

## **Plagiarism detectors in undergraduate academic writing assignments**

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### ***Abstract***

Due to easiness of producing plagiarised assignments by the help of internet technology, the implementation of plagiarism detectors seems to be one of the essential components of university students' assignment evaluation. Within this scope, the present study aimed to investigate the incidents of plagiarism in EFL academic writing. In addition, the impact of plagiarism detectors in preventing plagiarism in undergraduate assignments was also examined. To achieve these aims, a longitudinal study was conducted in the English Language Teaching Department of Çanakkale Onsekiz Mart University, Turkey in four consecutive years between 2010-2011 and 2013-2014 academic years. The participants were freshmen who enrolled in the Advanced Reading and Writing Skills Course. At the end of the spring semester, the participants submitted 3.000-word assignments as a requirement of the course. The results indicated a sharp decline in the number of plagiarism incidents by the implementation of Turnitin, a plagiarism detector. In the long run, the decrease in the number of plagiarised assignment submission was observable. Yet, the results also highlighted excessive increase in the number of non-submitted assignments. Thus, it could be concluded that plagiarism detectors are effective tools both in the detection and prevention of plagiarism. However, lecturers should take precautions to encourage students to submit their assignments. As the relevant literature highlights the contribution of providing feedback from multiple sources, weak students might be heartened to benefit from different types of feedback in process writing including familiarization with avoiding plagiarism.

***Key words:*** detecting plagiarism, plagiarism detectors, preventing plagiarism, EFL academic writing

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## Plagiarism detectors in undergraduate academic writing assignments




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## Outline

- Digital technology
- Plagiarism
- Plagiarism detectors
- Studies on PDs
- The study
  - Methodology
  - Findings and discussion
  - Conclusion and implications



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## Introduction

**Digital technology:**

- Students:
  - Sources easy to reach
  - Easy to reproduce texts
- Teachers:
  - Originality is questionable

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## What is plagiarism?

• “[C]opying or borrowing another person’s work or original ideas.”  
(Brown et al., 2010, p. 1)

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## Types of plagiarism

**Minor plagiarism:**

- Quoting a sentence or two without quotation marks and without a citation.

**Major plagiarism:**

- Almost the entire work written by someone else.


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## How to detect plagiarism?

**Digital tools:**

- Plagiarism detectors such as
  - Turnitin,
  - EduTie,
  - PlagiServe,
  - Moss .

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## Plagiarism Detectors

### Why to use a plagiarism detector?

- To check student papers against plagiarism.
- To provide more effective feedback.

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## Features

Originality

GradeMark

PeerMark

Originality

GradeMark


PeerMark

Originality

GradeMark

PeerMark


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## 2010 report

- 21 independent studies.
- Scientific basis** of their services by highlighting the results of research studies on pedagogy and practice in writing.
- The overall conclusions:**
  - teachers should integrate process writing, pay attention to originality, provide formative feedback, benefit from peer review, appreciate the contribution of writing on learning in the content areas, and impose technology to enhance writing.


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## 2012 report

- 39 independently published studies on the impact of Turnitin services.
- A consensus:**
  - Turnitin is an effective tool in the prevention and detection of plagiarism.

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## 2014 report

- Evidence on Turnitin's educational gains:**

"by encouraging students to become more original writers, facilitating electronic submission and helping instructors reduce the amount of time spent grading, while increasing the quality of feedback they give and the level of student engagement" (p. 9).

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# THE STUDY

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## Problem statement

- Technological developments provide several advantages related to academic tasks (Walker, 2010).
- !!! Increase the possibility of plagiarism !!!
- Detection of plagiarism is
  - important,
  - difficult, and
  - time consuming.

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## Solution

- Turnitin, a plagiarism detector.
- Does it work?

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## Methodology

### RESEARCH QUESTIONS:

- RQ1: How frequent is plagiarism in undergraduate academic writing?
- RQ2: Does the integration of plagiarism detectors have an impact on the frequency of plagiarism incidents?
- RQ3: Are there any gender differences in terms of being accused of plagiarism?
- RQ4: Are there any status differences in terms of being accused of plagiarism?

