# Strategies for Avoiding Cheating and Preserving Academic Integrity in Tests

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# ملخص:

تهدف الدراسة الحالية إلى استكشاف أسباب الغش في الاختبارات وتوجيه انتباه الأساتذة إلى أهم الاستراتيجيات الفعالة لتجنبه. و ضمن هذا السياق، تم إجراء استبيان لكشف مدى تفشي ظاهرة الغش في التعليم العالي وتبيين أسبابها. وقد أظهرت النتائج أن 70.70% من طلبة السنة الثانية اعترفوا بأنهم غشوا في الاختبارات، كما تم إدراج الأسباب التالية في المراتب الثلاثة الأولى على التوالي: التسابق على العلامات، توقعات الأبوين، وعدم قيام الأساتذة بمهمة الحراسة على أكمل وجه. بناء على ذلك، تم شرح استراتيجيات تجنب الغش والمحافظة على النزاهة الأكاديمية والمتمثلة أساسا في زيادة وعي الطلبة فيما يخص القيم الأخلاقية.

الكلمات المفتاحية: الغش في الاختبارات، تفشى ظاهرة الغش، النزاهة الأكاديمية.

# Abstract

The current study aims at exploring the causes of cheating in tests and directing teachers' attention towards the most effective strategies for avoiding it. Within this scope, a questionnaire was administered to uncover the prevalence of cheating in higher education and to detect its causes. Findings revealed that 70.70% from second-year students admitted that they have cheated in tests. Furthermore, the following three causes were rank-ordered in the first three positions respectively: competition for grades, parental expectations, and ineffective invigilation by the teacher. Accordingly, strategies for avoiding cheating and preserving academic integrity were explained mainly through raising students' consciousness about moral values.

Key words: cheating in tests; the prevalence of cheating; academic integrity.

# Introduction

Cheating is a form of academic dishonesty which needs careful attention by both teachers and administrators since it is overwhelming the academic field. In this respect, it is observed that many students violate academic integrity during tests including guizzes and examinations in order to avoid failure. Hence, their academic achievement does not reflect their English proficiency. More importantly, students' reliance on technology has not only facilitated cheating but created new techniques of cheating as well. Within this scope, the current quantitative research investigates the prevalence of this phenomenon in the Department of English and its possible causes. Furthermore, it aims at providing effective strategies for avoiding cheating and preserving academic integrity in higher education. Hence, a questionnaire was administered to second-year students of English to collect data about the issue of cheating. Results from the questionnaire were analyzed and interpreted according to research aims.

# 1. Definition of Cheating

Cheating is a widespread phenomenon which is persistent in all the learning levels irrespective of learners' economic status and purpose (Davis, Drinan & Gallant, 2009, p. 1). It is defined as:

> [D]eceiving or depriving by trickery, defrauding, misleading or fooling another. When we talk about student cheating, academic cheating, or academic misconduct, we are referring to acts committed by students that deceive, mislead, or fool the teacher into thinking that the academic work submitted by the student was a student's own work. (Davis et al., 2009, p. 2)

As explained by Davis et al. in the previous quotation, cheating entails fraud and deception. The Merriam-Webster Online Dictionary explained the verb "to cheat" as follows: "to use unfair or dishonest methods to gain an advantage" (2017). Similarly, Curran, Middleton and Doherty argued

that "cheating is an act of lying, deception, fraud, trickery, imposture, or imposition employed to create an unfair advantage often at the expense of others". They further added that "cheating implies the breaking of rules" (2011, p. 54). Consequently, students often use dishonest ways to get good marks and succeed. Monzani et al. defined "cheating" as "copying answers from the paper of a colleague with consent while taking an examination" (2007, p. 379). The word "consent" implies that cheating is preplanned by both sides: the giver and the receiver. As a result, two types of cheaters are distinguished: "the willing recipient" and "the giver" (Cizek, 1999, p. 40). So, both the giver and receiver of information are considered as cheaters. This entails a sense of collusion between both sides.

