreed and only 1% strongly disagreed, hence majority of respondents agreed that Turnitin had raised awareness among students/ researchers, about plagiarism. There were 39.6% respondents who strongly agreed that “Comments function of Turnitin is helpful for students to learn that what is more required for completion of their work”, 40.6% agreed, 10.4% neither agreed nor disagreed, 7.3% disagreed and 2.1% strongly disagreed, the majority of respondents agreed that function of comments of Turnitin is helpful for students to learn that what is more required for completion of their work. There were 43.8% respondents who strongly agreed that “As e-learning tool Turnitin promoted writing skills among students”, 43.8% agreed, 6.3% neither agreed nor disagreed, 4.2% disagreed and 2.1% strongly disagreed, hence majority of respondents agreed that as an e-learning tool, Turnitin promoted writing skills among students. There were 35.4% respondents who strongly agreed that “Through Turnitin e-lectures can be executed in term of giving feedback to students”, 40.6% agreed, 16.7% were neither agreed nor disagreed, 6.3% disagreed and only 1% strongly disagreed, hence the majority of respondents agreed that Through Turnitin e-lectures can be executed in term of giving feedback to students. There were 25% respondents who strongly agreed that “Through Turnitin Students can learn about the weaknesses of their work in the light of experts’ reviews”, 42.7% agreed, 13.5% neither agreed nor disagreed, 12.5% disagreed and 6.3% strongly disagreed, hence majority of respondents agreed that through Turnitin, students can learn about the weaknesses of their work in the light of experts’ reviews. There were 36.5% respondents who strongly agreed that “It is easy to learn from Turnitin that how to improve originality of work”, 40.6% agreed, 13.5% neither agreed nor disagreed, 7.3% disagreed and 2.1% strongly disagreed. Majority of respondents agreed that it was easy to learn from Turnitin that how to improve originality of work. There were 20.8% respondents who strongly agreed that “Turnitin helps students to learn that how to get away from plagiarism”, 41.7% agreed, 19.8% neither agreed nor disagreed, 10.4% disagreed and 7.3% strongly disagreed, so the majority of respondents agreed that Turnitin helps students’ to learn that how to avoid plagiarism. There were 15.6% respondents who strongly agreed that “Turnitin helps in

locating and learning grammatical errors and spelling mistakes”, 38.5% agreed, 20.8% neither agreed nor disagreed, 17.7% disagreed and 7.3% strongly disagreed, the majority of respondents agreed that Turnitin was helpful for e-learning about plagiarism or cheating.

Table 5: Advantages of Turnitin

| Sr.# | Statement | 1 SA F (%) | 2 A F (%) | 3 NANDA F (%) | 4 DA F (%) | 5 SDA F (%) | Mean | Std. Deviation |
|------|--|---------------------|--------------------|------------------------|---------------------|----------------------|-------------|-------------------|
| 1 | Turnitin is helpful for e-learning about plagiarism or cheating | 52 (54.2) | 21 (21.9) | 3 (3.1) | 13 (13.5) | 7 (7.3) | 1.98 | 1.338 |
| 2 | Turnitin can be used as a source of teaching device | 36 (37.5) | 41 (42.7) | 13 (13.5) | 3 (3.1) | 3 (3.1) | 1.92 | .959 |
| 3 | Turnitin is useful for learning, how to write reference or citation properly | 34 (35.4) | 43 (44.8) | 9 (9.4) | 9 (9.4) | 1 (1) | 1.96 | .962 |
| 4 | Turnitin helps to locate the sources, used to complete the assignment or research work | 14 (14.6) | 24 (25) | 24 (25) | 19 (19.8) | 15 (15.6) | 2.97 | 1.293 |
| 5 | Turnitin has raised awareness among students/ researchers, about plagiarism | 22 (22.9) | 43 (44.8) | 19 (19.8) | 11 (11.5) | 1 (1) | 2.23 | .968 |
| 6 | Comments function of Turnitin is helpful for students to learn that what is more required for completion of their work | 38 (39.6) | 39 (40.6) | 10 (10.4) | 7 (7.3) | 2 (2.1) | 1.92 | .991 |
| 7 | As e-learning tool Turnitin promoted writing skills among students | 42 (43.8) | 42 (43.8) | 6 (6.3) | 4 (4.2) | 2 (2.1) | 1.77 | .900 |
| 8 | Through Turnitin e-lectures can be executed in term of giving feedback to students | 34 (35.4) | 39 (40.6) | 16 (16.7) | 6 (6.3) | 1 (1) | 1.97 | .934 |

