

*Students' Reliance on AI-Based Tools in Written Expression Course:  
Challenges and Solutions*

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**Abstract**

In recent years, AI-based tools have changed our world massively; these tools opened up new possibilities in all sectors, and education is no exception. However, students' reliance on these tools such as ChatGPT has a negative implication. This paper examines the impact of AI-based tools on studying written expression course among first and second year students at the university of Mohamed Ben Ahmed Oran2, Oran, Algeria. The study also explores the challenges the teachers of written expression course face. Written expression course teaches students the essentials of written compositions. This research employed the mixed method approach to better answer the research questions. Both semi-structured interviews and a questionnaire were used to collect the data. Both teachers and students were under investigation. The interviews were conducted with three written expression course teachers; on the other hand, the questionnaire was addressed to 20 first and second year students. The paper delves into the causes of such excessive reliance as the lack of confidence, the quick easy access to these tools, the availability of information, lack of awareness. It also highlights the consequences of such increasing reliance such as the passive learning experience which will obstruct the development of critical thinking, diminish active engagement, and the cognitive processes that the students may go through in order to write good readable texts. This paper also proposes strategies to alleviate its negative impact, such as spreading awareness.

Keywords: AI-Based Tools, Written Expression, Oran 2 University Students, Teachers, Challenges, Solutions

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## 1. Introduction

AI-based tools or machines are highly sophisticated software that generate human-like conversations. The early 2020s witnessed the rise of AI-based tools in the academic context. These high-tech tools became an integral part of the students' life. This technology has changed the studying-learning game. Offering fast and efficient assistant, these machines became indispensable. AI-systems aid students to answer questions, explain complex concepts, or write essays in a click of a button. Quick accessibility to the vast body of knowledge led to the growing dependence on the AI- dialogue systems. Moreover, the personalization of the answers made these tools more appealing. Students world wide have access to devices like smart phones, computers etc... making AI-powered machines available regardless the time and place. The ability to get prompt responses is an appealing phenomenal experience for students. However, the world wide community has rung the warning bell after the rising concerns about the potential negative impact of its use on education, especially the writing tasks.

At Oran2 Mohamed Ben Ahmed University, first and second year English language bachelor students are offered written expression course. Written expression course teaches students the essentials of written compositions i.e, how to write paragraphs and essays in English language. Students are often asked to write paragraphs and essays covering different topics. However, when students depend on IA-based dialogue systems to assist in writing their paragraphs and essays ignoring the engagement in the learning process, the outcomes are disastrous. According to Kaepffel (2021), it is pivotal for students to develop their cognitive abilities, especially those students involved in tasks like synthesizing, evaluating, and forming arguments. The over-reliance on the AI-based tools will eventually lead to deactivating the students' cognitive abilities responsible for such tasks; as a result, the development of the cognitive abilities will cease leading to other problems "cognitive abilities of a person are innate, but it is important to pay significant attention to their development from the very birth of the baby and throughout life."(Akhmetova et al., 2024, p. 1). Lepp, Barkley, and Karpinsky (2015) ensure that the over-use of smartphones and social media engagement reduce attention span and decrease memory performance. The lack of academic honesty, ceasing cognitive development, and the lack of deeper learning are all reasons that urge teachers to step and strike the balance between allowing the students to use these tool rationally in a way that does not hinder the cognitive development and ensure the progression of the learning-teaching process. Therefore, this piece of research aims to:

- Examine the impact of AI-based tools on studying written expression course among first and second year students at the university of Oran2 Mohamed Ben Ahmed, Oran, Algeria.
- Explore the challenges the teachers of written expression course face.
- Uncover the causes leading to the students' over-reliance on AI-engines when doing their writing assignments.
- Suggest solutions to this issue.

This paper aims to answer the following questions:

- What is the impact of AI-based tools on studying the written expression course among first and second-year students at the University of Mohamed Ben Ahmed Oran 2, Oran, Algeria?
- What challenges do the teachers of written expression course face?
- What are the causes leading to students' over-reliance on AI-engines when completing their writing assignments?

- What solutions do written expression teachers propose to address students' over-reliance on AI-based tools in their writing tasks?

