The Impact of Using Artificial Intelligence Tool ChatGPT at Valencia College 2023 Best Practice / Guidelines

By: Kenji Nakanishi

Mentor: Professor Amira Mohamed-Ameen

Valencia College

Abstract

The purpose of this study is to gain a deeper understanding of how those in Higher Education, particularly students and faculty, perceive the recently introduced Artificial Intelligence (A.I.) technology "ChatGPT" and its possible impact on education, including potential ethical issues. ChatGPT (Generative Pre-Trained Transformer) is a text-based chatbot released on November 30, 2022, by OpenAI which is trained with information dated until January 2022 and has the capabilities to reply to prompts introduced by the user, returning human-like answers. Educators and researchers both are investigating the ways in which AI should be used to enhance teaching and learning results, in the same manner its negative effects. Our research questions focus on assessing the perceptions and trust the user has in technology from both students and professor points of view. Giving an overview of the research conducted as of 2023 in AI, and how academic corpus are adapting to these technological shifts, considering the implications on their teaching. In addition, we are going to propose best practices and guidelines on how to use the tool in school.

Keywords: Artificial Intelligence (AI), ChatGPT (Chat Generative Pre-Trained Transformer),

Massive Open Online Courses (MOOCs), Intelligent Tutoring System (ITS), Learning

Management System (LMS)

Introduction

The advance of Artificial Intelligence (A.I.) has reached a profound transformation across multiple sectors, with higher education not being an exception. The opportunity is vast, with a potential for A.I. use in personalized learning, computerized assessment, or supporting teaching courses. ChatGPT, a text-based chatbot, has particularly gained notoriety as the "plateau of productivity" for its potential to revolutionize and enhance the learning process as well as the experience of the user (Singh, et. al 2023).

The arrival of ChatGPT in November 2022 bolstered an explosion of attention on A.I. chatbot, with some embracing the new technology with welcoming arms, and others cautious and skeptical. Voices on both sides have highlighted the potential for great impact, both positive and negative. Those who support usage of the tool in academia highlight adaptive learning, intelligent tutoring system (ITS), automated feedback and enhanced engagement. According to Cope (2021), A.I. would increase the study quality meaning the traditional system could shift to automated grading, A.I. feedback, assignments are oriented to the necessity of each student, and transparency without favoritism. Cotton and Shipway (2023), adds to this point highlighting the chatbot conversation like interface to assist faculty members and students with data gathering, and accomplish repetitive programmable tasks. Rose and Ferschke (2016) and Ghotbi and Ho (2021) both authors support this technology by stating that underrepresented students who are facing economic hardship or difficulties and cannot access traditional education can obtain resources to learn.

On the other hand, many critics point to plagiarism, AI mistakes, inaccurate data, duplicate content, and dependency on A.I creating ethical concerns; further details will be provided later. Therefore, to what extent and scope is correct to use it. Are some of the questions

that are going to be discussed and taken into consideration in the academic field. While ChatGPT could be a great tool for exploring college material, students should use it responsibly and ethically. The purpose of this research is to provide guidelines for higher education faculty members, delivering best practices with actions to undertake to diminish instances of misuse of the rapidly advancing technology ChatGPT.

Fraudulent Behavior

The COVID-19 pandemic saw many faculty members having to adapt to online learning modalities suddenly and quickly, while also learning to navigate the new learning space.

Research focused on detecting evidence of fraudulent behavior in online examinations was conducted. Population was 132 undergraduate students from University of Cadiz at Spain with majors in computer engineering enrolled in a databases course. Banderas (2021), reviewed students' submission time and grades obtained when performing online examinations and activities in their Learning Management System (LMS) such as Moodle or Canvas where faculty organize their courses, set up learning activities and students find learning material and communication tools that allows them to interact with their professors and classmates.

