# An Exploration on Learners' Verbal, Non-Verbal and Electronically-Aided Academic Dishonesty Praxis In The Post- Covid 19 Classroom

## Allan O. De La Cruz, Ph.D.

Professor III, College of Business, Entrepreneurship and Accountancy, Teacher Education and the Graduate School

Cagayan State University, Sanchez Mira, Cagayan, Philippines

#### Elizabeth C. Bautista, Edd

aodlc2010@hotmail.com

Assistant Professor III, College of Teacher Education Cagayan State University, Sanchez Mira, Cagayan, Philippines elizabethbautista112@gmail.com

#### Abstract

Before, during, and after the COVID-19 pandemic, academic dishonesty particularly cheating in examinations is a cause for concern across schools worldwide. The percentage of students who have committed at least one act of academic dishonesty continues to increase. This study was conducted to gather information on the prevalence, and practices on cheating during examination among college learners in one state university in the northwestern part of Cagayan, Philippines. Descriptive statistics, t-test, F-test and Pearson's r were used to analyze the data gathered. Results revealed that for every ten students, eight of them cheat. Male students cheat more in examinations and employ more cheating practices than females; however, both male and female students practice this academic dishonesty, and their cheating practices do not vary. The students without academic honors, and the lower the GPA that the students have, the more cheating practices they employ during examinations. Although the general findings showed that the students do not employ much those cheating practices, the 90% who admitted cheating in a major examination showed an inclination to their engagement in this academic misconduct.

**Keywords:** academic dishonesty, cheating practices, major examination

#### INTRODUCTION

One persistent issue in the educational system is that of academic dishonesty. During the COVID 19 pandemic which brought extra ordinary challenges that affected the education sector, this issue was seen as a major concern in as much as basic and major classroom activities are no longer done in a physical class. This broad concept is a common phenomenon and a worldwide problem. Moon (2006) and Howard (2000) cited in Hosny and Fatima (2014) named its main categories as cheating, plagiarism, and collusion. Stuber-McEwen, Wisely and Hoggart (2009) calls academic dishonesty as cheating on tests, plagiarism, fabrication, unfair advantage, aiding and abetting, falsification of records and unauthorized access "It is the deliberate behavior or action that interferes with or hinders the pursuit of knowledge and results in misinterpretation of academic- materials, taking credit or recognition for academic work (including papers, lab reports, quizzes, examinations, etc) that is not one's own, or fabricating data, records or tampering with university-documents." (UNESCO,2003).

In this study, academic dishonesty refers only to cheating, a dishonest act or academic misconduct with the intention to provide or obtain information from unauthorized persons or forbidden materials or gadgets during examinations. Examination cheating is an unethical practice that some university

students often opt to do when they face a dilemma of failing an examination. (Peters, 2010). It is an immoral activity in the academic environment (McCabe and Derinan, 1999).

A lot of surveys have been conducted and indicated the widespread use and incidence of cheating. Perez-Pena (2012) in his article published in New York Times, cited in Doyne and Schulten (2012) states that large scale cheating has been uncovered over the last year at some of the nation's most prestigious and competitive schools like Stuyvesant High School in Manhattan, the Air Force Academy, and the Harvard. The studies regarding students' behavior and attitudes show that a majority of the students violate standards of academic integrity. In the same article, it exposes the survey at Josehson Institue of Ethics, which advises schools on ethics education, that about three-fifths among the high school students admit to having cheated in the past year.

In the Philippines, Balbuena and Lamela (2005) in their study found that academic dishonesty is prevalent in schools for 67% of the participants reported that they engaged in cheating during examination. The pervasiveness of cheating on exams poses great challenge to the evaluation of students' academic performance. In another study, Quintos (2017) found out that 92% of the 237 undergraduate students from four different disciplines of the University of the Philippines have cheated at least once in exams/quizzes, and/or exercises. The result is alarming, and this causes for concern for the academic integrity of the university, especially when it comes to the exams, quizzes, papers and projects presented by the students.

