

The Use of Online Similarity Check to Improve Student's Awareness on Plagiarism Issues

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Abstract: Plagiarism has been a serious concern in Indonesia especially those of Islamic Universities where the regulation has not been settled. This study examines student's awareness of plagiarism issue before and after the implementation of Turnitin showing the similarity index of their papers. The technique of data collection employed in this study covers documentation on student's similarity index and field notes from focus group discussion in three departments at an Islamic State University in Malang. It involves English Letters department, Arabic Language Teaching department and Syariah Business and Law department. The analysis shows that discussing plagiarism is inseparable from the cultural interference and perspective of the students; as well as the understanding on the legal bases on plagiarism. The use of online similarity check is effective to improve the student's awareness to avoid plagiarism. The implication of this study further goes to the need of establishing a more explicit regulation on how to handle and avoid plagiarism in Islamic Universities under Indonesian Ministry of Religious Affair.

1 INTRODUCTION

Plagiarism has been a sporadic issue in academic context particularly for students writing in English as foreign language. Therefore understanding specific academic conventions is not enough as students are also required to avoid plagiarism. Both of these skills are seen as essential skills for international students (r. Barret & j. Malcolm, 2006). Teaching international students on the importance of articulating other's voice and subjectivity needs long process. It should be introduced earlier in children's writing class as it involves particular social implication and certain ideologies (g. Kamberelis and k.d. scott, 1992). For pre-intermediate students, the challenge to write a paper in English deals with how to come to the suggested word count, therefore they prefer to insert more citation to cover their difficulty in developing paragraphs (m. A. Al-khairi, 2013). In this case, paraphrasing strategy becomes another challenge for them which then result in high similarity index of their paper.

Checking similarity index can be done through various online platforms, one of which is Turnitin. Turnitin supports the user's need by providing helpful clues to the part in one's writing indicating similarity to other text. In addition it is also equipped with feature like peer review modules to enable users make

comments and connections with other users (J. Li and M. Li, 2018). Turnitin is also reported as a very supportive originality check platform due to its capacity to provide obvious indicator of plagiarism levels in user's work. In addition this software is also useful for teaching staff to assess student's assignments and detect plagiarism (E. Buckley and L. Cowap, 2013).

2 METHOD

This study was carried out to students at Maulana Malik Ibrahim Islamic State University of Malang (MMI-UIN). They are students of English Letters, Arabic Language Teaching and Syariah Business & Law departments. The participants are those agreed to join focus group discussion held in English language, Bahasa Indonesia and Arabic language. All participants were not familiar with the use of Turnitin before the focus group discussion. After a short training of using Turnitin, they were involved in focus group discussion aimed to explore several aspects. First aspect is on the student's knowledge of plagiarism issues. Second is on how students interpret the similarity index of their paper. Third is on the experiences of students with particular emphasis on the ways in which Turnitin was employed as a tool

for writing development. The focus-group interviews lasted approximately 45 and 60 min each.

3 FINDING AND DISCUSSION

3.1 Plagiarism in Indonesia

Indonesia regulates the prevention of plagiarism through Law no. 28 of 2014 on Copyright as well as the provisions of articles 9-14 of the Trade Related of Intellectual Property Rights (TRIPs). Copyright under the Act is an exclusive right of the authors that arise automatically on the basis of a declarative principle after a work is manifested in its tangible form without prejudice to restrictions in accordance with the provisions of legislation. Plagiarism indeed is a violation of the moral right of copyright (K. Hidayah, 2017).

Efforts to emphasize the prevention of copyright infringement in Indonesia are also supported by the facts of the scholars who forbid the unauthorized use of copyrights. The cleric issued Decree of Fatwa MUI Number: 1 / MUNAS VII / MUI / 5/2005 on the Protection of Intellectual Property Rights (IPR).

Educational institutions in universities have also regulated through Article 1 Paragraph 1 of Minister of Education Regulation no. 17 of 2010 which explains that plagiarism is the act of intentionally or unintentionally in obtaining or trying to obtain credit or value for a scientific work. That is to quote part or all of the work and / or scientific work of others, without declaring the source appropriately and adequately (K. Hidayah, 2017). Sanctions for students who perform plagiarism are given in the form of administrative sanctions. If the student is proven to have plagiarism despite graduation, then the sanction is the cancellation of the diploma (Article 12 paragraph [1g] Permendiknas 17/2010).