# 2. Types of Cheating

According to Davis et al., four forms of cheating are distinguished: "individual cheating", "cheating with peers", "cheating with parents", and "cheating with teachers and school administrators" (2009, p. 1). Unlike the first two types which are frequently observed, cheating with parents depicts cooperation between parents and their children to accomplish the homework. Learners who are used to be helped by parents before college cannot rely on themselves when they enter it (Davis et al., 2009, p. 6). Besides, cheating with teachers and school administrators implies that "grades have become the goals of education" (Davis et al, 2009, p. 13). Within this scope, the government is investing money on education; hence, learners' success is required in return. Consequently, administrators may "engage in behaviors that corrupt the educational system including ... altering grades and student records, handing out unearned diplomas, falsifying enrollment numbers and financial records, and taking bribes to admit unqualified students" (Davis et al., 2009, p. 64). This leads to corruption of both teachers and administrators (Davis et al, 2009, pp. 15-16). Unfortunately, some institutions are behaving dishonestly by giving grades or qualifications to students without merit.

Furthermore, two general types of cheating are identified: *cheating before the test* and *cheating during the test*. The former occurs when a test is sold by Websites, or when a test is given by teachers or administrators. The latter either relies on technological tools like "cell phones" and "pagers" to collaborate with peers who are in or outside the classroom or on "cheat sheets" (Impara & Foster, 2006, p. 93). We notice that cheating could be the result of cooperation between teachers, students and administrators. So, we should start fighting this phenomenon by raising teachers' and administrators' awareness first. Concerning students' behaviour in cheating, many techniques exist in examinations and tests, the following table presents three techniques as follows:

Table 1 Students Reports of Specific Cheating Behaviours, 1961-1991

	Students (%)	
Type of cheating	1961	1991
Copied from another student in a test or exam	26	52
Helped another student to cheat in a test	23	37
Used crib notes to cheat in a test or exam	16	27

Adapted from: McCabe & Treveno, 1996, as cited in Cizek, 1999, p. 31.

# 3. Causes of Cheating

According to Ludeman (1939) and Covington (1992), the main cause behind cheating is getting a good mark (as cited in Cizek, 1999, p. 31). In this respect, the main cause which leads to cheating is avoiding failure (Davis et al., 2009, pp. 1-3). Similarly, the psychologist *Charles Drake* conducted research in 1941 about the causes of cheating at College. He concluded that "stresses and pressures for good grades" lie behind cheating (as cited in Davis et al., 2009, p. 70). Other studies by Trabue (1962) and Evans and Craig (1990) demonstrated that cheating is caused by "the meaninglessness and difficulty" of tests (as cited in Cizek, 1999, p. 31). In contrast, Ludeman asserted that "easiness" of tasks as an intriguing fact behind cheating (as cited in Davis et al., 2009, p. 71).

Cornehlsen added another cause which is "parental expectations" (1965, as cited in Cizek, 1999, p. 31). Additionally, students cheat because they are lazy (Schab, 1969, as cited in Cizek, 1999, p. 32). Also, they are subject to "peers' pressure" and failure to revise (Kaufman, 2008, p. 2). Likewise, Smith et al. provided four reasons that lead to cheating in exams: "graduate school requirements, competition for grades, heavy workload, and insufficient study time" (1972, as cited in Cizek, 1999, p. 32). Furthermore, Zastrow declared that cheating is caused by lack of time due to students' part-time work, "extracurricular activities", no preparation for the test, "poor instructors", and "inadequate time to complete tests" (1970, as cited in Cizek, 1999, p. 33). Surprisingly, students argued that "ten minutes of cheating is better than two hours of studying" (2009, p. 74). This is due to the fact that students do not know how to invest time for learning because they are not motivated to revise their lessons.