Banderas (2021) mentioned "Lecturers usually prefer face-to-face rather than online examinations.", "The main reason for this is the concern that students can easily cheat in online examinations because the lecturers lose control of what the students do while taking their examinations." Solution implemented was to take real time evaluations to ensure absence of fraud. Unfortunately, that is not always possible, since student scheduling can often conflict with that of the professors. In the same research, Banderas added that multiple-choice questionnaires were popular and used as they are immediately graded with automation. However, they are prone to cheating by students. Thus, harder methods (difficult multiple-choice, open questions, shorter

time to answer) were proposed by professors, but students reported that LMS services got interrupted during quizzes. That is why students asked for asynchronous examinations to take quizzes at different times Although, students recognize that cheating during examination is ethically not acceptable behavior, most of them admitted to have done it at some point during their academic years. (Banderas et at, 2021.p. 241).

According to Albrecht, three circumstances must be met for students to be driven to cheat: Some sort of pressure (final exams being the source of anxiety), the possibility of not getting caught, and the ability to rationalize the actions as acceptable (student who were familiar in collaborate during face-to-face settings thinks that can normalize collaboration).

Professors are blind to what each student is doing while taking online examinations (if students are with somebody else, reviewing course materials that they should not consult, or using external tools). Thus, Banderas (2021) mentions the lack of control in online courses encourages students to massively copy and plagiarize, and even more in the case of multiple options where it is easier to cheat. Tools are available to detect cheating (plagiarism detection systems), Turnitin and Viper, widely known in higher education, and although they are effective tools, they are focuses on looking for semantic similarities between sentences and between words, which is suitable to detect unfair practice in projects involving essays, summarization, and discussion but not towards multiple choices questionnaires.

E-proctoring tools have become popular, and they have been used by educational institutions to detect fraud in online examinations. By using these tools professors can remotely monitor students while taking exams. significant differences were found between the grades of proctored and non-proctored students. (Binglin et al, 2020 p. 2).

To further demonstrate this, a SQL live proctored coding examination and non-proctored examination were compared, evidencing that questionnaires were completed with external aid since the time submissions were faster than expected with higher grades than SQL. (Banderas, 2021, p. 244)

Grades	2016-17	2017-18	2018-19	2019-20
A	0%	0%	3%	11%
В	9%	2%	12%	40%
C	32%	27%	40%	26%
D	59%	71%	45%	23%

Table 1. Data content grades for examination.

Modification of the learning process

While A.I. has considerable educational potential and value, using an A.I. may lead to academic dishonesty due to its ease of use and difficult detection (Zhai et al., 2021). To add to this point, a survey case study evidenced that a staggering 97 % of students were observed to be cheated in some way in their assigned task and homework when moved to online settings (Banderas et al, 2021). One additional case to pay attention to is the online programs and courses incorporated under the name of Massive Open Online Courses (MOOC's) available on Coursera, LinkedIn Learning, or school online classes which differ from the traditional face to face teaching method. Investigation evidence that MOOCs could be a flexible alternative specially widely used during COVID-19 era, the percentage of completing the course understanding the material provided rate just a minimum of 3%. Rose, C.P. & Ferschle pointed out that MOOC's might be effective in a collaborative environment where A.I. aids students to complete analysis enhancing learning outcomes. Rose further highlighted that low completion rate or perfect scores in virtual sections can raise other concerns such as dependency on technology, quality of

teaching and whether the resources offered by the school is enough. Thus, obtaining MOOC's certifications does not guarantee that the student acquires the necessary skills and knowledge taught during the course, raising the concerns whether completing assignments and courses online can truly replace the traditional face to face method of teaching.

Negative aspects of AI in Education:

Survey case research about how much the education system has contributed to the understanding of moral awareness and issues with respect to AI was conducted at International University in Japan examining 195 students with a social sciences major and 272 students at college of business management. Bossman (2016) listed nine potential ethical issues in AI including unemployment, inequality, impact on human behavior and iteration, committing mistakes, racism and bias, security threats, malicious acts, loss of human control, and rights for robots. Most significant as follows:

- 1) Unemployment, Mainichi (2016) reported that the company IBM Japan Ltd.'s Watson shifted their human workforce to an "AI technology that can think like a human." Job losses may happen or are about to happen because of being replaced by AI systems. Specifically, those that involve highly repetitive or structured actions in predictable settings (Boddington 2017).
- 2) AI mistakes, from autonomous cars to patients undergoing surgery that require the key intervention of the supervising human. (Alaieri and Vellino 2016). O'Sullivan classifies responsibility into accountability, liability, and culpability.
- 3) Discrimination and bias, Ntoustsi et al. (2020) explained how problems in gathering and processing data may result in biased AI decisions over human characteristics such as race and gender; provided references in literature about many instances of racial and gender