In spite of the fact that nowadays plagiarism issues are increasing, in Indonesia the regulation to treat directly on such issues is not available in all Indonesian universities. Take for example in Universities under the Ministry of Religious Affairs. Some universities depend on religious morality and academic ethics in dealing with plagiarism. In the context writing in English as foreign language (EFL), students faced several difficulties particularly in combining ideas from some resources without tempting to copy paste the wording of the author cited (B. Y. Cahyono and R. N. Indah, 2012). There are actually several causes of plagiarism in EFL setting. The most factor is time constrain, the lack of

knowledge about plagiarism, poor citation skill, poor academic skill, inability to paraphrase properly and the challenge to struggle with grammar and vocabulary as well (Y. C. Sun, . 2013).

In addition, the research in Maulana Malik Ibrahim Malang in 2013 showed that the law attitude of students in the university does not show the positive of law attitude in protection of the copyrights. Although the students respect the creation of mine (literary), but they still do not have the law attitude to obey the law of copyright (K. Hidayah, 2013). It is important in the campus, that the students must know about the copyright regulation and moral right in the copyright.

3.2 Legal Perception of Plagiarism

Plagiarism belongs to wrongful conduct that may harm the author that has the copyright legislation. When a person fails to attribute the voice or ideas of another author then it results in violence of moral property of the original work (W. Sutherland-Smith, 2005). International agreement on copyright were signed by countries including those in South-East Asia which then is translated into plagiarism regulation in universities (B. Y. Cahyono, 2005). In Indonesia the policies regarding plagiarism is as deciphered in Table 1 (B. Y. Cahyono,2005).

Table 1: Plagiarism policies in Indonesian outstanding universities.

University	Plagiarism is not addressed, but religious morality is upheld	Plagiarism is not addressed, but academic ethic is emphasised	Certain aspects of plagiarism are addressed explicitly
Airlangga University	✓		
Andalas University	✓		
Brawijaya University	✓	✓	
Diponegoro University	✓		
Gadjah Mada University	✓		
Hasanuddin University			✓
Muhammadiyah University of Malang	✓		
Padjadjaran University	✓		
Petra Christian University	✓		
State University of Jember		✓	
State University of Malang			✓
Udayana University	✓		
University of Indonesia			✓
University of Northern Sumatra	✓		

Based on the data of the sample papers, the highest similarity index is 84 and the lowest is 14. Half of the students (54%) got moderate level of similarity index ranging from 20 to 40. While 37% falls with the

category of high similarity (40 to 100). The rest (9%) had low similarity index as seen in Figure 1.

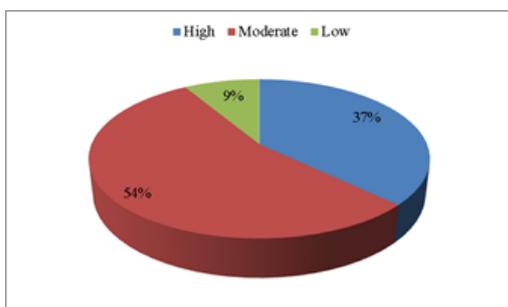


Figure 1 Similarity index of sample papers

The improvements were found through the intervention of Turnitin with first drafts. As shown in Table II, the average of the improvement is 30 while the average number of pages of student’s paper is 9. There was a weak correlation (0.3) between the improvement and the number of pages. Accordingly, it means that the problem is not on the quantity of student’s paper but on the quality of the wording in the paper which is to some extent similar to other text. It also shows different finding compared to the study examining student’s paper taking Master diploma in UK where there is tendency to reduce the use of other authors’ words (M. Davis, 2007).