However, some are hesitant to talk much and curb about the social problem. Experts would tell us that schools fail to address the problem. In Asia, as pointed out by Khodaie et. al. (2011), cheating in the course of education in Iran has remained an untouched and ignored problem in the realm of researches and studies. Mc Cabe (1999), a professor at the Ruthgers University Business School, and a leading researcher on cheating, found out in his study that most high school teachers and college professors surveyed fail to pursue some of the violations of the students they find. In the same article by Perez-Pena (2012), he shared one finding at Bryant University about institutions which did a poor job in educating the students about cheating, in enforcing them, and in giving teachers a clear process to follow through on these student-cheaters.

Since examinations are the universal –benchmark method of evaluation in all the global- education systems, cheating in an examination is gaining interest to researchers and the academic community.

Over the years, numerous researchers have investigated the incidence of cheating among high school and college or university students. Brownell (1928) cited in Whitley Jr (1998) was one among the first researchers who got interested in this research topic. Many have conducted studies to look into the motivations behind cheating and have pointed out factors that influence this dishonest behavior. Some researchers have also documented on the social and personal characteristics of cheaters, their motives for cheating, the causes associated with this behavior, and the frequency, place and time of cheating. The literature on academic dishonesty provides a framework for understanding exactly what constitutes cheating. However, the literature that is less thorough was when it comes to documenting what the students do when they cheat.

In the Philippines, however, there seems to be a limited literature on how do the students practice the act of cheating in examination particularly in local communities in the Philippines. These must be properly explicated to give the teachers a critical understanding of this academic misconduct. The information to be generated from this research could also add knowledge about academic integrity and the lack thereof in an under-represented context. As Yee and Mackown (n.d.) puts," it seems wise that we, as educators, learn as much as possible about cheating methods used by students".

This study was conducted to describe the prevalence of academic cheating among the college learners in the northwestern part of Cagayan, Philippines, and it looked into the practices of the

students on academic dishonesty particularly cheating during major examination. Specifically, this research sought answers to the following questions: a.) How prevalent is cheating in periodic examination among college learners in the northwestern part of Cagayan, Philippines? b.) How do the students and how often do these students practice those cheating practices during periodic examination? c.) Is there a significant relationship on the students' cheating practices, and the profile variables? This exploration provides a descriptive account on this academic misconduct, and as a basis for the development of an intervention to promote academic integrity, to regenerate students' eroding academic demeanor.

## **METHODS AND PROCEDURES**

# Participants.

The study was carried in a state university in the northern part of the Philippines where 182 freshmen enrolled in a 4-year degree program participated in the survey. Purposive judgmental sampling was employed to include the students enrolled in the BSAIS program from first year to fourth year college. Female outnumbered male respondents as 55% comprise the former, and only 45% make up the latter. There is a greater number of population coming from the 2<sup>nd</sup> and 1<sup>st</sup> year with 55 and 54 students respectively as compared to 39 and 34 students from the 4<sup>th</sup> and 3<sup>rd</sup> year respectively. As to their Grade Point Average, having 100 as the highest possible grade, more than 2/3 of the total respondents are average students having a Grade Point Average of 85-89. It is also good to note that 30.2% of the respondents are above average students with a grade of 90 and above. As to class performance, it is noteworthy that more than one third of the respondents are honor students; meaning for every ten students, there are three of them who are excellently performing well in class.

#### Survey Instrument.

In as much as the study employed descriptive -correlation design, questionnaire-based survey data was used to describe systematically, factually and accurately the students' views and practices as regards cheating during examination. The survey questionnaire is composed of three parts: Part 1 included the respondents' personal information to include their sex, grade level, Grade Point average (GPA), and Academic Class Performance. Part 2 focused on the Frequency of Cheating during periodic examination in one academic year. Part 3 was a survey on the cheating practices where respondents would rate on a Five-point Likert scale the frequency of occurrence or practice on the cheating practices presented during periodic examinations from Always (5) to Never (1) The cheating practices questionnaire was adopted from Yee and Mackown's (n.d.) similar listing of possible cheating styles or practices of students. These cheating practices were categorized by the researcher as verbal (written or oral), non-verbal (signals and actuations), and electronically- assisted (gadgets) cheating practice.