- discrimination. Human societies suffer from a deep bias that only with technical solutions cannot be eliminated; multidisciplinary approaches including social and legal are needed to avoid prejudice.
- 4) Privacy, The use of AI by governments for surveillance of global citizens at home and in public spaces through massive data collection creates serious ethical concerns but has commonly been justified by the need for security (Bartneck et al. 2021). Private companies and businesses also intrude into the privacy of citizens to improve advertising, marketing, and sales with the justification that it is the basis for better performance of AI systems. The use of psychological and emotional AI techniques helps manipulate and exploit human users and erodes their right to privacy.

The main concern was
unemployment, the fear of being
displaced by an A.I. is the most common
reason for feeling insecure about their
current position. For the case of
ChatGPT, its complexity to be detected
leads to a challenge in academic integrity,
fraudulent behavior, privacy, AI
mistakes, and dependence on technology.
MOOCs students can experience
loneliness and feel unmotivated for not
receiving the human support needed.

Ethical issue	Number of students by nationality and gender					
	Japanes	se/non-	Femal	e/male	Sum/	%
	Japanes	se				
Increasing unemployment	93	176	122	147	269	57.6%
AI impact on human behavior and emotions	14	23	23	14	37	7.9%
AI control of the society	2	28	14	16	30	6.4%
AI discrimination, racism, or bias	15	14	21	8	29	6.2%
Increasing inequality	6	19	17	8	25	5.4%
Loss of privacy	5	13	10	8	18	3.9%
Robots' rights and emotions	3	14	11	6	17	3.6%
AI mistakes	7	9	6	10	16	3.4%
Malicious AI	3	11	8	6	14	3.0%
Security risks	4	8	4	8	12	2.6%
Total	152	315	236	231	467	100%

Table 2. Students' responses about the ethical issues of AI in the future

THE IMPACT OF USING ARTIFICIAL INTELLIGENCE TOOL CHATGPT AT VALENCIA COLLEGE 2023

Research Question:

How to support adapting faculty staff to ChatGPT introduction?

Justification:

There has been a lack of clear communication and guidelines regarding its usage for students,

leading to confusion and uncertainty.

Research Statement:

Developing a guideline will help faculty members identify how to reduce the negative impact of

ChatGPT usage in classrooms.

Methodology

Deep dive into the literature review, attending workshops and referencing other best practices to

build a framework.

Results: Guidelines / Best Practices

To develop a guideline to reduce the negative impact of GPT usage in Higher

Education classrooms. Professors need to understand what it is, how it works, test it out, how it

should be used in their class, in-class experience with students, and establish scope of usage.

1) Faculty need to be trained on ChatGPT usage.

The first guideline to be presented is about training the faculty members about

what ChatGPT is, but before exploring the details, it is important to gain insight on how

professors perceive ChatGPT:

9

Professor's view about ChatGPT:

In the survey study conducted by Primary Research Group to measure the views on and use of ChatGPT, a questionnaire with multi-options, and open questions were asked to faculty members from public and private institutions. The questionnaire includes age, race, gender, Carnegie Class (community college, BA granting institution, Specialized college, PHD granting college, Level 1 or level 2 research university), political views, income, academic field, years of experience and questions to describe what adjustments have been done in their institution in regards of A.I. tool ChatGPT.

Whether their college administration developed guidelines of use ChatGPT, and how similar programs should be used in classes. With a total of 954 participants 86.48% mentioned that their administration had not yet developed guidelines, while 13.52% said that they had. Private colleges were more likely to report guidelines (16.71%) than those from public colleges (11.60%). Overall, data suggests that larger colleges and private colleges were more likely to have already developed guidelines.

The study surveyed if the professors themselves had developed ChatGPT guidelines for their own and that of their students; 17.61% of professors said that they had developed such guidelines. It was common for community college faculty, of whom 24.75% had guidelines for students and themselves.