Moreover, Haines et al. found that students cheat because of "neutralization" which is defined by Cizek as "denial of responsibility for improper actions because of the improper actions of others" (as cited in Cizek, 1999, p. 33). This entails that learning circumstances created by others act as an excuse to students' dishonest behaviours. A surprising cause, which was introduced by learners, is "the easiness of cheating" in college (Davis et al., 2009, p. 72). It is observed that this cause confirms neutralization. Besides, cheating is probably caused by a bad relationship with the teacher (Davis et al., 2009, p. 82). In the following table, Haines et al. indicated ten (10) reasons justified by "neutralization" as follows:

Table 2

Neutralization Reasons for Cheating

	- , , , , , , , , , , , , , , , , , , ,
Rank	Reason
10	People sitting around me made no attempt to
	cover their papers.
9	Don't have time to study because I am working to
	pay for school.
8	In danger of losing scholarship because of low
	grades.
7	Everyone else seems to be cheating.
6	The course material is too hard.
5	The course information seems useless.
4	The instructor doesn't seem to care if I learn the
	material.
3	A friend asked me to cheat and I couldn't say no.
2	The instructor left the room during the test.
1	The instructor assigns too much material.
Adapted	from Haines et al 1986 as cited in Cizek 1999

Adapted from: Haines et al., 1986, as cited in Cizek, 1999, p. 34.

As indicated in table 2, neutralization is related to external factors that lead to cheating. When the syllabus is difficult or when the invigilator leaves the room the student is encouraged to cheat. As claimed by Davis et al., the cause behind cheating is sometimes not related directly to students (internal factors) but to learning environments or external factors such as *large class size* especially when learners are sitting close to each other. Moreover, the nature of the test plays a major role, for example *multiple choice tests* encourage cheating (Davis et al., 2009, p. 75). Some learners admitted to commit cheating as a matter of obligation because of some compulsory factors like the ones which are stated in the following quotation:

-He was bigger than me.

-I knew they needed to do good in order to pass the class. I felt sorry for them.

-I wouldn't want them to be mad at me.

-Because they might let me cheat off of them some time.

-No particular reason. It doesn't bother me because I probably have it wrong and so will they.

-I know they studied and knew the material, but test taking was really difficult.

-Just to do it. I didn't like the teacher, and I knew if I got caught nothing would happen. (Davis et al., 2009, p. 75)

Personality research in psychology has determined some characteristics cheaters possess. The first quality is *gender*; men tend to cheat more than women. Moreover, *intelligence* plays a decisive role. Students who are more intelligent cheat less frequently than those who are less intelligent. Besides, ethics and moral development have a relation with cheating. Students who respect ethics do not cheat like those who do not take into consideration morals. In addition, students who have less motivation are more eager to cheat unlike those who are more motivated to study (Davis et al., 2009, pp. 77-78). Also, the need for approval, manifested by extroverts and sociable students is a possible marker of cheating. In addition, learners' perceptions about the test highly contribute to the increase of cheating because of the lack of responsibility or the neutralization effect. Another characteristic is risk. Students cheat when they see that there are no threats or risks. The last quality is *procrastination and responsibility*. Students who are procrastinators and not responsible persons tend to cheat more than those who feel responsible for their actions (Davis et al., 2009, p. 80).

#### 4. Methods and Tools of Cheating

Three methods of cheating in tests are differentiated: "using unauthorized materials, helping/being helped, and using technology" (Davis et al., 2009, p. 94). In the first method, although Forbidden Materials (FMs) are specified, some students may use them. For example "long narrow strips of papers" stored below the person (Cizek, 1999, p. 39). In other words, students use "crib notes" written on "small pieces of papers" (cheat sheets) which they keep hidden until they get a chance to use them (Clabaugh & Rozychi, 2001, p. 15). Moreover, students write on the tables and use symbols during the test. They sometimes get the questions before the test (Davis et al., 2009, p. 92). In addition, students use "coke battle cheating" by writing on the back side of the label of water bottles. They write answers too on their body parts and use "bandages". Students also write responses "on the visor of a ball cap, shoe soles, tissue, or on the inside of reflective sunglasses" (Davis et al., 2009, p. 95). Other traditional methods include "hiding notes in pencil cases", "writing on arms and hands", "writing on ruler" and "leaving the room to go to the toilet and look for notes" (Curran et al., 2011, pp. 56-57).

In the second method "helping/being helped", students design a code for cheating, for example "a system of hand and feet positions". Also, a stranger can replace the "registered" student in a test (Davis et al., 2009, p. 97). Moreover, Cizek (1999, p. 40) introduced the "giving, taking, and receiving" method (GTR) of collaboration where a student who knows much is chosen as information *giver*, and there is *a receiver* and *a taker* who exchange information by utilizing "signs".