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## setting

- Turkey:
  - Çanakkale Onsekiz Mart University
  - ELT Department
- Four consecutive academic years:
  - between 2010-2011 and 2013-2014



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## Participants



- 881 participants:
- Students enrolled in
  - Advanced Reading and Writing Skills Course
  - between 2010-2011 and
  - 2013-2014 academic years.

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## Participants N = 881

Year	Gender	Status	Group	n	Total
2010-2011	male	regular	day	32	172
		repeat	evening	19	
	female	regular	day	7	
		repeat	evening	54	
2011-2012	male	regular	day	46	272
		repeat	evening	4	
	female	regular	day	3	
		repeat	evening	23	
2012-2013	male	regular	day	30	243
		repeat	evening	32	
	female	regular	day	17	
		repeat	evening	38	
2013-2014	male	regular	day	50	194
		repeat	evening	47	
	female	regular	day	35	
		repeat	evening	40	

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## INSTRUMENTS

- 3.000-word academic writing assignment
- Scored by means of Transparent Academic Writing Rubric (Razi, 2013).
- $\alpha = .89$
- intra-rater reliability [Pearson's  $r(55) = .99, p < .001$ ]
- inter-rater reliability [Pearson's  $r(55) = .97, p < .001$ ]
- 50 items: each 2 points out of 100.
- Five categories of items:
  - introduction (8 items),
  - citation (16 items),
  - academic writing (8 items),
  - idea presentation (11 items),
  - mechanics (7 items).

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## PROCEDURES OF DATA COLLECTION

Advanced Reading and Writing  
Course Contents suggested by  
Razi (2011).



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## PROCESS WRITING AND TYPES OF FEEDBACK (MOST RECENT VERSION)



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## STEPS OF PRE SCREENING

- The length
- The quotation ratio
- Similarity reports



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## Limitations

- Concerns Turnitin similarity reports:
  - Sources not exist in databases.
  - May not report actual plagiarism (McKeever, 2006; Walker, 2010).
- Generalization:
  - Data from a single university in the Turkish tertiary context.