Interestingly, the personal development of guidelines was also inversely related to the age of the professor and the older the respondents. 27.27% of professors under age 30 had developed such guidelines, dropping to 15.8% of professors aged 60 or older.

Age of respondent	No	Strongly	Agree	Neither	Disagree	Strongly
	Answer	agree		agree nor		disagree
	•			disagree		
30 or under	9.09%	9.09% 🤙	9.09%	9.09%	18.18%	45.45%
31-39	4.76%	0.00%	0.00%	11.11%	20.63%	63.49%
40-49	5.19%	2.60%	3.90%	10.39%	20.78%	57.14%
50-59	2.87%	0.82%	5.33%	11.89%	18.03%	61.07%
60 or over	6.86%	2.29%	4.37%	11.23%	12.47%	62.79%
Unknown	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%

Table 3. If professor perceived the ChatGPT usage by your student

The following graph shows that community colleges were most likely to agree or strongly agree to write papers and assignments during class or in supervised areas, and that more than 34% of professors did, much higher than for professors from other types of colleges.

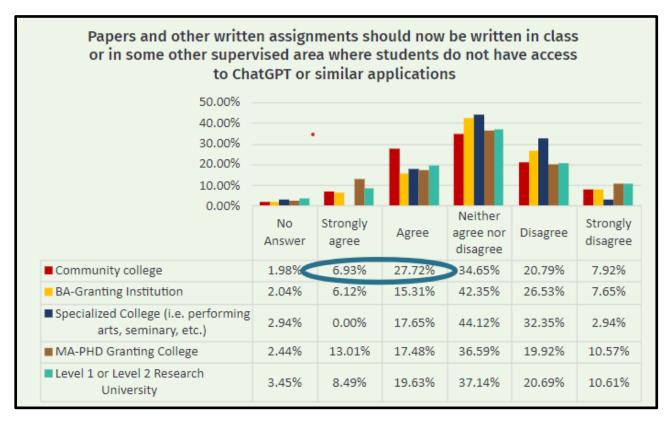


Figure 1. Graph showing respondents who think papers should be done on class.

Next graph breaks down whether students should be encouraged to learn using ChatGPT and integrate it into coursework. filtered by Carnegie Class, community colleges had the highest level of agreement, with 9.81% strongly agreeing and 20.79% agreeing. Specialized colleges had the highest level of disagreement, with 17.65% disagreeing and 17.65% strongly disagreeing.

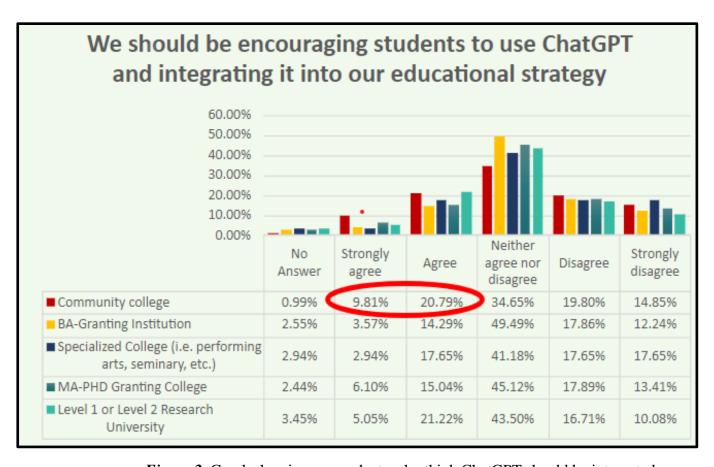


Figure 2. Graph showing respondents who think ChatGPT should be integrated.

Professors and faculty members could increase their knowledge on how it works by attending conferences, symposiums, and meetings. Valencia College is also preparing for the new era of A.I. in Education. There are resources professors can get involved in, and this is the perfect time to be trained and be updated with the newest tools.

2023 3rd Annual Collegewide Learning Outcomes Symposium

The 3rd annual Collegewide Learning Outcomes Symposium was held as a cross-disciplinary virtual event on Friday, November 3rd, 2023, from 9:00 am to 12:00 pm. The Symposium was an opportunity to learn about, share and celebrate successes, challenges, and innovations in the area of learning outcomes assessment.