The third method is related to technology where modern technological tools are used by students for "hightech cheating" (Lathrop & Foss, 2000, p. 11) such as "handheld computers and watches", "programmable calculators" and "pagers" (Lathrop & Foss, 2000, p. 12; Curran et al. 2011, pp. 58-59). Moreover, students use "palm pilots" and they often want to go to Water Cells so that they can use the mobil<u>e to ask other students for help (Clabauch & Rozychi</u>. 2001, p. 9). They also use "MP3 players" and "wireless receivers" (Curran et al., 2011, p. 58). Recently, cell phones have dominated the field of cheating (Davis et al., 2009, p. 98). In this respect, Bleeker stressed the fact that technology has facilitated cheating, he concurred that:

Computers, laptops, wireless access, digital cameras, advanced graphing calculators, the Internet, and millions of Web sites, as well as cell phones capable of recording, photographing, and text messaging, have permanently altered the way we do almost everything, including communicate, interact, work, play, educate, shop, and, yes, cheat. (2010, p. 15)

It is concluded from the previous quotation that the Internet and mobile phones have facilitated cheating in examinations. Generally speaking, the world today witnesses what Davis et al. called "the evolution of techniques" of cheating which started with "cheat sheets" and ended with "text-messaging" (2009, p. 89). This is due to the fact that the ancient tools are not useful in the Digital Age (Curran et al., 2011, p. 55).

# 5. Studies and Movements against Cheating

Two major movements against cheating and academic dishonesty shaped education in the early nineties: *the contemporary character education movement* and *the academic integrity movement*. The former came as a reaction against cheating in elementary and secondary schools following the ideas of the *Josephson Institute of Ethics*. The latter aroused in parallel with the establishment of the *Centre for Academic Integrity* (CAI) in the early nineties too. Nowadays, the CAI includes many universities all over the world (Davis et al., 2009, pp. 24-25). However, the role of CAI is more influential now than before because of the Digital Age which brought "more pressures" on learners (Davis et al., 2009, p. 28).

The contemporary character education movement come out with "Six Pillars of Character": trustworthiness, respect, responsibility, fairness, caring and citizenship. Whereas, the CAI focuses on "five fundamental values: honesty, trust, fairness, respect, and responsibility" (Davis et al., 2009, pp. 24- 25). It is observed that they nearly share the same qualities; both the movement and the centre advocate "responsibility, fairness and respect". However, the movement utilizes "trustworthiness" while the centre uses "trust". Moreover, the movement uses "caring" but the centre uses "honesty". Although the latter has a more exact meaning than "caring", we understand that a student who cares for integrity is the one who preserves academic honesty. Eventually, caring implies honesty.

Subsequent studies appeared later in different countries, Monzani et al. investigated cheating among Brazilian two universities in São Paulo. Participants include one hundred forty-seven (147) and eighty-two (82) undergraduates in engineering and Chemistry respectively (2007, p. 381). Students admitted that their peers often "asked them for answers" or "gave them answers". In contrast to earlier studies, this study revealed that women are more eager to cheat than men in engineering. Teixeira and Rocha (2008, p. 9) conducted a survey to investigate cheating in Spain and Portugal and concluded that cheating level is high in these two countries (67 %). They further acknowledged the need for honour codes as a preventative strategy (2008, p. 17). Furthermore, Blachnio and Weremko investigated "the effect of self-esteem and attitude towards disloyalty" on cheating in Poland. The study revealed that cheaters have a lower self-esteem and a lower "value of loyalty" than non-cheaters (2011, pp. 17-18). Curran et al. (2011, p. 61) explored traditional as well as technological tools of cheating, they concluded that students use "sophisticated" methods of cheating. Therefore, teachers should raise students' awareness of the regulations as well as the punishments.