Table 2: Similarity index of sample papers

Datum	Check 1	Check 2	Difference	Pages
1.1	73	13	60	10
1.2	28	17	11	9
1.3	59	20	39	9
1.4	59	36	23	7
2.1	20	10	10	4
2.2	19	6	13	4
3.1	14	4	10	11
3.2	23	0	23	9
3.3	23	9	14	9
3.4	25	0	25	6
3.5	26	3	23	10
3.6	26	9	17	10
3.7	26	8	18	8
3.8	27	3	24	6
3.9	29	13	16	7
3.10	45	9	36	7
3.11	32	8	24	8
3.12	39	16	23	8
3.13	43	9	34	10
3.14	48	0	48	11

Datum	Check 1	Check 2	Difference	Pages
3.15	50	0	50	6
3.16	66	9	57	9
3.17	84	22	62	10
4.1	81	5	76	14
4.2	66	7	59	14
4.3	54	1	53	8
4.4	15	1	14	11
5.1	31	2	29	7
5.2	31	4	27	14
5.3	25	9	16	8
5.4	27	13	14	12
5.5	46	17	29	16
5.6	31	12	19	13
5.7	44	14	30	11
5.8	29	15	14	12
Σ= 35	Avg 39	Avg 9	Avg 30	Avg 9

After the short training on the use of Turnitin, students in focus group discussion reflected their learning about similarity checking. They agreed that the use of online similarity check like Turnitin gave opportunities for them to engage more in improving their awareness not only about plagiarism but also on their own weakness. They realized the need to learn more about many areas of source use, such as citation, quotation and paraphrasing. This is similar to the demand in any academic context that writing a paper should also involve the ability to express one’s own voice, how to use phrases, and acknowledge all borrowed text (M. Davis and F. Yeang, 2008). Many students experienced the sense of a real turning point in understanding what they needed to do to use sources effectively

The use of online system is helpful to support students’ writing proficiency as they can assess their own work (K. Ma, 2013). In this study, the use of online similarity check has shown several benefits, not only to identify the phrases, clauses or sentences which are similar to other texts but also to guide the students mind their wording by implementing several paraphrasing strategies.

Regarding the first question on student’s knowledge on plagiarism, students had several responses.

“I thought that when I copy one’s sentences but I acknowledge the source then it doesn’t belong to plagiarism.”

“When I paraphrase other person’s sentences into my own word, I think that becomes my ideas too. I don’t think it is plagiarized.”

"Plagiarism occurs when one borrow other's data, opinion or thought without stating the citation properly."

From the feedback above, it is obvious that student's knowledge on plagiarism is varied but relatively poor. On legal consequence of plagiarism, not many can describe well. Based on these feedbacks, it is clear that plagiarism is not merely lack of language skill or lack in integrity because they plagiarise without knowing exactly the detailed meaning of plagiarism. Therefore blaming plagiarism to international students by relying on language skills and integrity is arguable (N. Handa and C. Power, 2005).

This fact is similar to student's low understanding on the meaning plagiarism in a Hong Kong College where the first year students had little familiarity with the Western notion of plagiarism and poor ability to recognize it (G. Deckert. 1993). It also brings another impact that there exist culturally based interpretations of plagiarism (G. Hu and J. Lei, 2012).

The focus group interview describes how students affirm that their difficulty to rephrase the ideas from the resources is directly linked with their weakness in reading. They cannot extract large amount of sources, synthesized the information and put into a concise paragraph. Only expert readers can specify meaning to elaborate in the paragraphs of their paper (D. Biber and B. Gray, 2010).

The similarity check is supposed to be understood as a tool to develop one's writing quality. However, students felt accused by saying:

"It seemed that the high index of my paper told me that I was cheating though I didn't plagiarize at all. I have made the references clear and the citations are also proper."

"It's getting more difficult. I guess I have combined several ideas from some sources and I have also checked my grammar and vocabulary in all paragraphs. But then, Turnitin said that I plagiarized to some extent."

"I worry that my teachers will base the scoring on the index. I know my weakness on the language that I cannot paraphrase well. But it does not mean that I am dishonest as what the index said."

In this case, students need to acknowledge that the online similarity check is not merely plagiarism detection platform but as a tool for plagiarism education and it helps constructing academic literacy by reviewing the proportion of one's voice in the paper. Then it contributes to building one's writing skill in co-articulating other people's voice in the text (G. Kamberelis and K.D. Scott, 1992).

The way students interpreted their high similarity index results in the need to differentiate the labels, not

directly given to plagiarism as cheating versus misuse of source texts (Y. Li and C. P. Casanave, 2012). After introduced to Turnitin, students reflect on their experience.