Figure 3. Information displayed in Valenciacollege.edu about symposium

- LTAD 3188: Conversational AI: An Introduction to Enhancing Student Learning online event.

In which participants learnt strategies for leveraging conversational AI tools, specifically ChatGPT to enrich teaching practices and enhance student learning experiences.

- PRFC 3368: Circles of Innovation- AI & the Multiverse Time Travel Experience
Event to decode AI communication, and design futuristic classroom solutions. Immerse in interactive videos to understand AI's role in teaching, student engagement, and problem-solving. reflect on its ethical implications and discover the professor's role in shaping innovative learning.

2) Faculty should introduce ChatGPT in their classrooms prior to giving assignments

The second guideline is to assign an in-class experience of using ChatGPT to explore with the student and learn together about its limits and educate students, but before diving into the details, it is important to understand how students perceive ChatGPT:

Student's view about ChatGPT:

Professor Abdulhadi from Khalifa University conducted an interview / survey study in which 56 students of computer engineering were given the task to complete their coding assignments first try with and then without ChatGPT assistance to measure their perception

about the tool. Abdulhadi asked students conceptual questions, code completion tasks, and code analysis questions. Students were required to include conversations with ChatGPT in their assignments. "What do you think of ChatGPT? Think deeply and write down whatever comes into your mind!"

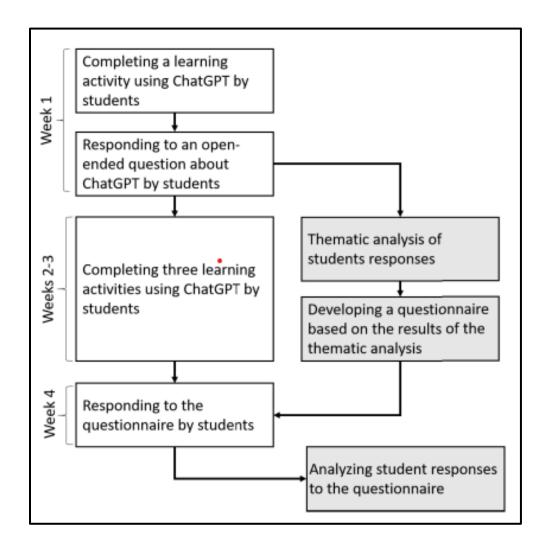


Figure 4. Workflow of steps on measuring student's perception about ChatGPT

The result showed that the students admire the capabilities of ChatGPT and found it interesting, motivating, and helpful for study and work. However, many students feel that ChatGPT's answers were not always accurate and most of them believe that it requires good background knowledge to work with since it does not replace human intelligence. So, most

students think that ChatGPT needs to be improved but are optimistic that this will happen soon. (Abdulhadi, 2023. p.5)

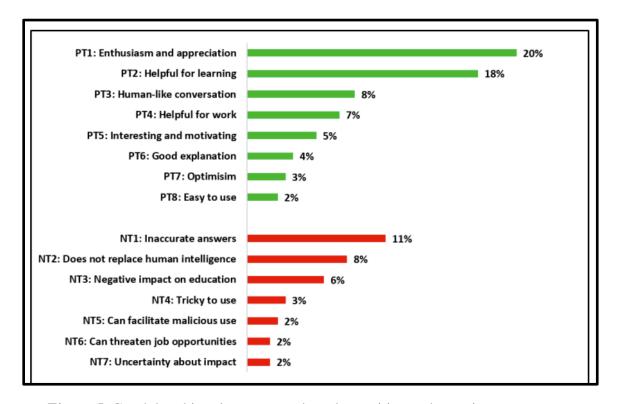


Figure 5. Graph breaking down respondents by positive and negative aspects.

Beth McMurtrie believes that AI-based applications such as ChatGPT will inevitably become an integral part of writing, much like calculators and computers have become commonplace in math and science.