# 6. Method

The present research was conducted through the quantitative approach. It investigated the prevalence of cheating in the department of English and the possible causes behind it by administering a questionnaire to collect statistical data. Following Krejcie and Morgan' s sampling table (1970, as cited in Cohen, Manion & Morrison, 2000, p. 94), one hundred and three (103) students should be included in the sample so that it could be representative of the whole population that is composed of one hundred and forty (140) students. Eventually, a questionnaire was administered to one hundred and three (103) students, among which 4 students did not answer the questionnaire. Students were asked to rank order the causes of cheating which are stated in the literature according to their importance.

#### 7. Results and Discussion

As explained before, ninety-nine (99) participants handed the questionnaire. Among them, 16.16% (16 students) are males and 83.83% (83 students) are females. Their age ranges from 18 to 44 years old as indicated in the table below: Table 1

I able I	
Students	' Age

Sindenis Inge		
	Frequency	Percentage
18 years	1	1.01%
19 years	33	33.33%
20 years	28	28.28%
21 years	23	23.23%
22 years	6	6.06%
23 years	2	2.02%
24 years	4	4.04%
36 years	1	1.01%
44 years	1	1.01%
Total	99	100%

As shown in table 1, the majority of students (84.84%) are aged between 19 and 21 years. In addition, students were

asked whether they have ever cheated in the university. Their answers are indicated in the following table:

Table 2

Preval	ence	of (	C	heating	

	Frequency	Percentage
Yes	70	70.70%
No	29	29.29%
Total	99	100%

As table 2 shows, the majority of participants (70.70%) admitted that they have cheated whereas only 29.29% of students asserted that they have never cheated. This denotes that cheating is predominant among second-year students in the department of English, which needs careful attention and investigation. Interestingly, from 16 males, only two argued that they have never cheated in tests. However, among 83 females, 27 confessed that they have never committed cheating.

Interestingly, students were asked to rank the causes of cheating according to their importance. As students have 12 options to rank from 1 to 12, the *average ranking* for each choice should be counted as follows:

# $\frac{x_1w_1 + x_2w_2 + x_3w_3 + x_4w_4 + x_5w_5 + x_6w_6 + x_7w_7 + x_8w_8 + x_9w_9 + x_{10}w_{10} + x_{11}w_{11} + x_{12}w_3}{2}$

# Source: SurveyMonkey, 1999-2017.

N represents the total number, x stands for the number of choices while w represents the weight of each choice. Weights are specified in reverse. The first ranked choice has a weight of 12, the second ranked choice has a weight of 11...and so on. This denotes that the last ranked choice has the lowest weight that is 1. For example, the average ranking of the first cause was counted as follows:

(17x12)+(12x11)+(11x10)+(10x9)+(10x9)+(9x8)+(9x8)+(9x8)+(9x8)+(8x7)+ (7x6)+(5x5) 12

12	
204+132+110+90+90+72+72+72+72+56+42+25	
= 12	
$=\frac{1037}{12}$	
= 86.41%	

As findings indicate, the average ranking of "competition for grades" is 86.41%. Concerning the other causes, the results are indicated in the following table:

Table 3
Causes of Cheating as Ranked by Students

Cause	Percenta	Rank
	ge	
Competition for grades	86.41%	1
Parental expectations	80.58%	2
The teacher is not a good	80.25%	3
invigilator		
No motivation to study English	76.91%	4
The easiness of cheating in	75.75%	5
college		
Good grade' pressure	74.41%	6
The meaninglessness and	74.25%	7
difficulty of tests		
Peers' pressure	73.91%	8
The nature of the test	72.33%	9
No punishment	71.66%	10
Heavy workload and insufficient	71.25%	11
time		
Teachers are not competent	63.08%	12

As table 3 indicates, students were asked to express their preferences by placing numbers from 1 to 12 in order to indicate the most important cause behind cheating. Eventually, competition for grades was ranked in the first position with a percentage of 86.41%. This indicates that students are highly competitive since their aim is getting the best mark. Also, "parental expectations" was rank-ordered as the second most prominent cause of cheating (80.58%). This implies that students want to get good marks for the sake of their parents who have high expectations about their academic achievement. Moreover, good invigilation was ranked as students' third cause (80.25%) which entails that students are encouraged to cheat because the teacher does not invigilate effectively. The fourth rank was assigned to lack of motivation (76.91%). In this respect, students who are demotivated cannot understand the syllabus and revise their lessons perfectly. Furthermore, easiness of cheating in college and good grades' pressure were ranked in the fifth (75.75%) and sixth (74.41%) positions respectively. This implies that cheating in college is easier than cheating in schools. This may be due to large size groups and examinations' poor management. Besides, students are eager to get good marks in order to succeed.