# Data Collection Procedure and Analysis

After seeking approval from the Campus Executive Officer, the college dean, and the students, questionnaires were floated to the students. To safe keep students' identification, each was instructed not to write his/her name and to fold the accomplished survey questionnaire after answering it. After all the floated sets of survey questionnaires had been retrieved, the data were collated and tabulated. The profile of the respondents was analyzed using frequency count, means, and percentage. The frequency of cheating incidence was computed by getting the number of cheaters over the total number of population. The respondents' practices on cheating was computed by its mean and, it was analyzed and interpreted through a 5-point Likert Scale to identify whether they always (5) or never (1) practice the cheating practices identified in the list. On the other hand, the difference between the students' views and cheating practices and the profile variables was tested using t-test, f-test, and Pearson's r.

#### **RESULTS AND DISCUSSION**

## Percentage of Cheating Incidence in Examinations

The data gathered as reflected in table 1 show that a total of 85.56% of the respondents admitted that they have cheated at least once during the conduct of a major examination in one academic year. The findings are similar to the one published in the Academic Fact Sheet authored by the Educational Testing Service and the Ad Council's Campaign to Discourage Academic Cheating which says that 86% of the high school students agreed that they have cheated in a test at some point.

In a study conducted by Shafie and Nayan (2012) among Malaysian students, 16% never cheated in an examination. This means that 84% of those surveyed cheated during an examination. Also, in an article published by US News, Ramirez (2008) said that in a survey of American teenagers, academic dishonesty is rampant and getting worse at high schools, with 64% surveyed by the Center for Youth Ethics at Josephson Institute in Los Angeles said that they had cheated on a test at least once in the past year from 60% in 2004.

A greater percentage of cheating incidence was found out by Khodaie, Moghadamzadeh, and Salehi (2011) who concluded that 95.6% of the students surveyed have confessed to committing cheating in their exam/homework. When these students were asked about the quantity of cheating among students, these respondents thought that 70% of them cheat during the examinations.

The table also shows that males are more academically dishonest than females during major examinations. These male cheaters constitute 95.05% of the total population as compared to 85.15% female cheaters. The findings are similar to what the Minnesota State University Mankato published in an article on Academic Dishonesty which says that of the four recent studies reviewed which included gender/sex as a possible explanatory variable for cheating, three studies were found that males were more likely to cheat. Also, in the study of Finn and Frone (2004) as published in the Research Brief 2 (23) printed 23 of November states that males were more likely to cheat. Tang and Zuo (1997) found out that of the 282 students of classes in 3 state universities, most of the cheatings were done by men. Galloway (2012) in his survey of 4,316 high school students, female students (M=4.34, SD=2.90) reported cheating less than male students (M=5.03, SD=3.37). In the same study, the researcher also cited the similar finding of Davis et al, 1992; Davis and Ludvingson, 1995; Jensen et al, 2001; Newstead, Franklin-Stroke & Armstead, 1996) telling that male students do cheat more than females.

The findings are opposite to what Smith, Ryan ND Diggins (1972) cited in Althanasou and Olasehinde (2002) wherein 97% of the women answered that they have cheated on examination as compared to 91% of men. Also, Althanasou and Olasehinde (2002) cited the study of Who's Who Among American High School Students (1994) that 44.5% of females cheated on a quiz or a test as compared to male cheaters 42.2%.

On the other hand, Ramirez (2008) in his article on Cheating on the Rise among high school students said that there is no virtual difference between boys and girls when it comes to cheating. Chapman and Lupton (2004) cited in David (2015) finds no sex difference in academic cheating in Hongkong students' population; however, for his United States respondents, he found out that males still cheat more than females.

The data also show that as the year level of these students rises, the incidence of academic cheating during a major examination also increases. The finding is supported by the study of Galloway (2012) who found out that the 11<sup>th</sup> and 12<sup>th</sup> graders were reported cheating in more ways than the underclassmen (9<sup>th</sup> and 10<sup>th</sup> grader). The researcher presumed that it is because the upperclassmen had a long history at the school, and they cheat through a variety of methods. With this, it could mean

that the higher the grade level is, the more opportunities, more experienced, and more exposed, and the students are to an environment where cheating is unchecked and seen as universal exercise.

On the other hand, what Finn and Frone (2004) found out was the opposite, meaning the younger students were more likely to cheat.