However, Abdulhadi highlights multiple key challenges including copyright issues, bias, fairness, dependency, the difficulty of distinguishing model-generated content from student answers, data privacy, and security. Furthermore, ChatGPT operates differently from search engines like Google as it does not scan the internet for up-to-date information, and its knowledge is limited to what is acquired before September 2021. To try it, ChatGPT was used to create challenging critical thinking questions related to education, machine learning, history, and

marketing. ChatGPT was able to reply with accuracy, relevance, clarity, precision, depth, logic, persuasiveness, and originality. Abdulhadi found that ChatGPT displayed a high level of critical thinking rather than a simple retrieve information tool.

In-class Experience:

Teach students how ChatGPT works, emphasizing that the tool generates predictions based on the provided prompt. It is crucial to recognize that the information generated may lack accuracy, especially when combined with other sources. Therefore, it is important to remind students that ChatGPT makes mistakes thus validating sources is needed. (Brown, 2023)

Using AI during the writing process

At Valencia College professor Chris Brown has started to teach about A.I. in his classes, teaching about Al models such as ChatGPT and Google bard and encouraging students to explore the large language model. The steps to develop a formative lesson instructing effective use of AI are as follow:

- Get students to know how to use A.I..: Guide students in reading and evaluating sources;
 Teach students how to plan writing structure of a research essay, prompt the language model to synthesize the results.
- 2) Thesis Statement: Write a strong thesis statement that includes their perspective, reminding students that A.I. can generate duplicate content combining sources, students need to incorporate their point of view.
- 3) Writing process: Encourage students to verify if sentences make sense, summarize, and cite relevant sources. It is crucial to verify rigorously sources cited.

Professor Brown case assignment: "Chief Seattle research assignment", questioned challenging questions to the students regarding "Simon Pokagon Speech in English, 1893", a reading on native American religions of North America. The method used was to inquiry Google Bard with research questions, and then trying different prompts and verify the given sources as parts of the outcome. Further Brown mentions that Generative A.I. will provide an answer based on the questions and prompts it receives. While it does generate mixed or similar answers, it may not produce identical responses for all students, even if they type precisely the same question to the A.I.

3) Faculty need to consider and communicate appropriate usage of ChatGPT in their field

After gaining an understanding of how ChatGPT works and experiencing its application in your class, it becomes important to establish clear guidelines for its use. While the specific use may vary depending on the subject taught, the goal is to organize and articulate the permissible scope of ChatGPT within the classroom.

Example:

Students might ask Bard/ ChatGPT to define the tone of their writing and enhance professionalism. Have students evaluate their sources, encouraging development of critical thinking. Post-completion, professors provide students with reflections on their use of the tool to understand its application. Remember automation as a form of cheating similarly to copy-paste, but augmentation is artificial intelligence with human instruction.

Discussion / conclusion and future recommendations:

- 1) Despite its moderate answering accuracy, ChatGPT seems to be an attractive platform for students. Students are impressed, interested, motivated, and optimistic about it.

 Professors should investigate how to make the best out of this interest and explore the capabilities and deficits of ChatGPT in their fields and teach students how to use it beneficially.
- 2) ChatGPT shows good performance on certain tasks such as writing essays, and it is expected to improve soon. Professors should get ready for the time when ChatGPT and other LLMs will become more capable and less dependent on prompt quality. It is not too early to start thinking about creative assessment techniques for the A.I. era.
- 3) AI-powered LLMs will shape a new era of I.T. With the unprecedented interaction through hundreds of millions of users, a boost in quality is expected. The better this technology will get, the higher the chances to benefit students' learning, but the higher the challenge to academic integrity.

For future studies requiring the collection of information on professors' and students' perception of ChatGPT, a set of survey questions, informed consent, and flayer to be distributed has been detailed and included in the appendix.

References

- Albrecht, W. S., Wernz, G. W., Williams, T. L., et al. (2005). Fraud: Bringing light to the dark side of business. The Academy of Management Executive, 9 (1), 93-95. http://www.jstor.org/stable/4165250
- Balderas, A., Palomo-Duarte, M., Caballero-Hernández, J. A., Rodriguez-Garcia, M., & Dodero, J.
 M. (2021). Learning analytics to detect evidence of fraudulent behavior in online
 examinations. *International Journal of Interactive Multimedia and Artificial Intelligence*,
 7(2). https://doi.org/10.9781/ijimai.2021.10.007
- Bingling, C., Sushmita A., Max F., et al. (2020). Learning to Cheat: Quantifying Changes in Score