Surprisingly, "the meaninglessness and difficulty of tests" was not perceived as an overwhelming cause since it was rank-ordered in the seventh position (74.25%). Peers' pressure was placed in the eighth rank with a percentage of 73.91%. This denotes that parents' pressure is more influential than peers' pressure. Additionally, the nature of the test and the absence of punishment were placed respectively in the ninth (72.33%) and tenth ranks (71.66%). So, students would cheat irrespective of the nature of the test as cheating is often pre-planned. More

interestingly, the severity of punishment could play a major role in hindering students' cheating trials. Heavy workload and insufficient study time was rank-ordered before the last item with a percentage of 71.25%. Although students may not have time to revise, they cheat for other reasons which are more significant. In the last position, there is the lack of teachers' competence with a percentage of 63.08%, which implies that teachers' effectiveness and skills have less influence over students' cheating than the other causes. Ranging from 86.41% to 71.25%, it is observed that the causes from 1 to 11 have approximate percentages. Therefore, this study ought to be replicated to validate the findings.

# 8. Strategies for Avoiding Cheating

The following strategies could be influential in deterring punishment in higher education.

# 8.1. Moral Development and Effective Assessment Design

Two ways could be influential in fighting cheating: "moral development" and "the institutionalization of integrity" in educational institutions. Moral development is affected positively by the education of students based mainly on teaching "universal moral values" (Davis et al., 2009, p. 133). More importantly, David et al. identified four stages of institutionalization: the first one is "recognition and commitment" of the "educational organization" that it is not satisfied with cheating and should combat it. The second stage is "response generation"; it indicates communication between the members of the academic community aiming at looking for ways to tackle the phenomenon. The third stage is "implementation" when both teachers and administrators collaborate to apply practical solutions. The fourth one is "institutionalization". It is to reach control of the phenomenon although there are still some cheating behaviours (2009, pp. 156-159).

Furthermore, the design of assessments plays a major role in preserving integrity. Keeping the same content of assessment over many years may encourage students to cheat (Wollack & Fremer, 2013, p. 102). Thus, what could diminish cheating is "different forms" of questions in one test (Davis et al., 2009, p. 118). Hence, it is advised by Davis et al. (2009, p. 122) that examinations which are based on writing essays are much better to avoid cheating.

# 8.2. Time-Management Skills

Students are not aware of the importance of time organization either for daily assignments or examinations. This was confirmed by Zimmerman, Banner and Kovach who stressed the fact that "most students wait until the last minute before studying for major tests or writing important papers" (Zimmerman et al., 1996, p. 36). Hence, teachers should cooperate with learners "to adjust their schedules" (Zimmerman et al., 1996, p. 36). They could draw a *study-time self-monitoring chart* to help students organize their time (Zimmerman et al., 1996, p. 28). Within this scope,

time management is very influential in "regulating other aspects" of students' learning especially by raising "awareness of their use of study time". Students have to assess their time use accurately in order to improve their time planning and management (Zimmerman et al., 1996, p. 26). Thus, "time management" is extremely effective in regards to "preparing for tests" (Harvey & Chickie-Wolfe, 2007, p. 229). This could be realized through three strategies of time manipulation: the first one is the choice of "time-use strategy" from the common learning strategies; the second feature is the design of one's own strategy. The third strategy is looking for both high achievers and teachers' advice concerning the implementation of the new strategy (Zimmerman et al., 1996, p. 34). Moreover, Doyle (2008, p. 78) identified a "three-part approach" to develop students' time management skills: firstly, making "a rationale" to enhance time management; secondly, drawing "a system for time management decisions". Thirdly, helping them manage their time through some "suggested tools".