**Table 1. Percentage of Cheating Incidence in Examinations** 

Year Level		ale		nale	Numbe r of Cheate rs	Number of respon dents	Total percenta ge of cheaters
	f	%	f	%			
First Year	20	90.91	20	60.5	40	54	74.07%
Male=22							
Female=32							
Second Year	23	92	28	93.33	51	55	92.73%
Male=25							
Female=30							
Third Year	14	100	19	95	33	34	97.05%
Male 14							
Female=20							
Fourth Year	20	100	19	100	39	39	100%
Male =20							
Female=19							
TOTAL	77		86		163	182	89.56%

# **Learners' Cheating Practices**

Table 2 elucidates the respondents' cheating practices. It came out that non-verbal cheating practices or the use of signs/signals and other cheating tactics other than written/oral or the use of modern gadget topped the list with a mean of 1.74. The possible explanation, I presume, is the lesser chance of getting caught and be punished because the test taker who cheats in this kind is not using any electronic gadget to cheat nor he is using the verbal cheating practices like asking or writing in sheets of paper.

As a whole, using the 5-point Likert scale, the overall weighted mean of 1.67, and the weighted means for each category of cheating practice which range from 1.63- 1.74 means that the cheating practices under each category were never used by the respondents. However, looking at each category separately, there are cheating practices which are sometimes and seldom adopted by the respondents when they cheat during periodic examinations.

## A. Verbal Cheating Practices (Oral and Written)

In the verbal cheating practice, the top practices are "Whispering" (asking for answers and giving answers verbally) and "Cheat sheet" ( pre-writing of the topics in cheat sheets of paper, usually in small font). The former is sometimes practiced and the latter is seldom practiced by the respondents.

The findings support the results found by David (2015) which says that the most frequent cheating behavior among the 60 participants surveyed in his study includes allowing/helping others to cheat, using leaflet among others. Shafie and Nayan (2012) also considered cheating using notes during the exam, copying from other people and helping other people to cheat as the three serious cheating

behavior of the respondents in their study. Saidin and Isa (2013) also found in their research work that crib notes and copying from peers were the respondents' preferred cheating methods or practice. Also, 75% of the respondents admitted to giving an answer to another student when they ask for, and 77% of them also confessed that they place a script in a way that other students can see (Starovoytova and Namango, 2016).

Though the other verbal cheating practices were done by some students, the computed mean of below 1.80 means that those oral and written cheating practices were never practiced by the respondents.

## B. Non-Verbal Cheating Practices (Signals/Actuations)

In the non-verbal cheating practice, wandering eyes (looking over the shoulder of someone or to the side to get an answer) was sometimes practiced by the respondents. Also, the practices of Cheat mate (positioning in a zone particularly near smart classmates and friends); Sign language (using hand gestures to communicate with others); and Open notes (deliberately opening of books, photocopies and notebooks to locate the answer) were seldom practiced by the students.

These practices were adopted by some learners as according to the study of Balbuena and Lamela (2015), the students cheat on their classmates or seatmates because they want to pass the exam and get high grades.

Anderman (2018) in his article also narrated his experience when he taught high school in Florida in the 1980s. He recalled his amazement at the efforts of some students who cheat by or sneaking at their neighbors' exams or by creating tiny cheat sheets which enclose extraordinary amounts of information written in a tiny transcript.

There are still other non-verbal cheating practices done by the learners, but since their computed mean is below 1.80, those practices were translated as never practiced by the respondents.

# C. Electronically-assisted Cheating Practices (Gadgets)

In the electronically-assisted cheating practice, 123click (opening the power point presentation of the lecture delivered by the teacher which he/she captured using the camera phone was sometimes practiced. Also, Google Search (surfing the internet to have an idea on what to write from the questions in the exam ) and Cell-Texting (asking/giving answers of the exam through text were seldom used by the respondents.

The use of electronic gadgets to cheat was noted in the article of Anderman (2018). He said that cheating among students today can use smartphones or smartwatches and other gadgets to retrieve information. He added that the cheaters can use even tiny earpieces through which information can be sent via Bluetooth technology. In the study of Starovoytova and Namango (2016), it was found out that 70% of the respondents admitted to cheating using mobile phones to Google or to assess notes.