| | | | | | | | | |
|----|---|--------------|--------------|--------------|--------------|------------|-------------|--------------|
| 9 | Through Turnitin Students can learn about the weaknesses of their work in the light of expert's reviews | 24 (25) | 41 (42.7) | 13 (13.5) | 12 (12.5) | 6 (6.3) | 2.32 | 1.165 |
| 10 | It is easy to learn from Turnitin that how to improve originality of work | 35 (36.5) | 39 (40.6) | 13 (13.5) | 7 (7.3) | 2 (2.1) | 1.98 | .995 |
| 11 | Turnitin helps students' to learn that how to get away from plagiarism | 20 (20.8) | 40 (41.7) | 19 (19.8) | 10 (10.4) | 7 (7.3) | 2.42 | 1.149 |
| 12 | Turnitin helps in locating and learning grammatical errors and spelling mistakes | 15 (15.6) | 37 (38.5) | 20 (20.8) | 17 (17.7) | 7 (7.3) | 2.63 | 1.163 |

1= strongly agree; 2= agree; 3= neither agree nor disagree; 4= disagree; 5= strongly disagree

There were 43.8% respondents who "Always" used Turnitin to check student's work online, 27.1% "frequently", 19.8% "Sometimes", 6.3% "Seldom" and 3.1% "Never" used Turnitin to check students' work online, so the majority of respondents always use Turnitin checking the students' work online. There were 37.5% respondents who "Always" shared originality report with their students after checking their work in Turnitin, 30.2% "frequently", 15.6% "Sometimes", 9.4% "Seldom" and 6.3% "Never" shared originality report with their students after checking their work in Turnitin. So the majority of respondents shared the originality report with their students for their compliance. There were 36.5% respondents who mentioned that after receiving originality report, their students "Always" tried to eliminate plagiarized material from their work, 40.6% "frequently", 13.5% "Sometimes", 6.3% "Seldom" and 3.1% "Never" tried to eliminate plagiarized material from their work. There were 4.2% respondents who "Always" checked and marked the assignments using rubrics in Turnitin, 11.5% "Frequently", 31.3% "Sometimes", 25% "Seldom" and 28.1% "Never" checked and marked the assignments using rubrics in Turnitin. There were 4.2% respondents which responded that they "Always" used Turnitin as e-blackboard, 6.3% "Frequently" 29.2% "Sometimes", 16.7% Seldom and 43.8% "Never" used Turnitin as e-blackboard. There were 4.2% respondents who mentioned that they "Always" checked and mentioned comments about assignments using grade marks in Turnitin, 20.8% "Frequently", 32.3% "Sometimes", 19.8% "Seldom: and 22.9% "Never" checked and mentioned comments about assignments using grade marks.

Table 6: Usage purpose of Turnitin

| Usage | 5 | 4 | 3 | 2 | 1 | MODE |
|--|--------------|--------------|--------------|--------------|--------------|------|
| | Always | Frequently | Sometimes | Seldom | Never | |
| | F | F | F | F | F | |
| | (%) | (%) | (%) | (%) | (%) | |
| I use Turnitin to check student's work online | 42 (43.8) | 26 (27.1) | 19 (19.8) | 6 (6.3) | 3 (3.1) | 5 |
| After checking students work in Turnitin, I share originality report with them | 37 (38.5) | 29 (30.2) | 15 (15.6) | 9 (9.4) | 6 (6.3) | 5 |
| After receiving originality report, students try to eliminate plagiarized material from their work | 35 (36.5) | 39 (40.6) | 13 (13.5) | 6 (6.3) | 3 (3.1) | 4 |
| I check and mark the assignments using rubrics in Turnitin | 4 (4.2) | 11 (11.5) | 30 (31.3) | 24 (25) | 27 (28.1) | 3 |
| I use Turnitin as e-blackboard | 4 (4.2) | 6 (6.3) | 28 (29.2) | 16 (16.7) | 42 (43.8) | 1 |
| I check and mention comments about assignments using grade marks | 4 (4.2) | 20 (20.8) | 31 (32.3) | 19 (19.8) | 22 (22.9) | 3 |

Fulfillment of the Objectives

In this section, statistics analysis related to the objective of the study is being presented. Following are the research questions and their answers in the light of statistical tests.