Several research papers tackled the over-reliance on AI-based tools from educational, pedagogical, and psychological perspectives. Stohr, Wanyu Ou, and Malmstrom (2024) concluded that although students find AI-Chat bots useful in assisting them to do various tasks such as writing, coding, and offering immediate responses etc..., the concerns remain high, as they worry about the over-reliance on these tools on their critical thinking progression, problem solving, and creativity. Zhai, Wibowo and D. Li (2024) studied the impact of AI-systems on students' learning attitude and cognitive development. They found that addictive reliance on these tools can diminish cognitive abilities, decisions making, and analytical skills. Bognár et al. (2024) examined the extent to which AI-language models can impact students' engagement. The researchers demonstrated that although these tools can enhance personalized learning and feedback, the over-reliance can diminish critical thinking, decrease academic input and creativity. Abbas, Jam, and Khan (2024) navigated through the consequences of using AI-tools among university students. The researchers found that the over-reliance can lead to reducing cognitive engagement's rates, resulting in a negative learning behavior like laziness and plagiarism.

As demonstrated above, all the presented pieces of research focus on AI-engines over reliance in educational settings and among university students in general; however, the present study goes deep, focusing only on one course, namely, written expression, one specific environment, namely, language learning, two specific levels, first and second year bachelor students, and on one geographical setting, Oran, Algeria. This study will start a new trend of research in this field, focusing on the impact of the issue under study on specific programs or courses, dissecting the problem and trying to find solutions to it. Furthermore, the current inquiry is new trend within this somehow novice field of research, attempting to fill a gap in the knowledge body.

## **2. Methodology**

This research employed the mixed method approach to better answer the research questions. Both semi-structured interviews and a questionnaire were used to collect the data. Both teachers and students were under investigation. The interviews were conducted with three written expression course teachers; on the other hand, the questionnaire was addressed to 20 first and second year students. The interview and the questionnaire were designed by the researcher. The students were assisted and accompanied by the researcher during questionnaire answering. The data collection procedure took one month to be terminated. All the collected data was analyzed manually; no software were used. The interviews span ranged from 15 to 20 minutes. The researcher herself was among the interviewed researchers. The researcher resorted to a research assistant to conduct the interview with her. The questionnaires were carefully explained to the students to ensure good quality data collection.

### **2.1 The Participants**

3 written expression university teachers were under study. They all have been teaching written expression from 2 to 7 years. All the teachers hold PhD in English language. Regarding the students, their ages range from 17 to 21 years old. 10 are first year students, and the other 10 are second year students. The students were purposefully selected based on their performance. The researcher observed the students' performance during regular sessions

and exams. When they are asked to write paragraphs about different topics in the classroom or at home, when time session is over, the researcher noticed that there is a huge difference between their paragraphs written in the classroom during regular sessions or exams and at home. After investigation, the researcher found that when the students are outside the classroom, they use AI- based tools like ChatGPT to generate the paragraphs for them. This issue irritated the teacher and urges her to conduct a study tackling this problem and trying to understand this phenomenon and to find solutions to it.

### **3. Results and Discussion**

In this section, the findings of the study are presented, analyzed, and discussed in detail. This section is divided into two sections. The first uncovers and analyzes the findings of the students' questionnaire while the second uncovers and analyzes the findings of the teachers semi-structured interviews.

#### **3.1 The Analysis of the Students' Questionnaire**

The students under study were carefully chosen after observing their performance, comparing it, and contending that they use AI-based tools. Therefore, all the selected students use AI-based tools to assist them when writing their writing assignments. When the students were asked if they feel that these AI-means help them to improve the quality of their written works, all of them said "yes". All the students agree that AI-tools are very useful and helpful when generating ideas and sentences. When they struggle to generate due to the lack of language competence, specifically, language production difficulty, they resort to AI chat models for an instant solution to the problem, especially, since English language is learned in these classes as a second language; Silva (1993) concluded that second-language writers often struggle with planning, setting goals, and organizing their ideas, resulting in more surface-level revisions, less frequent reviewing, and limited fluency in their writing. One of the students revealed that these platforms help him to detect and correct his grammar and spelling mistakes automatically in a click of a button. He added that thanks to ChatGPT he doesn't need to spend time and mental efforts searching for these errors and correcting them manually. The real time feedback is another feature they like about AI- conversing engines. Another student spoke about being offered style improvements and proofread her work in real time. It seems that all these features tend to attract the generation Z (gen Z) students. According to Forbes (2024),

"Generation-Z has grown up in an era where technology is inevitable. With smartphones in hand from a young age, Gen-Zers have an intuitive understanding of digital platforms and are at the forefront of adopting new technologies like augmented reality, blockchain and artificial intelligence."

