

## An Analysis of Applications Employed by Students to Cheat on Exams

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### Abstract

This research intended to find out the reasons for students' cheating, the applications used by students to cheat, and the solutions for educators to avoid students from cheating. This research used a mixed method. This research was conducted in STIKes Bina Cipta Husada Purwokerto. 16 students of Clinical and Community Pharmacy and two English lecturers were the subjects of this research. Questionnaires and interviews were conducted to collect the data. Then, the data was analyzed using data reduction, data display, and conclusion drawing. The result obtained that there are four reasons for students' cheating such as unconfident to do exams, lack of motivation, dislike of English, and social situational factors. Meanwhile, the applications employed by students to cheat on exams such as *Gemini*, *DeepL*, *Bing*, *Roboguru*, and *Question. AI*. To overcome students' cheating problems, educators can do many things such as make anti-cheating pledges, different versions of tests, switch seating on every test day, use a questions pool, and application to detect plagiarism, and give compliments to students.

**Keywords:** Application; cheat; solutions

### 1. Introduction

The purpose of learning English at the college level is to produce graduates who are professional, competent, and have good foreign language communication skills. At the college level, especially at STIKes Bina Cipta Husada Purwokerto, English courses are one of compulsory courses for students. Studying English in college certainly involves learning aspects of language skills, including listening, speaking, reading, and writing skills. Being proficient in English and able to communicate well is a must and a need.

However, almost all students feel burdened by the English course and are too lazy to do the exams. They rather cheat than think by themselves. According to Bailey (2020), there are three reasons why students cheat on exams such as students may not feel motivated to complete an assignment. The other spectrum is fear. When students need a certain grade but don't feel confident that they can do it honestly, cheating becomes much more tempting. Furthermore, lack of resources becomes one of the reasons.

According to other researchers, the real reasons vary just as much as students' explanations. However, educators can still learn the reasons for students cheating and think critically about solutions to keep away the students from it. According to Wiley (2020), Students who lack self-efficacy aren't confident that they can complete an assignment or do well on a test. And when they think they're incapable of doing the work, students are more likely to cheat. Furthermore, students have their motivation to learn such as students who love to learn or just getting into medical school, landing a job after graduation, or simply getting grades to please their parents. The last reason is about social situational factors in which students who believe that their peers are cheating are one of the most important predictors of academic dishonesty.

In cases in STIKes Bina Cipta Husada Purwokerto especially in English subjects, students fear failing and then desire to cheat on exams because they are disinterested in the subject and believe they will not get caught. This problem is seen when the researcher observes students in almost all study programs both in classroom activity and exams. For example, the students who are inactive in the classroom get very good scores on exams. While those who are active get not too high a score. It is distinctive from reality and should be a concern whether they have applications to cheat on exams or not.

Based on the background above, there are three problems in this research such as the reasons for students' cheating, the applications used by students to cheat on exams and the solution for educators to avoid students from cheating.

**2.Method**

This research used a mixed method. Creswell (2010) states that the mixed methods research approach is a research that combines qualitative and quantitative research. This research uses concurrent mixed methods, namely a research strategy that combines qualitative and quantitative methods at one time. The population in this research are all 6<sup>th</sup>-semester students of clinical and community pharmacy study programs consisting of 16 students and two English lecturers. The sample in this research was determined using a random sampling technique and was obtained by two students and lecturers.

This study uses two types of data, namely quantitative data and qualitative data. Quantitative data is in the form of a questionnaire to find out the reasons for students' cheating and applications used by them to cheat, while qualitative data is in the form of data on the results of interviews. Quantitative data results are analyzed using open-ended data, while qualitative data analyzed using thematic content analysis

**3. Findings and Discussion**

After collecting the data, then the researcher analyzed it to get results. The data from the questionnaire were transferred into percentage form to make it easier to be understood by the readers. The researcher used an open-ended analysis technique to get the answer to the reasons for students' cheating and also to know the applications employed by students to cheat. The results of the analysis can be seen in Figure 1 below:

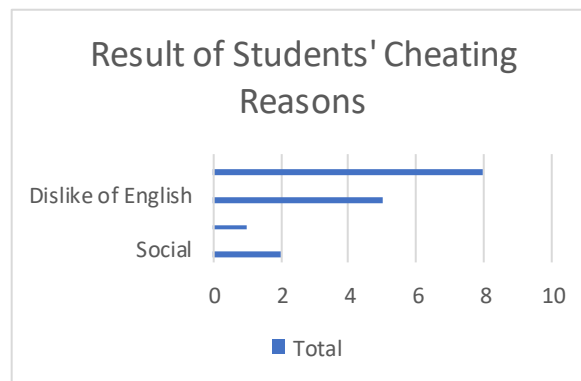


Figure 1. Result of Students' Cheating Reasons

The result shows that some students feel uncomfortable doing exams so they prefer to cheat. Others have their reasons such as dislike of English, lack of motivation, and because of their social situational factor. It is in line with the expert stated in the background of the study in which students may not feel motivated to complete an assignment or exams, they also feel unconfident to do the exams honestly. Furthermore, students who have friends or social circle who believe that English is something that is burdensome and it is better to cheat also have a reason. Meanwhile, the result of the analysis of the applications employed by students can be seen in the figure below:

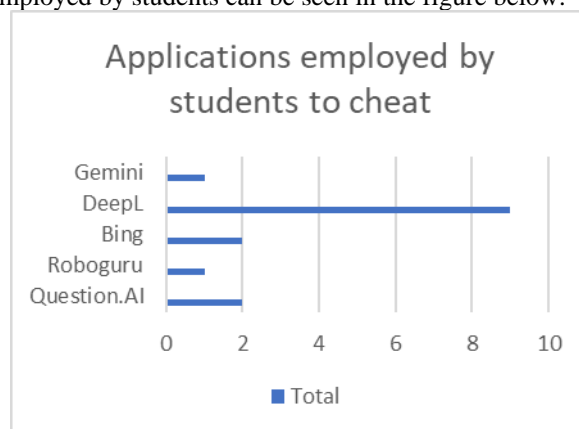


Figure 2. Applications employed by students to cheat

The result shows that almost all students use *DeepL* to cheat on exams. It is because the application is the most applicable to be used for English tests besides Google Translate. The students can translate the text by using their

camera, or recorder, or simply just choose the file they want to translate. In that way, students can answer the questions correctly by what they want. The second applications are *Question.ai*, *Gemini*, and *Bing*. These three applications have the same function as a search engine for many tasks or tests. These applications use *Artificial Intelligence (AI)* as Copilot to search information, translate text, capture questions to find the answer, record, and smart writing tools. Students who find it difficult to answer the test can easily find them through these applications. The last is *Roboguru*. It is an application in which students can ask the answers by writing the questions through the web, application, and direct message in WhatsApp, then they will be answered freely. This application makes it easier for students to do the exams.

To find solutions for educators to prevent students from cheating, the researcher interviewed two English lecturers. A semi-structured interview is given with three basic questions and two additional questions. It is conducted for 5-10 minutes via WhatsApp cell. On the first two questions, the researcher asked their opinion about whether they also encounter the same difficulties when their students are inactive in class but get very high scores on exams or not then the first lecturer answered "Yes, it is something that cannot be avoided, but as an educator, we can avoid students from cheating." Thus, the result of other questions can be seen as follows:

Extract I:

Researcher: What do you think about the current phenomenon where students depend on applications and the internet to take exams? (2<sup>nd</sup> question)

Lecturer 1: I think it is because of advances in technology nowadays, and it cannot be denied that students are very dependent on the Internet. It's like, when they wake up, they look for cellphones and social media, and that carries over to the classroom and exams.

Researcher: Okay, and what is your solution for this problem? (3<sup>rd</sup> question)

Lecturer 1: Usually, I do three things to prevent students from cheating, the first thing is I make a promise with students together in the class put it on a poster, and hang it on the classroom. The promise is about the anti-cheating pledge and every student has to sign it, if students still cheat after signing, they will be punished. The second is by making different versions of exams for the same type of questions. Usually, I create a different version without telling the students to avoid them from cheating. Of course, they were shocked and tried to be honest because they were afraid I would do it again. The last method is to switch seating in the classroom on every test day. By using this method, the teacher/lecturer will know the situation of all students when they are sitting in different places. In applying this thing, I observed that the chance for students to cheat was decreased.