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## Findings

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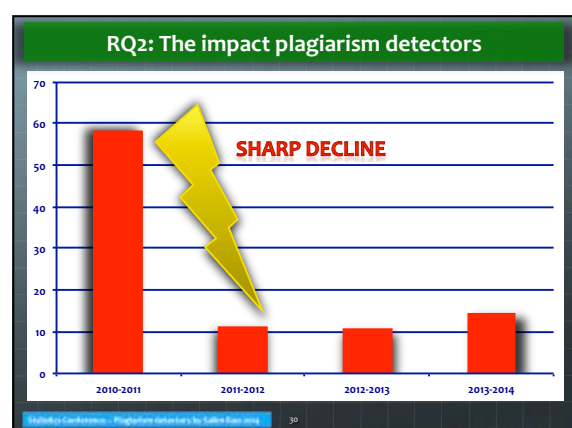
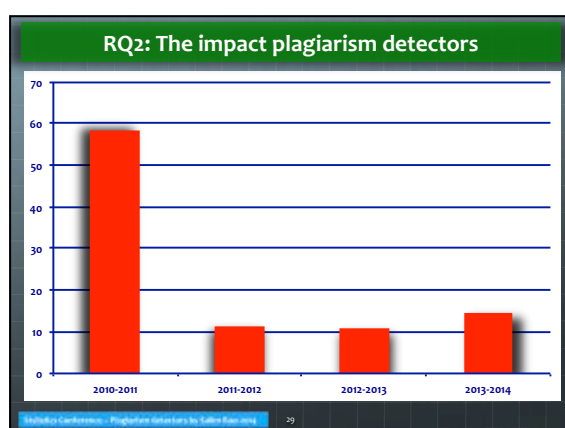
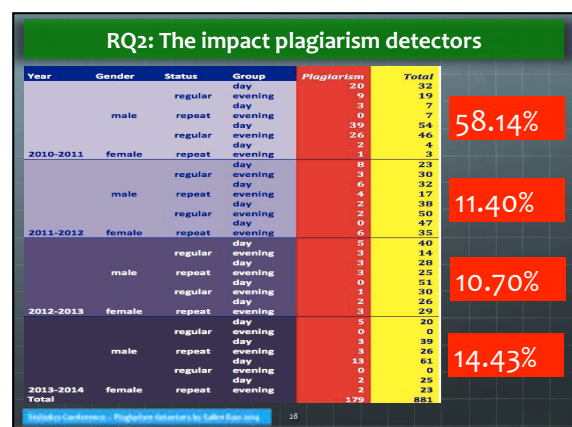
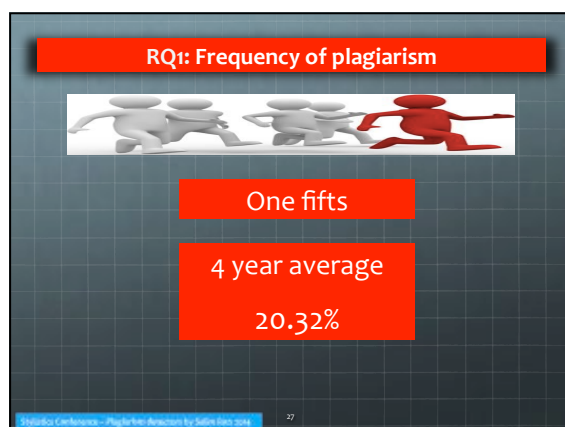
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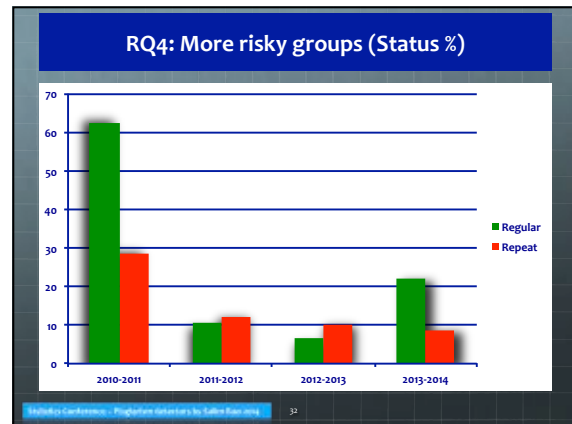
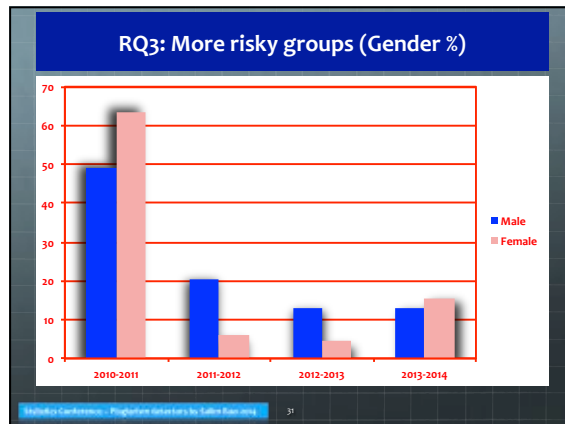
RQ1: Frequency of plagiarism									
Year	Gender	Status	Group	Plagiarism	No Submission	Accepted	Total	Total	
2010-2011	male	regular	day	20	8	4	32		
		evening	day	9	7	3	19		
		repeat	day	3	3	1	7		
		evening	day	0	4	3	7		
	female	regular	day	39	4	11	54		172
		evening	day	26	4	16	46		
		repeat	day	2	1	1	4		
		evening	day	1	2	0	3		
2011-2012	male	regular	day	8	11	4	23		
		evening	day	3	13	14	30		
		repeat	day	6	9	17	32		
		evening	day	4	4	9	17		
	female	regular	day	2	13	23	38		272
		evening	day	2	16	32	50		
		repeat	day	0	12	35	47		
		evening	day	6	4	25	35		
2012-2013	male	regular	day	5	18	12	40		
		evening	day	3	4	7	14		
		repeat	day	3	19	6	28		
		evening	day	0	16	6	25		
	female	regular	day	1	10	41	51		243
		evening	day	1	5	24	30		
		repeat	day	2	15	9	26		
		evening	day	3	12	14	29		
2013-2014	male	regular	day	5	9	6	20		
		evening	day	3	23	13	39		
		repeat	day	8	15	8	26		
		evening	day	13	11	37	61		194
	female	regular	day	0	0	0	0		
		evening	day	2	17	6	25		
		repeat	day	2	7	14	23		
		evening	day	2	7	14	23		