"Now I realized that I have to be more cautious with the citation. I used to take sources and combine with others, but apparently it's not enough. It's all about paraphrase and check."

"I learn that when I took the source from other language, for example from a reference in Arabic language, Turnitin cannot detect it."

"This tool uncovered that I referred too much to certain source in my paper. It seems I need to develop my reading as well."

"Last semester I got A in my paper project just because I used a lot of references. Yet, I'm not sure whether I can get another A if the scoring also involves Turnitin check."

The fact that students experienced differently about the exposure to online similarity check to some extent deals with the changing awareness of plagiarism. In the beginning the students might think that they are away from plagiarism, but after introduced to Turnitin they realized that they have to be more responsible to what they write in their papers. Despite the negative feedback, more students appreciated the use of this online similarity check to improve their writing proficiency. Students who state that they need to learn more about how to use sources and to develop their interpretive reading as well demonstrate good stage of learning as they can reflect more on their experiences (N. Hayes and L. D. Intronza, 2005).

The use of plagiarism detection is only a small part of the construct in building student's writing competence. However, online plagiarism detection also to some extent has limitation. It cannot detect complex paraphrase and high density of paraphrase mechanism. Further, the lexical substitution as the dominant mode in paraphrasing cannot be traced by automated plagiarism detection. Some writers also tend to shorten the plagiarized text (A. Barron-Cedeno, M. Vila. M, A. Marti and P. Rosso, 2013)

The implementation of Turnitin as noted in this study has created a discussion focus of student writing development (C. Penketh and C. Beaumont. 2014). More importantly it increases student's responsibility for writing. It makes students more careful to their wording in the paper as it is also potential to be used for marking. In general students were aware that their skill to paraphrase results in a better writing development. This will also result in an increase on academic honesty and integrity(J. Orr, 2018).

Students reported that after introduced to Turnitin they would want to do their best to improve their paper quality in terms of writing the citation. They also stated that they need to learn more to sharpen their skill to use references and synthesize ideas from the sources. This process also supports the learning opportunities for academic literacy and plagiarism education (M. Davis, 2007). In addition, improving the skill on academic language is also effective to help reduce incidences of plagiarism (M. Perkins, U.B. Gezgin, and J. Roe, 2018). Although this research has focused on a particular cohort of students with a small number of sample, to some extent the findings have some transferability to other contexts. Students share the same experience being introduced to online similarity check for the first time will face adjustment issues. Further, when plagiarism issues are ruled within campus policy, the reduction of cheating would support the realization of personal and academic integrity of the students through the use of more holistic practices (R. L. Young, G.N.S. Miller and C.L Barhardt, 2018).

4 CONCLUSION

This study uncovers the use of online similarity check that is Turnitin to improve student's awareness of plagiarism issues. Previously students did not realize that plagiarism issues are broad. Therefore blaming poor language skill and academic integrity for the problem of plagiarism is arguable as this study shows that it is a matter of insufficient knowledge on how to use sources more effectively. On how student's interpret the similarity index of their paper, the finding shows that the high index is mostly labeled as cheating not as misuse of source. In this case, students need to acknowledge the essence of the use of online similarity check, not merely to label as plagiarism. Students also had various experiences with particular emphasis on the ways in which Turnitin was employed as a tool for writing development. Hence, it is considered essential to enhance student's critical reading and note-taking skills to avoid plagiarism. In addition, students should also develop their skill on summarising and paraphrasing so that they are able to incorporate evidence appropriately into their writing.