Four strategies of time organization were proposed by Harvey and Chickie Wolfe. Firstly, specifying "short- and long-term goals" could help learners divide time units according to "deadlines" and "schedules" taking into consideration "priorities" in choosing which task to tackle first. Secondly, there is "planning and scheduling" the activities through notes and logs that help you to remember what is planned. Thirdly, "organization" implies "preplanning and prioritizing". Fourthly, "control over time" which indicates exact "estimation" of time and neglecting details and "thinking before acting" as far as the goals are concerned (2007, pp. 125-126). Consequently, time management skills include specifying the learning objectives and indicating "priorities" through "planning and scheduling" as well as "control" and "thinking before acting".

More interestingly, teachers have to provide students with sufficient time on the test (Harvey & Chickie-Wolf, 2007, p. 230). Hence, time-regulation strategies could be effective for students, they may include: "setting regular study periods and realistic goals", making priorities in "tasks", "distraction", and "self-reward" avoiding (Zimmerman et al., 1996, p. 33). To sum up, time plays an important role in cheating avoidance either on the side of the teacher or on the side of the learner. Teachers should allocate an amount of time which is sufficient for the task/ test, and students should know how to manage their time effectively to accomplish the task/test in due time. This could be promoted through self-regulation and selfresponsibility.

# 8.3. Classroom Management during Tests

Some procedures should be taken into consideration during examination to reduce cheating. These may include

separating students' seats, walking "up and down the rows" in tests, and watching the students "constantly" (Davis et al., 2009, p. 118). Furthermore, teachers could make "counter measures" by using technology as a tool to fight cheating, for example using "jammers" to stop "receiving and transmitting signals" may be helpful in deterring cheaters (Curran et al., 2011, p. 60). Another preventive and more sophisticated way is "the Faraday Cage" which stops "electromagnetic waves" through using metal inside the walls (Curran et al., 2011, p. 60).

# 8.4. Preparation for Examinations/ Tests

Students have to rely on "constant review" of previous information to ensure its recall (Doyle, 2008, p. 82). Also, good preparation plays a significant role in raising academic achievement. Zimmerman et al. insisted that "students who are well prepared for an exam are more likely to do well than those who have not prepared adequately" (1996, pp. 93-94). In this respect, it is explained that "correct exam preparation is built on efficient time management, skillful text summarization, and high quality note-taking and review" (Zimmerman et al., 1996, p. 94). Accordingly, revision for "half hour daily" leads to "higher grades" because it is better than revision in the last moments (Harvey & Chickie-Wolfe, 2007, p. 216). Other influential factors for effective preparation include: the use of "cognitive and metacognitive strategies", "physical functioning, such as nourishment and adequate rest", the use of "problem-solving strategies", and "family, peers, and educators' support" (Harvey & Chickie-Wolfe, 2007, pp. 228-229).

Three phases of tests/examinations' preparation are required: first, "regular, weekly reviews" to memorize information on the short term; second, "systematic reviews" before examinations or tests are needed. However, quick revision is called "cramming" because it is not a "highquality review" and it does not lead to long-term learning. Third, reviewing examinations' content and correct answers is necessary to learn from one's mistakes and errors (Zimmerman et al., 1996, p. 94). The following quotation explains the benefits of revision:

> Revision facilitates memorization by having students rewrite the information, reorganize it into a more meaningful order, and assimilate the material into their cognitive schemata. Reviewing notes is clearly necessary for students to retain information well enough to be able to recall it. (Harvey & Chickie-Wolfe, 2007, p. 65)

As indicated in the previous quotation, revision is based on "re-writing" and "re-organizing" the content of lessons and "reviewing notes" which facilitates its "retention" and "recall". Furthermore, various strategies could be useful to prepare for tests: firstly, "revising lecture and text notes" indicates that students would memorize only the constituting parts of the lesson rather than the details. In