One reason why learners cheat during examinations was that cheating is an acceptable strategy in order to get into a good college and secure a successful career (Anderman, 2018). In the article, it was specified that that was the justification of the students who were caught cheating on a language examination via text messaging. In another article, Kaplan (2017) noted that children nowadays are way more high-tech when they cheat. He shared the incident narrated by Steve Goffner, a high school teacher in New York City about a high school student who cheated on the Gotham-wide Regents exam in mathematics by getting answers through text. What he did was, he used a pencil in answering the multiple choice test type. Most likely, he got his cell phone to the bathroom, then wrote the answers on the back of his hand. When he went back to his desk, he changed all 30 answers and got a perfect 30 out of 30. In the same article, it narrates the incident in Thailand as reported by CNN

regarding an aspiring medical student who cheated on their entrance exam using glasses that contained hidden cameras. Also, there was this kid from Golden High School, in Golden, Colo., who stored the entire examination onto his calculator and sold it to his friends.

Generally, the findings could mean that the students bring into play these cheating practices just so they have something to write in their major examination. Though the practice of cheating using the different tactics is not that great as seen in the overall weighted mean of 1.67, it is still disclosed by a few learners that there are cheating practices presented that were sometimes and seldom practiced by them.

With the advent of modern technology, the problem on cheating could be worse, but, if teachers, parents and the school administration work together, they can change a culture of cheating to a culture that stresses a culture of mastery and learning.

Table 2. Summary of Learners' Cheating Practices in a Examinations

Cheating Practices	Weighted	Descriptive
	Mean	Value
Verbal Cheating Practices (Oral and Written)	1.63	Never
Non-Verbal Cheating Practices (Signals/Actuations)	1.74	Never
Electronically-assisted Cheating Practices (Gadgets)	1.64	Never
OVERALL WEIGHTED MEAN	1.67	Never

## Relationship on the Students' Cheating Practices and the Profile Variables

It can be gleaned from the table 3 that the cheating practices of male and female students is significantly different as proven by the t- the computed value of 1.014 with a probability value of .031which is less than .05 level of significance. This means that males and females have different cheating tactics. This further implies that males who are a greater cheater know and employ more cheating tactics than females. However, David (2015) found the opposite, checking sex differences in cheating behavior, their results showed no significant difference. Bjorklund and Wenestam (1999), in their study among the Swedish-Finnish respondents, found that there are almost no differences between male and female on the various cheating behaviors/practices. There was only difference on the two cheating behavior/practices-, taking unauthorized material into an examination like crib notes, and taking an examination for someone else or having someone else take an examination for them.

As to academic honors, it is also significantly related to the students' creative cheating tactics as indicated by the t-value 0.437 with a probability value of .006 which is less than .01 alpha level of significance. This means that the students with academic honors and the students' without academic honors have dissimilar cheating tactics.

On the other hand, the grade level of the students cannot prove any significant difference on their cheating tactics as tested by the one-way Analysis of Variance revealing a result of 2.090 with a probability value of 1.03 which is higher than .05 level of significance. This means that regardless of their grade/year level, their cheating tactics are the same.

When tested if there exists a relationship on the GPA of the students and their cheating practices, using the Pearson Product –Moment Correlation Coefficient, there exists a relationship as indicated by the r-value which is -.243 with a probability value of .001 which is less than .01 alpha level of significance. The negative value of the r means that the lower the GPA of the students, the more cheating practices that they know and employ during examination and vice versa. The finding is similar to what was published in the site of Minnesota State University Mankato which shows that of the five recent statistical studies conducted, they found a significant negative correlation between cheating and GPA. That is, students with lower GPA tend to be more likely to cheat. Tang and Zuo (1997) found the same results telling that students with higher GPA less did so.

Table 3. Relationship of the Students' Cheating Practices and the Profile Variables

Profile	t-value	Prob-value	Remarks	
Sex	1.014	.031	S*	
Academic Honors	0.437	.006	S**	
	f-value			
Year Level	2.090	.103	NS	
	r-value			
GPA	243	.001	S**	

## **CONCLUSIONS**

Cheating is practiced by the learners of a state university during major examinations. The cheating incidence, as self proclaimed by these students is high; however, they almost never practice the verbal, non-verbal, and electronically aided cheating practice during examination. The males cheat more and employ more cheating practices than females. It is interesting to note that both students with and without academic honors cheat in examinations. Students' cheating practices do not differ regardless of the year level. The lower the GPA that the students have and those without academic honors, the more cheating practices that are employed by these students.