It has been found that features like: grammar and spelling checks, style and clarity suggestions, real-time feedback, and error detection and correction etc., make AI-conversation models appealing to the students, and encourage them to extensively use these tools whenever they have a writing assignment.

17 out of the 20 students under study think that the over-reliance on AI-based tools may affect their ability to improve their writing skills independently. One of the second year students entails that students must be careful when using these platforms and have self control; otherwise, students will have some serious problems that they must deal with later.

One of the first year students said “to be honest, ChatGPT does the work for me”. Another one said “yes, off course, when you over-rely on ChatGPT, you will not be able to use your brain and practice writing; as a result, you will not be able to improve your writing skills”. One of the second year students thinks that AI tools are dangerous, and they meant to replace and transform humans into unproductive and lazy creatures. According to Binns (2018), over-relying on AI tools can decrease critical thinking, problem solving ability, and increase human being passivity”. Based on students’ responses, it seems that the students are to some extent aware of the fact that relying on AI-based tools will deprive them from reaching their full cognitive potentials when writing in addition to depriving them from going through the usual writing process: prewriting, drafting, revising, editing, and publishing. This justifies why their performance is weak during exams.

When the students were asked how confident they are in their writing skills without the use of AI-based tools, the answers range from neutral to not very confident. 13 students out of 20 chose neutral while the other 7 said that they don’t feel that confident. Their answers justifies their complete extensive reliance on AI-tools when writing, ignoring the outcomes of their deed. It has been noticed that they feel insecure when it comes to writing due to many reasons such as the lack of grammar, spelling, lexicon competencies. They believe that the machine can do it better, creating a feeling of anxiety, doubt and insecurity. Lack of self-efficacy is another reason leading to the extensive use of AI in writing. Here, students develop some sort of a negative perception about themselves, believing that without AI-engines they can not achieve success. Negative feedback is one of the reasons. Students fear hearing the teachers’ negative feedback because of the lack of confidence. They think that if their written compositions are not AI supported, their works will not meet the requirements. Consequently, the psychological barriers play a pivotal role in pushing the students to depend on AI. The students run from the reality and do not accept the fact that they have some writing issues, so instead of working on these issues and improving their writing skills, they resort to AI for a quick solution, hiding beneath AI. Therefore, the problem seems deeper that it appears.

Then, the students were asked if AI-based tools help them understand and learn from their mistakes. Here, their answers vary. 4 students out of the 20 said “yes, sometimes”. The students who selected this option said that sometimes AI tools like ChatGPT help them learn new words, transform their ideas into sentences, and polish their writing and style. 8 believe that they ‘rarely’ learn from their mistakes. According to them, using AI in writing is a short time experience; it is all about the final result product. Furthermore, one of the main reasons of using AI is to limit the time of writing. Using AI will reduce the steps of the usual writing process from 5 to 2, giving instruction and publishing. 3 out of the 20 students selected the option ‘neutral’. Selecting this option means that the students have a balanced view. They don’t strongly agree or disagree. In other words, they believe that these tools have benefits as they can have limitations. The rest said ‘No, never’. Most of the students who selected ‘never’ may rely on ChatGPT to write their paragraphs with zero efforts. They give the AI engine the instruction, then they copy paste the written composition. They only check if the AI language model have completed the task successfully. The checking time is too short for learning new words or writing techniques.

The next question was how often do the students review or revise AI-generated suggestions before accepting them? 9 students said ‘never’. This answer shows their complete trust and reliance on the machine. The uncovered results reflect the students’ lack of confidence. The students feel insecure about their own abilities and skills. They know they have some language issues that they are supposed to work on in this course and the other related courses

