



Open access Journal

Plagiarism in Mexican Engineering Students

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Abstract

The present work investigates the index of plagiarism in dissertations in the field of engineering at an undergraduate level in a higher education institution in Mexico. Through the on-line program *SafeAssign*, we analyzed 243 college dissertations and found evidence of plagiarism half of them. Ethical and teaching implications are analyzed. It is recommended to reduce the plagiarism, strategies such as reducing the extension of works, the systematic use of programs to screen for originality and to stress the importance of it originality in academic work

Key words: Plagiarism, Dissertation, Mexico

Plagiarism in Mexican Engineering Students

There is a cultural component in the plagiarism phenomenon affecting many academic settings worldwide. Maurer, Kappe y Zaka (2006), have depicted policies in major American Universities to reduce this practice and to reinforce ethical principles to protect authorship and foster originality in students' works. They argue that one of the teacher's responsibility is to be vigilant of this practice and to apply sanctions to those who breach this sets of rules.

In the Spanish speaking world, Spain has shown leadership in research and legislation against plagiarism. For instance, research on cyber plagiarism has suggested several solutions and policies (Comas y Sureda, 2007).

In the Mexican educational system, it seems important to tackle this problem since the overall political agenda confronting the 2018 general elections is the pervasive corruption in the country.

In general, educational research about plagiarism has grown in almost every country, and this is a vibrant topic of research and academic discussion.

Comas, Sureda, Casero y Morey (2011) reported that 77% of students in their analysis reported to have copy and paste information from the internet in developing their graduate work.

In general, there is broad agreement that the easy access to the academic information on the web has facilitated and even fostered unethical use of other's work.

Plagiarism

Plagiarism is an ancient phenomenon, reported since the Roman era, and according to Pérez (2009) it was used to depict the fact of abducting a person to be sold later as a slave.

González y Mattar (2011) summarize this practice, in the academic context, as the act to copy and paste (or paste and adapt) information found on the web. Or more widely, the use of other people ideas, without quoting the author or performing an adequate citation of the original work.

Research on Plagiarism

Fish y Hura (2013), identified five approaches to study plagiarism. The first assume internal factors that promote this behavior (personality, coping styles etc.). The second, focuses on external factors, usually within the school, the educational process or the teachers style. The third, when this is a rather unintentional practice associate to uses and habits within the school. The fourth, analyses plagiarism from ethical and legal

standards and Finally, the fifth, when researchers assume that students take information under the assumption that this is a valid and accepted practice that affects no one.

Ochoa and Cueva (2014) argue that there is a need to develop research that help us understand the origins, consequences and meaning of plagiarism in different schools and academic settings. For instance, Mejía y Ordoñez (2004) had characterized the study of plagiarism in Latin America as “without the innuendo of Fraud” as in the United States (p. 28).

This study intends to explore plagiarism in dissertations in one higher education institution in México, specifically in the field of engineering.

Methods

The object of study is the required dissertation work to gain a Bachelor’s degree in engineering. In Mexico, many colleges demand a written dissertation to complete a professional degree.

A total of 247 dissertations in .pdf digital format were analyzed for this work, using the anti- plagiarism software SafeAssign. This on-line program analyzes documents and presents a report of potential duplicate, copied or otherwise used paragraphs and it yields a percentage of coincidence other sources. For the purposes of tis work, we used a scale to assess the degree of originality using the criteria proposed by Ramírez and Jiménez (2016). Table 1 describes categories to classified analyzed dissertations (insert figure 1 around here)

Results

Reports of percentage of coincidence in analyzed works was 50 %, in the border with the threshold of critical levels of plagiarism (Ramírez & Jiménez , 2016). This is a troubling finding that adds to other reported levels of Plagiarism. Bautista, Sanchez and Canto (2017) reported an even higher percentage 62% of plagiarism in another higher education institution, this time to a graduate level. They also reported that most sources were not academic in nature (research, goggle scholar) and that only 19% of dissertations yielded levels consistent with original Works.

Discussion

Results show, in general, good psychometric properties from this adapted version of the Grid.

Colleges can take measures to prevent plagiarism. For instance, open and public policy statement and the consequences and punishment for its occurrence need to be posted both in web sites and in open spaces. Curriculum should include academic ethics, copyrights, intellectual property and best practices in academic work.

Restraining access to data bases in Mexican universities could be a bad idea, if we consider that most to students access open non-academy sites to develop their homework’s.

Teachers also can take measures against plagiarism should focus on asking short essay form. students, that rewards original thinking and problem solving. Long works are more likely to contain pirate content that brief ones (Bautista , Sanchez'Escobedo, & Canto, 2017). They could also set criteria to select materials depended its origin, quality and seriousness.

Techer could also use these popular on-line anti-plagiarism programs, many of them free of charge. For example, DupliCheker, Copyleaks, PaperRater, Plagiarsima and PlagScan, amongst many others.

As shown, plagiarism and lack of originality in Mexican colleges is a serious problem that needs to be addressed at various fronts.

Originality requires form school policies, teacher practices and the awareness of the students that this harmful practice in the academic life will not be tolerated.

Reference

1. Bautista , F., Sanchez'Escobedo, P., & Canto, P. (2017). Plagio en los posgrados de ciencias sociales en una universidad estatal de México. *Educación y Ciencia*.
2. Comas , R., Sureda, J., Casero , A., & Morey, M. (2011). La integridad académica entre el alumnado universitario español. *Estudios Pedagógicos*, 207-225.

3. Fish, R., & Hura, G. (2013). Students' perceptions of plagiarism. *Journal of the Scholarship of Teaching and Learning*, 33-45.
4. González, M., & Mattar, S. (Septiembre - Diciembre de 2011). ¿Es el plagio una sorpresa? ¿Acaso tiene clase? *Revista MVZ Córdoba*, 16(3), 2657 - 2658.
5. J. P. (Enero - Julio de 2009). Plagio, para evitar el plagio. *Dimensión empresarial*, 7(1), 28 - 34.
6. Maurer, H., Kappe, F., & Zaka, B. (2006). Plagiarism - A Survey. *Journal of Universal Computer Science*, 1050-1084.
7. Mejía, F., & Ordóñez, C. (2004). El fraude académico en la universidad de los andes ¿qué, qué tanto y por qué? *Revista de Estudios Sociales*, 13-25.
8. Muller, C., Katz, S. R., & Dance, L. J. (1999). Investing in Teaching and Learning: Dynamics of the Teacher-Student Relationship from Each Actor's prespective. *Urban Education*, 34, 292-337.
9. O. L., & A. C. (2014). El plagio y su relación con los procesos de escritura académica. *Forma y Función*, 27(2), 95 - 113. doi: 10.15446/fyf.v27n2.47667
10. Ramírez , R., & Jiménez , H. (Julio - Diciembre de 2016). Plagio y "auto-plagio". Una reflexión. *HiSTOReLo. Revista de Historia Regional y Local*, 8(16), 271 - 283.

Table 1.

Levels of plagiarism of correlation

% of coincidence	
Original work	0-10
Some evidence to suspect	11-29
Evidence of plagiarism	21-50
Critical	More 50

Source: Ramirez and Jimenez (2016).