| Objective | Fulfillment |
|--|--|
| For which purpose (s) mostly Turnitin is being used? | <ul style="list-style-type: none"> As a source of teaching device. For e-lectures and giving feedback to students. |

| | |
|--|---|
| <p>Which kind of e-learning can be learnt through Turnitin?</p> | <ul style="list-style-type: none"> • To check students' work online. • E-learning about plagiarism. • Learning about proper referencing and citation. • E-learning about the improvement in the originality of work. |
| <p>Is Turnitin useful for improvement in writing skills?</p> | <p>(P-Value= .000) Significantly improving writing skills.</p> |
| <p>To what extent Turnitin is being used to deliver online lectures?</p> | <p>(P-Value= .000) Significant for execution of lecturers in term of giving feedback.</p> |
| <p>To what extent Turnitin is being used to e-checking assignments?</p> | <p>(P-Value= 000) Significantly being used for e-checking assignments using rubrics.</p> |
| <p>To point out the e-learning outcomes that can be attain through Turnitin?</p> | <ul style="list-style-type: none"> • Awareness about plagiarism among students and researchers. • E-learning, how to improve originality of work. • Elimination of plagiarized work. • E-learning that how to get away from plagiarism • E-learning about the sources that are used for the completion of assignments. |

For the execution of T-Test(s) please see Appendix

Conclusion

In Pakistan Turnitin was introduced by Higher Education Commission (HEC) in 2009. At that time it was mostly used only for checking plagiarism by matching text. With the passage of time, many new features were added and some new services are offered by the agency. Currently this software is being used for multiple purposes. This study was conducted to know the role of the software in e-learning. It was seen in the light of the responses of the respondents that this software was being used for various purposes. Through this study, e-learning through Turnitin software was also noted. There are so many dimensions which are still needed to be investigated regarding the usage and role of Turnitin in e-learning and its broad outcomes.

References

- Ali, W. Z. W., Ismail, H., & Cheat, T. T. (2012). Plagiarism: to what extent it is understood?. *Procedia-Social and Behavioral Sciences*, 59, 604-611.
- Batane, T. (2010). Turning to Turnitin to fight plagiarism among university students. *Journal of Educational Technology & Society*, 13(2), 1-12.
- Cheema, Z. A., Mahmood, S. T., Mahmood, A., & Shah, M. A. (2011). Conceptual awareness of research scholars about plagiarism at higher education level: intellectual property right and patent. *International Journal of Academic Research*, 3(1), 666-671.
- Kostka, I., & Maliborska, V. (2016). Using Turnitin to Provide Feedback on L2 Writers' Texts. *TESL-EJ*, 20(2), n2.
- Lee, Y. (2011). Understanding anti-plagiarism software adoption: An extended protection motivation theory perspective. *Decision Support Systems*, 50(2), 361-369.
- Marcus, S., & Beck, S. (2011). Faculty perceptions of plagiarism at Queensborough community college. *Community & Junior College Libraries*, 17(2), 63-73.
- McCabe, D. L. (2003). Promoting academic integrity-A US/Canadian perspective. In Marsden, Hicks and Bundy (eds) *Educational Integrity: Plagiarism and other Perplexities*. Proceedings of the first Australasian Educational Integrity Conference (pp. 21-22).
- Mulcahy, S., & Goodacre, C. (2004). Opening Pandora's box of academic integrity: Using plagiarism detection software. In Proceedings from ASCILITE Conference 2004.
- Park, C. (2003). In other (people's) words: Plagiarism by university students--literature and lessons. *Assessment & evaluation in higher education*, 28(5), 471-488.
- Piracha, H. A. (2011). Plagiarism at a glance: a case study of University of the Punjab. *Journal of the Bangladesh Association of Young Researchers*, 1(1), 127-132.
- Ramzan, M., Munir, M. A., Siddique, N., & Asif, M. (2012). Awareness about plagiarism amongst university students in Pakistan. *Higher Education*, 64(1), 73-84.
- Rolfe, V. (2011). Can Turnitin be used to provide instant formative feedback?. *British Journal of Educational Technology*, 42(4), 701-710.
- Shirazi, B., Jafarey, A. M., & Moazam, F. (2010). Plagiarism and the medical fraternity: a study of knowledge and attitudes. *JPMA. The Journal of the Pakistan Medical Association*, 60(4), 269.
- Szabo, A., & Underwood, J. (2004). Cybercheats is information and communication technology fuelling academic dishonesty?. *Active Learning in Higher Education*, 5(2), 180-199.
- Thompson, C. (2006). Unintended lessons: Plagiarism and the university. *The Teachers College Record*, 108(12), 2439-2449.

Walker, J. (2010). Measuring plagiarism: researching what students do, not what they say they do. *Studies in Higher Education*, 35(1), 41-59.

Zehry, K., Halder, N., & Theodosiou, L. (2011). E-Learning in medical education in the United Kingdom. *Procedia-Social and Behavioral Sciences*, 15, 3163-3167.