With the emergence of modern and advanced technology today, the problem on cheating could be worse, but, if teachers, parents and the school administration work together, they can change a culture of cheating to a culture that stresses a culture of mastery and learning.

# **RECOMMENDATIONS**

- 1. All subject teachers have to continuously communicate policies on academic misconduct with students. A values orientation on the undesirable implications of cheating must be provided to all students.
- 2. Teachers have to constantly institute a non- permissive cheating environment by becoming more vigilant during the conduct of periodic examinations. They must be persons of integrity by maintaining an environment of trust and respect.
- 3. Faculty members have to consistently, strictly and fairly discipline cheaters based from the existing Students' Manual. Leniency in dealing with academic offenders might cause these cheaters to continue cheating during examinations.
- 4. Teachers have to conduct examinations other than paper and pencil periodic examinations like the conduct of an oral or performance exams with appropriate rubrics to minimize the incidence of cheating during periodic exams, and to better measure their performance.
- 5. The school could launch awareness campaigns to magnify the importance of a healthy educational environment and campus culture where cheating practice of students is minimized or totally eradicated.

#### References

- [1] Academic Cheating: The Role of Student Self-Efficacy and Identification with School. (2004). Research Brief. 02 (23). 09 November. Retrieved from www.ascd.org/publications/researchbrief/v2n23/toc-aspx
- [2] Academic Dishonesty. Minnesota State University Mankato. Retrieved fromhttps:www.mnsu.edu/cetl/teachingresources/articles/academicdishonesty.html
- [3] Anderman, E.M. (2018). Why Students at prestigious high schools still cheat on exams. The Conversation.. Retrieved from theconversation.com/why-students-at-prestigious-high-schools-cheat-on-exams-91041
- [4] Athanasou, J.A. & Olasehinde, O. (2002). Male and Female Differences in Self-Report Cheating. Practical Assessment, Research & Evaluation. 8 (5). Retrieved from http://PAREonline.net/getvn.asp?v=8%26n=5
- [5] Balbuena, S.E. & Lamela, R.A. (2015). Prevalence, Motives, and views of academic Dishonesty in Higher Education. Asia Pacific Journal of Multidisciplinary Research 3(2). 69-75.
- [6] Bjorklund, M. & Wenestam, C.G. (1999). Academic Cheating: Frequency, methods, and causes. Retrieved from www.leeds.ac.uk/educol/documents/00001364.htm
- [7] Cheating is a Personal Foul. Academic Cheating fact Sheet. (1999). Educational Testing Service/ Ad Council Campaign to Discourage Academic Cheating. Retrieved from www.glass.castle.com/clients/www-noncheating-org/adcouncil/research/cheatingfactsheet.html
- [8] Doyne, S. & Schulten, K. (2012). Is Cheating Getting Worse? The New York Times. .Retrievedfromhttps://learning.blogs.nytimes.com/2012/09/10/why-do-students-cheat-in-school/
- [9] David, L.T.(2015). Academic Cheating in college students: relations among personal values, self-esteem, and mastery. Procedia- Social and Behavioral Sciences,187, 88-92. Retrieved from https://www.sciencedirect.com/science/article/pii/S1877042815018108
- [10] Dealing with Cheating, Center for Innovation in Teaching and Learning. The University of Illinois at Urbana-Champaign. Retrieved from citl.illinois.edu/citl-101/teaching-learning/resources/classroom-environment/dealing-with-cheating
- [11] Freedman, C. (2016). This is What Happens when You Cheat in School. Retrieved from https://www.collegexpress.com/article-and-advice/majors-and-academics/blog/what-happens-when-you-cheat-school/
- [12] Galloway, M. (2012). Cheating in Advantaged High Schools: Prevalence, Justifications, and Possibilities for Change. , Ethics and Behavior 22(5), 378-399. Retrieved from debdavis.pbworks.com/w/file/fetch/83389900/CONTEMP%20cheating%20in%20advantage d%20high%20schools.pdf
- [13] Hosny, M. & Fatima, S. (2014). The attitude of Students Towards Cheating and Plagiarism: University Case Study. Journal of Applied Sciences. 14 (8),748-757. Retrieved from https://scialert.net/fulltextmobile/?doi=jas.2014.748.757
- [14] Kainz, O., Cymbalak, D. & Jakab, F. (2015) Adaptive Web-Based System for Examination with Cheating Prevention Mechanism . Retrieved from http://www.lnse.org/vol3/172-P003.pdf
- [15] Kaplan, M. (2017). Students are turning to high-tech cheating. New York Post.Retrieved from https://nypost.com/2017/11/08/students-are-turning-to-high-tech-cheating/
- [16] Khodaie, E., Moghadamzadeh, A & Salehi, K. (2011). Factors Affecting the Probability of Academic Cheating School Students in Tehran. Procedia Social and Behavioral Sciences, 29 1587-1595. Retrieved from https://ac.els.-cdn.com/s1877042811028680/1-s2.0-s1877042811028680-main.pdf?
- [17] Lahey, J. (2013). I Cheated All Throughout High School. The Atlantic Daily.Retrievedfromhttps://www.theatlantic.com/education/archive/2013/12/i-cheated-allthroughout-high-school/282566/