REFERENCES

- A. Barron-Cedeno, M. Vila, M. A. Marti and P. Rosso. 2013. *Plagiarism meets paraphrasing: insights for the next generation in automatic plagiarism detection*. Computational Linguistics vol. 39 no. 4 pp. 917-947
- B. Y. Cahyono and R. N. Indah. 2012. *Second language research and pedagogy: toward the development of English language teaching in Indonesia*. UM Press, Malang. ISBN 979495998-7.
- B. Y. Cahyono. 2005. *How Australian and Indonesian universities treat plagiarism: a comparative study*. Jurnal Ilmu Pendidikan vol. 2 no. 3 pp. 1-18
- C. Penketh and C. Beaumont. 2014. Turnitin said it wasn't happy: can the regulatory discourse of plagiarism detection operate as a change artefact for writing development?" *Innovations in Education and Teaching International* vol. 51 no. 1 pp. 95-104
- D. Biber and B. Gray. 2010. *Challenging stereotypes about academic writing: complexity, elaboration, explicitness*. English for Academic Purposes vol 9 no.1 pp. 2-20
- E. Buckley and L. Cowap. 2013. *An evaluation of the use of Turnitin for electronic submission and marking and as a formative feedback tool from an educator's perspective*. British Journal of Educational Technology vol. 44 no. 4 pp. 562-570
- G. Deckert. 1993. Perspectives on plagiarism from ESL students in Hong Kong. *Journal of Second Language Writing* vol. 2, No. 1 pp. 131-148
- G. Hu and J. Lei. 2012. Investigating Chinese university students' knowledge of and attitudes toward plagiarism from an integrated perspective. *Language Learning* vol. 62 no. 3 pp. 38-50
- G. Kamberelis and K.D. Scott. 1992. *Other's people viuces: the coarticulation of texts and subjectives*. Linguistics & Education vol. 4 no. 3, pp. 359-403.
- J. Li and M. Li. 2018. *Turnitin and peer review in ESL academic writing classrooms*. *Language Learning & Technology* vol. 22 no. 1, pp. 27-41
- J. Orr . 2018. *Developing a campus academic integrity education seminar*. *Journal of Academic Ethics* vol. 14 no. 3 pp. 195-209.
- K. Hidayah. 2013. *Tingkat pemahaman mahasiswa tentang perlindungan hak cipta atas karya tulis*. De Jure: Jurnal Hukum & Syariah vol. 5 no. 1 pp. 52-66
- K. Hidayah. 2017. *Hukum HKI: Hak Kekayaan Intelektual*. Setara Press Malang
- K. Ma. 2013. Improving EFL graduate students' proficiency in writing through an online automated essay assessing system. *English Language Teaching* vol. 6 no. 7 pp. 158-167
- M. A. Al-Khairy. 2013. *Saudi English-major undergraduates' academic writing problems: a Taif University perspective*. *English Language Teaching* vol. 6 no. 6, pp. 1-12
- M. Davis and F. Yeang. 2008. *Encouraging international and dyslexic students to develop better learning strategies for writing through the use of Turnitin*. *Brookes eJournal of Learning and Teaching* vol. 2 no.3
- M. Davis. 2007. *The role of turnitin within the formative process of academic writing – a tool for learning and unlearning*. *Brookes eJournal of Learning and Teaching* vol. 2 no. 2

- M. Perkins, U.B. Gezgin, and J. Roe . 2018.
- N. Handa and C. Power. 2005. *Land and discover! A case study investigating the cultural context of plagiarism*. Journal of University Teaching and Learning Practice vol. 2 no. 3b pp. 64–86
- N. Hayes and L. D. Introna. 2005. Cultural values, plagiarism, and fairness: when plagiarism gets in the way of learning”, *Ethics and Behaviour* vol. 15 no. 3 pp. 213–231
- R. Barret & J. Malcolm. 2006. *Embedding plagiarism education in the assessment process*. International Journal for Education Integrity vol. 2 no. 1, pp. 38-45
- R. L. Young, G.N.S. Miller and C.L Barhardt. 2018. *From policies to principles: the effects of campus climate on academic integrity, a mixed methods study*. Journal of Academic Ethics vol. 16 no.1 pp 1-17.
- Understanding the relationship between language ability and plagiarism in non-native English speaking business students*. Journal of Academic Ethics vol. 16 no.2 pp.1-12
- W. Sutherland-Smith. 2005. *Pandora's box: academic perceptions of students plagiarism in writing*. Journal of English of Academic Purpose vol. 4 pp. 83-95
- Y. C. Sun . 2013. *Do journal authors plagiarize? Using plagiarism detection software to uncover matching text across disciplines*. Journal of English for Academic Purposes vol. 12 pp. 264-272
- Y. Li and C. P. Casanave. 2012. *Two first-year students' strategies for writing from sources: patchwriting or plagiarism?* Journal of Second Language Writing vol. 21 no. 2 pp. 65-180