 Advantage of Unproctered Assessments Over Time, *University of Illinois at Urbana*Champaign, https://doi.org/10.1145/3386527.3405925
- Brown, C. (2023). Using AI During the Writing Process: How Students Can Use Large Language

 Models in Research, 2023 3rd Annual Collegewide Learning Outcomes Symposium,

 Valencia College. https://youtu.be/QMYbDD104 A
- Cope, B., Kalantzis, M., & Searsmith, D. (2021). Artificial intelligence for Education: Knowledge and its Assessment in Al-enabled Learning Ecologies. *Educational Philosophy and Theory*, *53*(12), 1229-1245. https://doi.org/10.1080/00131857.2020.1728732
- Cotton, D., Cotton, P., & Shipway, J. R. (2023). Chatting and Cheating: Ensuring academic integrity in the era of ChatGPT. *Routledge*. doi: 10.1080/14703297.2023.2190148

- Ghotbi, N., & Ho, M. T. (2021). Moral awareness of college students regarding Artificial

 Intelligence. *Asian Bioethics Review*, *13*(4), 421–433. https://doi.org/10.1007/s41649-021-00182-2
- McMurtrie, B. (2022, 13 2022). Teaching experts are concerned, but not for the reasons you think. The Chronicle of Higher Education. https://www.chronicle.com/article/ai-and-the-future-of-undergraduate-writing
- Rosé, C.P., & Ferschke, O. (2016). Technology Support for Discussion Based Learning: From Computer Supported Collaborative Learning to the Future of Massive Open Online Courses. *International Journal of Artificial Intelligence in Education, 26, 660-678.*
- Singh, S., Xu, M., & Patros, P. (2023). Transformative effects of ChatGPT on modern education:

 Emerging Era of AI Chatbots. Internet of Things and Cyber-Physical Systems, 4, 19-23.

 https://doi.org/10.1016/j.iotcps.2023.06.002.
- Shoufan, A. (2023). Exploring Students' Perceptions of ChatGPT: Thematic Analysis and Follow-Up Survey. IEEE Access, 11,38805-38818.doi: 10.1109/ACCESS.2023.3268224
- Primary R. G. S. (2023). Survey of US Higher Education Faculty 2023, Views on and Use of ChatGPT. Primary Research Group, 1,1-112.
- Valencia College. (2023). Learning Outcomes Assessment, Valencia

 College. https://valenciacollege.edu/academics/academic-affairs/learning-assessment/learning-outcomes-assessment/index.php#symposium

Zhai, X. (2023). ChatGPT User Experience: Implications for Education. *SSRN Electronic Journal*, 1-18. http://dx.doi.org/10.2139/ssrn.4312418

Zhai, X., Chu, X., Chai, C.S., Jong, M.S., Istenič, A., Spector, M., Liu, J., Yuan, J., & Li, Y. (2021). A Review of Artificial Intelligence (AI) in Education from 2010 to 2020. *Complex., 2021*, doi: 8812542:1-8812542:18.

Appendix A

The Impact of Using Artificial Intelligence Tool "ChatGPT" at Valencia College Informed Consent

Principal Investigators: Kenji Nakanishi

Amira Mohammed-Ameen

Introduction

You have been invited to participate in a research study which will include approximately 50 people. Your participation in this study is completely voluntarily, and you should only take part of this study because you want to. You may choose not to take part of the study at any time, and your decision will not be held against you. Feel free to ask any questions that you may have before deciding to participate. To participate in this research, you must be of at least 18 years of age.

Purpose of the research study

The purpose of this study is to comprehend how Artificial Intelligence (A.I) is impacting our society and its possible consequences. Mainly with the tool "ChatGPT", how students from Valencia College are using this tool to complete its assignments and designed tasks. In this study not only students, but professor from diverse subjects will be study to obtain a clear point of view from both part of the academic corpus (Students and Professors).

What you will be asked to do in this study

[Online Survey]

If you decide to participate in this study, you will be presented with an online survey which includes questions regarding the tool "ChatGPT", and its uses on regarding to completing assignments and task assigned by your instructor. There will be multiple options and open questions that you can input your answer.