but instead of facing this reality, they resort to the fast easy option namely AI-engines to do the required work unaware of the outcomes. Being unaware of the impact of this deed on limiting or ceasing critical thinking that gives individuality to the students; in addition, the accuracy and the perfection of the IA language generators' answers are all reasons that make the students ignore the revision. As a result, they find it difficult to evaluate the resulted suggestion. 7 students said rarely. These students said that they revise only when the topic that they are writing about is complex, or they are unfamiliar with, in this case, they revise to avoid situations like awkward pauses, mispronunciation, embarrassment etc. 3 students said that they sometimes revise what the AI- Language models generated. When they were asked why they said it depends on the time and the circumstances. If they have time, they would revise. But, if they don't have time, they won't revise. Furthermore, in certain circumstances, they revise when they are assigned to read their written compositions. Only one student selected 'often'. This student said that she revises because she believes that it is crucial to personalize the written composition. Consequently, it seems that most of the students under study do not revise their written compositions automatically generated by AI-engines. This conclusion means that the students have low self-confidence; on the other hand, they have high confidence in AI-engines. The low confidence stems from the lack of certain writing skills like lexicon, grammar, punctuation etc. the high confidence in the machine stems from the concept itself that the machine is more accurate than humans.

Next, the students were asked if they feel that AI-based tools encourage creativity in their writing, or do these tools limit it by providing ready-made solutions. 9 students see that these tools limit their creativity by letting the machine do what they are supposed to do. It seems that they know that these ready made paragraphs and essays that they are asked to write, but they don't and let AI to do it for them limit their critical thinking, creativity and the learning process. On the other hand, the majority of the students (11) think that these tools do not limit the creativity, on the contrary, they help them to learn new words, how to use punctuation, grammar etc. one of the students said that the world is changing and we need to be open to new learning tools and instead of having instructor monumental reviews we can have this instant reviews using the AI-Based tools. Another students said that these tools help him enrich his vocabulary and save time.

As can be noticed, the students under inquiry are unaware of the shortcomings of their over reliance on AI especially in the course of written expression that requires critical thinking, individuality and the constant work on the written skills to improve them. Their unawareness of the issue is due to the overconfidence in the machine. Generation z are known to be the generation of technology since they grew up with smart and digital technologies being part of their lives. They are used technology; therefore, they are unaware of the danger of AI. In addition, the students also lack ethical awareness. Since the students ask the AI language models to write their written assignments, they are unaware of the ethical implication. The lack of teachers guidance can be one of the factors leading to this reliance. The teachers, at the beginning of the academic year and the first written expression session, must dedicate this session to aware the students of the nature of the course and the danger of using AI in this course.

### **3.2 The Analysis of the Teachers' Interviews**

Three teachers were under study including the researcher. All the teachers teach written expression course for first and second year bachelor students. All the teachers face the same problem, namely, the students' over reliance on AI-based tools. The aim of interviewing the

teachers is to address this problem, discuss it and find solutions to it. The first question asked was the ways have led the teachers notice the students over-reliance on AI-based tools when asked to write paragraphs or essays. All the teachers said that the first sign was the noticeable difference in students' performance during regular classes compared to exams. In regular classes, their paragraphs and essays were nearly flawless, with no grammar, punctuation, or spelling errors. However, during tests and exams, there was a significant decline in their performance. Their writing was filled with errors in spelling, grammar, and punctuation, and even the flow of ideas became problematic. Consequently, the teachers concluded that during regular sessions the students are not the once who are writing the written assignments, and because the paragraphs were nearly perfect and flawless, the teachers knew that the students are using AI-based tools to generate their written compositions. Furthermore, when the teachers confronted the students they admitted.

The second question asked was if the teachers believe that AI tools help or hinder the development of students' writing skills. All the teachers agreed on that AI hinder the students writing skills. They believe that using AI in written expression course obstruct the students' skills and abilities development. In this session, students should make mistakes, identify their mistakes and correct them, and they should practice writing by knowing and following the five steps of the writing process. However, using AI in writing will resume the writing process in to two steps giving instruction to AI language model and publishing (the generated paragraph). Not only the students' critical thinking will be ceased, but they will also become dependable and addicted to the machine, limiting their individuality and creativity. The students became unprepared for non-AI situations; as a result, they struggle during exams and tests, and their performance is very weak since using digital tools like phones or tablets is forbidden. Another reason why AI hinders students' development is its superficial understanding. AI generate what students ask; however, it never explains why something is correct or wrong leading to superficial learning and understanding. Eventually, the students will not learn anything. In addition, students will miss out working on their language use and writing skills.