- [18] Mccabe D.L. & Derinan, P. (1999). Toward a Culture of Academic Integrity. Journal of Higher Education 46.8; B7
- [19] Moore, R. & Jensen, M. (2006). Results of a 16-Year Study of Cheating in Introductory Science Classes. Retrieved from https://files.eric.ed.gov/fulltext/EJ1057130.pdf
- [20] Most High-School Students Cheat. (2010.) Live Science. 12 May. Retrieved from https://www.livescience.com/8254-high-school-students-cheat.html.
- [21] Naghdipour, B.& Emeagwali, O.L. (2013). Students' Justification for Academic Dishonesty: Call for Action. Procedia Social and Behavioral Sciences. 83,261-265. Retrieved from https://ac.els-cdn.com/s187704281301118x/1-s2.0-s187704281301118xmain.pdf?
- [22] Perez-Peńa, R. (2012). Studies Find More Students Cheating, with High Achievers No Exception. The NewYork Times. 07 September. Retrieved from https://www.nytimes.com/2012/09/08/education/studies-show-more-studients-cheating-high-achievers.html.
- [23] Ramirez, E. (2008). Cheating on the Rise Among High School Students. US News. Retrieved from https://www.usnews.com/topics/author/eddy-ramirez.
- [24] Peters, S. (2010). Common ways Students Cheat on Exams. Retrieved from http://www.topic-mag.com/edition13/cheating/anotai.htm.
- [25] Saidin, N. & Isa, N. (2013). Investigating Academic Dishonesty among Language Teacher Trainees: The Why and How of Cheating. Procedia-Social and Behavioral Sciences 90, 522-529. Retrieved from https://core.ac.uk/download/pdf/81944140.pdf
- [26] Shafie, L.A. & Nayan, S. (2012). The Net Generation and Academic Dishonesty in Malaysia. Retrieved fromhttp://www.wseas.us/e-library/conferences/2012/Porto/EDUTE/EDUTE-28.pdf
- [27] Starovoytova, D. & Namango, S. (2016). Factors Affecting Cheating-Behavior at Undergraduate- Engineering. Journal of Education and Practice. 7(31). Retrieved from https://files.eric.ed.gov/fulltext/EJ1122531.pdf
- [28] Tang, S. and Zuo, J. (1997). Profile of College Examination Cheaters. College Student Journal, 31 September, pp.340-346.
- [29] UNESCO (2003). Combating Academic fraud towards a culture of integrity. Published by International Institute for Educational Planning.
- [30] Whitley, B. Jr. (1998). Factors Associated with Cheating among College Students, A Review. Research in Higher Education, 39 (3), pp. 235-274.
- [31] Yee, K. & MacKown, P. (n.d.)Detecting and Preventing Cheating During Exams. The Faculty Center for Teaching and Learning Electronic Workbook. University of Central Florida. Retrieved from www. fctl.euf.edu/events/GTA programs/workbook/files/detecting and preventingduringexams.html