addition, "elaborative interrogation" implies that "students ask themselves questions" to understand the test. Moreover, "representational imagery" is helpful when the words are associated with their images. Besides, "first-letter mnemonics" is remembering words by grouping their initial letters in one word. For example: HOMES indicates the Great Lakes: Huron, Ontario, Michigan, Erie, and Superior. Also, "Mnemonic sentences" is when learners remember words by writing sentences in which words start with the same letters as the words which need to be remembered. Finally, the "use of study partner" is when a student looks for a partner with whom s/he will "compare" notes and "test each other" (Zimmerman et al., 1996, p. 99). Besides, anxiety before and during examinations could be reduced when students create "a relaxing atmosphere" and "take deep breaths". Also, they should come to the exam hall feeling "confident, happy, and ready to do well" (Harvey & Chickie-Wolfe, 2007, p. 229). More importantly, teachers have to raise learners' consciousness towards integrity before the exams (Davis, 2009, p. 347). This sounds very interesting in reminding them of the crime of academic dishonesty and the need for avoiding cheating.

# 8.5. Honour Code and Cheaters' Punishment

As advocated by Davis and his colleagues, informing students about the reasons of the necessity to avoid cheating may be an effective solution (as cited in Davis et al., 2009, p. 118). Therefore, a code is necessary to clarify "what students shouldn't do" and "what they should do instead of cheating" (Davis et al., 2009, p. 136). The honour code would better be accompanied with an "academic pledge" for example: "I have neither given nor received unauthorized help on this assignment" (Hayes, as cited in Lathrop & Foss, 2005, p. 76). In this respect, Davis et al. explained the importance of "an honour code" as follows:

The holy grail of academic integrity for many schools has been the creation of a student-run honor code. Students in such schools typically report half the cheating rates of non honor-code schools. Of course, we do not know for certain if students in honor-code schools cheat less, or are simply less willing to admit that they are cheating...yet very few schools can succeed at creating student-run honor codes because it is a difficult and long process. (Davis et al., 2009, pp. 159-160)

As discussed in the previous quotation, an honour code is interesting to decrease cheating. The latter would diminish when there is punishment through a pre-established code. However, it is "a difficult" and "time-consuming process". Moreover, Davis et al. asserted that cheating will persist as far as teachers do not punish cheaters. They commented that "if we examine what faculty do when they detect cheating we will be able to understand why this situation exists". They further asserted that "students are disappointed and even angry when the teacher does nothing to curtail academic dishonesty (2009, p. 114).

Interestingly, lack of punishment and ignorance are behind the overspread of cheating (Davis et al., 2009, p. 114). Hence, teachers have to act as soon as possible whenever integrity is threatened. Punishment is the first practical solution that could serve as a deterrence technique. It could be done by teachers or administrators through disciplinary workshops. In this respect, the intensity of punishment depends on the severity of cheating.

# Conclusion

Cheating is a dishonest behavior that necessitates punishment as a deterrence strategy. Undoubtedly, punishment is teachers' and administrators' responsibility. Consequently, learners have to avoid cheating willingly or by force since they ought to be informed before tasks about the existence of an honour code that should be respected. Eventually, punishment necessitates the prevalence of honour codes. Hence, punishment is a good solution to push students towards achieving academic honesty but it is not enough, teachers have to design homeworks, tests, quizzes and exams which hinder students' desire to cheat. They should also take into consideration time required to accomplish the test and help students manage their time and prepare for examinations as well as tests. This could be done through raising students' awareness about effective strategies of information retention and retrieval. Classroom management during tests is also effective especially through classroom seating arrangements and using technology to prevent cheating.

The teacher has also to change the questions annually and to vary the way of assessment by designing different homeworks, quizzes, and tests. Multiple-choice questions and identification questions would better be avoided in favour of argumentative, explanative and comparative questions. Also, technological tools especially mobiles and wireless devices should be forbidden during examinations. More importantly, teachers should be aware of their responsibility as invigilators. When invigilation is done effectively we could say that students deserve their marks. However, imperfect invigilation reflects deception in grades and averages.

More importantly, students' awareness should be raised about the importance of examinations as an assessment tool to evaluate their level and focus on their weaknesses. Hence, cheating could lead to distraction and confusion about students' level. Moreover, cheating influences competitiveness negatively. However, it is observed that both jammers and Faraday cages are not used in Algerian institutions because traditional ways of cheating detection and deterrence still persist. Hence, raising teachers as well as faculty staff towards the use of technology to fight academic dishonesty is needed.

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