Then, the teachers were asked to suggest strategies to encourage students to critically engage with their own writing, rather than relying heavily on AI. The teachers suggested assigning creative writing assignments where students require original thoughts. Extend the written expression sessions to allow students to write in class and prohibit the use of digital tools during the sessions. Encourage the process of oriented-writing. The students are obliged to submit their outlines, drafts, revisions etc. to ensure that the students are following the natural process of writing and engaging critical thinking. The teachers also spoke about their role in guiding the students, instruct them and being with them during this journey. The teachers concluded that peer review sessions are also important in fostering critical thinking and self awareness about writing quality. The teachers emphasized the role of awareness in the first session of written expression in reducing the students' over reliance on AI in writing.

At the end of the interview, the teachers were requested to suggest solutions or strategies that would be recommended to reduce students' over-reliance on AI-based tools in the written expression course. The teachers' first suggestion was to aware students of the downfalls of such reliance by dedicating the first session to address this issue and to discuss it with the students. Preparing and printing brochures summarizing the issue and what was discussed in the lecture and putting it in PDF format in the official space of the course on Moodle platform, so the students can check it and download it later. Accessibility of the students to this document is very important. Define ethical consideration is another issue that need to be

discussed with the student. They need to be aware of the fact that asking AI to write the paragraphs and essays that they are supposed to write is unethical and not allowed. Perkins (2023) emphasized that students when using AI-based tools like ChatGPT, they need to be transparent and give credit, reinforcing honesty in their submissions. Another suggestion was to clearly communicate the course objectives and how auto-writing without the use of AI would foster their critical thinking, creativity, and improve their writing skills. Setting strict rules or penalties for using AI is another recommendation to deter students. One of the penalties can be course suspension. The teachers also suggested to minimize the number of students in written expression course that sometime surpasses 40 students per class, and turning these classes into workshops. Turning the regular classes to workshops will able the teachers to mentor the students effectively, guide them to develop their own style and voice, and provide them with feedback that would help them to improve. Stuart (2004) concludes that students receiving timely and specific feedback improve their analytical skills, especially when feedback is explanatory rather than just outcome-based. Extend the duration of the written expression course to allow students ample time to write their compositions in class. This will give them the opportunity to develop their paragraphs and review their work. Teachers will also have sufficient time to provide immediate feedback and guide students in improving their writing. Designing structured assignment was also suggested by one of the teachers. This kind of assignment would require individuality, critical thinking, and creativity, and it would be difficult to be AI-generated. Incorporating peer review is also another strategy that can be used by teachers where students provide constructive feedback to each other, reinforcing collaborative learning, making the lectures more engaging and rich. Consequently the students will be able to learn from each others mistakes. The points that were addressed by the teachers of written expression are key procedures that may help to reduce AI over reliance and draw boundaries especially in written expression course. The teachers started applying some of these suggestions. Future research will explore and examine if these procedures are effective or not.

#### **4. Conclusion**

This piece of research highlighted a growing trend of the over-reliance on AI- based tools by university students in their assignments, focusing on first and second year bachelor students in written expression course at the University of Oran 2 Mohamed Ben Ahmed, Oran, Algeria. The study employed both a questionnaire addressed to 20 students, and semi-structured interviews conducted with 3 teachers. The aim of the questionnaire was to uncover the causes and the opinions of the students regarding their over-reliance on AI in written expression course; on the other hand, the aim of the interview was to find solutions to this issue. The major aim of the study is to address this growing issue, irritating professors and universities globally. The findings revealed that the students under study are unaware of the shortcomings of the over-reliance on AI. It has been found that GenZ trust the machine over themselves since they are familiar with technology. It has been uncovered that such reliance stems from different reasons, such as the lack of language competence and real time feedback etc... It has been also found that the students are unaware of the outcomes of this reliance, such as hindering critical thinking, creativity, and individuality. In other words, this reliance will cease any learning or progression in this course which is based on critical thinking and creativity. To reduce the reliance, several measures were recommended by the teachers like to raise students' awareness by dedicating the first session to talk about this problems, preparing printed brochures, explaining the short-term and long-term outcomes of this reliance, communicating the course objectives, setting strict rules and penalties to deter the students, minimize the students number in written expression classes to ensure effective students



mentoring, control and guidance, extend the duration of written expression course, designing structured assignments, incorporating peer review etc. As it can be noticed, addressing this AI over-reliance requires a combination of policy enforcement, curriculum adjustments, and pedagogical strategies aimed at helping students develop as confident, creative, and independent writers. Future research could examine the suggested procedures and determine if they were effective or not, and they can also investigate the long-term effect of this reliance.

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