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		repeat	day	2	4
		evening	day	1	3
2011-2012	male	regular	day	8	23
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		evening	day	6	35
2012-2013	male	regular	day	5	40
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		evening	day	0	25
	female	regular	day	1	51
		evening	day	1	30
		repeat	day	2	26
		evening	day	3	29
2013-2014	male	regular	day	5	20
		evening	day	3	39
		repeat	day	8	26
		evening	day	13	61
	female	regular	day	0	0
		evening	day	2	25
		repeat	day	2	23
		evening	day	2	23
Total				179	881

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Discussion &

## Conclusion 1

**PLAGIARISM IS QUITE COMMON IN UNDERGRADUATE ACADEMIC WRITING.**

- Consider students' background.
- Institutional Turnitin licence in Turkey:
  - 30 universities
  - 20 private high schools
- Almost no awareness to produce original assignments at high school.
- No strict punishments for plagiarizers.

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Discussion &

## Conclusion 2

**TURNITIN CAUSES A DECLINE IN THE NUMBER OF PLAGIARISM INCIDENTS.**

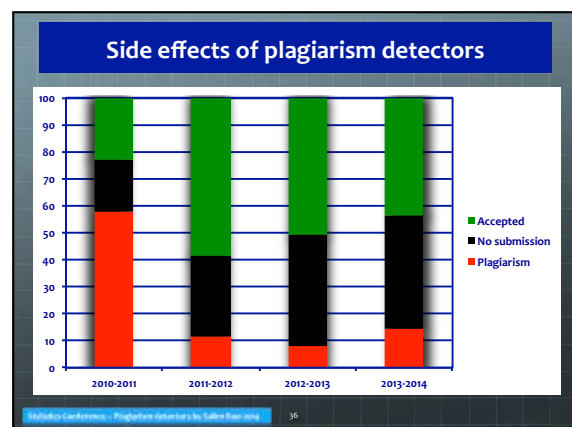
- Does being checked through Turnitin raise their affective filter?
- Although Turnitin causes anxiety, it encourages being careful about plagiarism and provides fair evaluation.

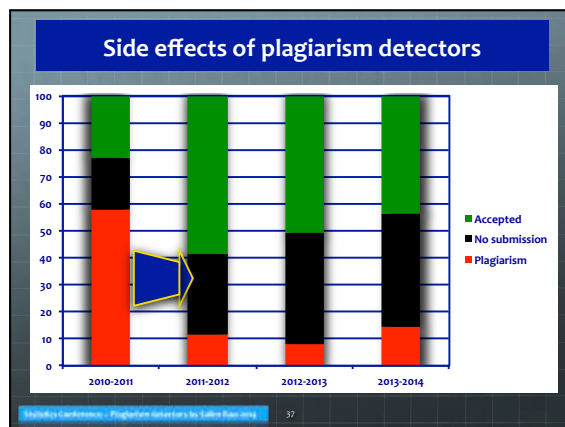
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**BE CAREFUL!!!**

**SIDE EFFECTS OF TURNITIN!!!**

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### Discussion & Conclusion 3

**BEFORE TURNITIN:**

- MORE FEMALE PLAGIARISM.**

**AFTER TURNITIN:**

- MORE MALE PLAGIARISM.**

Male students plagiarize more (Rakovski & Levy, 2007).

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### Discussion & Conclusion 4

**REPEATING STUDENTS PLAGIARIZE LESS.**

Consider:

- academic maturity and
- awareness of plagiarism detectors.

Drop in plagiarism incidents from the 1st to the 2nd assignment (Ledwith & Riques, 2008).

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### Implications

- Encourage lecture cooperation to detect and prevent plagiarism.
- Develop institutional policies to fight against plagiarism.
- Encourage the integration of plagiarism detectors.
- Teach how to benefit from digital feedback (Razi, 2014).

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