Based on the interview script above, lecturer 1 gave three different methods to prevent students from cheating such as making promises to students not to cheat and giving them punishment if they broke the promises. Lecturer 1 added that this promise was also written in a poster then it hung on the classroom wall. This technique is quite successful in preventing students from cheating because students who receive punishment will feel ashamed and guilty. Furthermore, making different versions of exams for the same type of questions can make students feel challenged and reduce the desire to cheat because they will not know what kind of version they will face. By changing the type of questions periodically, students will get used to doing exams honestly. The last method is to switch seating in the classroom on every test day. This is quite effective in reducing students' desire to cheat because they have to change places. Even so, it cannot be denied that there are still some students who are caught cheating because they feel safe sitting in the back of the classroom. Lecturer 1 added that if she used this method, she would have to supervise the students at the back extra closely. This is in line with the statement given by Hummel in his article (2024), he stated 11 strategies to help prevent cheating in the classroom. Three of them are creating an Anti-cheating pledge in which teacher can create their document or use a pre-generated one then have students sign the pledge and agree to uphold everything included. The second is making different versions of the same assessment. It means that the educator can create two or three versions of the same test with the questions in a different order on each version. The last is to switch up seating on test day. This method assigns students to switch their seating every test day. Educators can decide where each student will sit and make sure students who tend to cheat are placed away from each other.

Extract II:

Researcher: What do you think about the current phenomenon where students depend on applications and the internet to take exams? (2<sup>nd</sup> question)

Lecturer 2: I think sometimes we should normalize it because the internet makes it easier to study and find information about everything, but it will be the worst thing if students use it for cheating. Nowadays, I think everyone cannot be separated from the internet.

Researcher: Alright. So, what is your solution to this problem? (3<sup>rd</sup> question)

Lecturer 2: I don't have many things to do but usually I overcome this problem by using a questions pool rather than multiple-choice questions. It is because when I use the pool, I can make many versions of tests such as true/false questions, fill-in blanks, or polling using *the Padlet* application. By applying this method, I think students will answer based on their opinions and knowledge, even though they try to find the answer through the internet or applications, it is pure from what they think in their mind. Besides that, I also use *the SafeAssign* application to check plagiarism of students. This prevention

detects matches between students' submitted assignments and existing works by others. By using this application, I can know whether students get answers from the internet or copy each other, especially from homework assignments. The last thing is I always give compliments to students no matter how small the progress made by students in completing assignments or exams. I hope by doing this, students will be more confident in exams.

Based on the interview script above, lecturer 2 gave three different methods to prevent students from cheating such as using a questions pool, an application to detect plagiarism, and giving compliments to students. Lecturer 2 uses a questions pool to make many versions of tests so that students will purely answer the questions based on their knowledge and mind because they will be different types on every test. Furthermore, to avoid plagiarism of students' assignments, lecturer 2 uses an application called *SafeAssign* to double-check their answers with each other. Lastly, lecturer 2 always gives compliments to students no matter how small the progress of students in completing the assignments so that they will be more confident in doing both assignments and exams. The methods used by Lecturer 2 are in line with an article written by Northern Illinois University (2018) which stated seven tips for preventing cheating. Two of them use question pools and applications to check plagiarism. Pools can be created from new questions or questions in existing tests or pools. Pools are most effective when there are large numbers of questions in one group. For example, one might have a pool of true/false questions, another of multiple choice and a third for fill in the blank. Then educators can utilize an application called *SafeAssign* to check students' assignments. *SafeAssign* is a plagiarism prevention tool that detects matches between students' submitted assignments and existing works by others. These works are found on several databases including ProQuest ABI/Inform, Institutional document archives, the Global Reference Database, as well as a comprehensive index of documents available for public access on the internet. *SafeAssign* can also be used to help students identify how to attribute sources properly rather than paraphrase without citing the source. Thus, the *SafeAssign* feature is effective as both a deterrent and an educational tool. The last method is in line with Simmons (2018) who stated to deliver feedback to students with compliments added to motivate students more confident with their skills.

#### 4. Conclusion

Based on the research that has been done by the researcher, there are some reasons for students cheating such as unconfident to do exams, dislike of English, lack of motivation, and social situational factors. Meanwhile, the applications used by students to cheat such as *Gemini*, *DeepL*, *Bing*, *Roboguru*, and *Question. AI*. To overcome students' cheating problems, educators can do many things such as make anti-cheating pledges, different versions of tests, switch seating on every test day, use a questions pool, and application to detect plagiarism, and give compliments to students.

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