Location

The entire study will be conducted in Valencia College – Osceola Campus & West Campus.

Time Required

The entire study will last approximately half an hour.

Risks

Risks involved in participation of this study are minimal and do not involve any risks other than common use of a desktop computer and paper based surveys.

Benefits

There are no expected benefits associated with this study. However, possible benefits may include:

- Valuable data that improve our undertraining and knowledge on how "ChatGPT" is impacting our education society.
- 2) Recognizing explicitly on how the tool "ChatGPT" is being used.
- What an Academic corpus, let say professors sees the use of the tool "ChatGPT".

Confidentiality

All data collected will be kept confidential and the informed consent with your signature will be stored separately from the collected data.

Your participation in this research study is completely voluntary, and you may withdraw from this study at any time without penalty. All data collected data from your participation will be deleted if you choose to do so and you will be compensated for the time you have contributed.

If you have any further questions, you may contact the investigators of this project via email:

Contact Information of the Research Team

Kenji Nakanishi

Email: kcoronado3@valenciacollege.edu

Amira Mohammed-Ameen

Email: amoameen@knights.ucf.edu

IRB contact about study participation rights or to report a complaint.

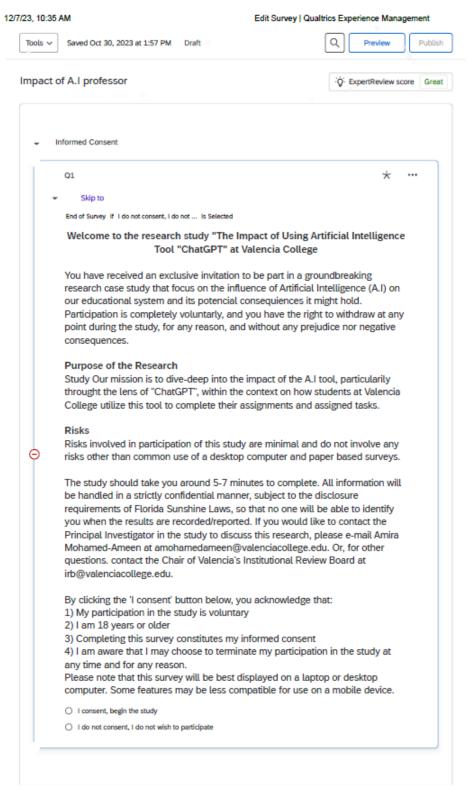
Research at Valencia College involving human participants is conducted under the oversight of the Institutional Review Board. If you have questions, concerns, and/or complaints about your participation in the study, or you are unable or choose not to contact the research team, you may contact the IRB:

International Review Board Valencia College Chair of Valencia IRB Email: irb@valenciacollege.edu

Your signature below indicates that your consent in participation of this research and that you are 18 years of age or older.

Name of Participant (PRINT) _	
Signature of Participant	
Date	

Appendix B



https://valenciacc.yul1.qualtrics.com/survey-builder/SV_3flvwlGDHyo92p8/edit?SurveyID=SV_3flvwlGDHyo92p8

Add Block Demographic Information How old are you? O Under 18 O 18-20 O 21-24 O 25-29 ○ 30 or older What is your gender? O Male O Female O Non-binary / third gender O Prefer not to say Q5 Your academic fi eld is best described by which of the following designations O Social Sciences (except economics and psychology) O Economics / Finchaces O Business (other than economics / fi nance) O Performing Arts O Psychology & Social Work Medicine O Law O Mathematics / Statistics / Computer Science O Hard Sciences (Chemistry, Biology, Physics) O Education or Library Science O Allied Health: Nursing, Occupation or Physical Therapy, Nutrition, etc. O Earth and Environmental Sciences O Architecture, Fine and Visual Arts O History O English, Literature & Languages Other:

https://valenciacc.yul1.qualtrics.com/survey-builder/SV_3flvwlGDHyo92p8/edit?SurveyID=SV_3flvwlGDHyo92p8

Q2 How 0 Und 18-2 21-2 25-2 30 0 What i Male Fem Non Pref Q5 Your a Soci Ecor Busi Perf Psyc Med Law	is your gender?
Q2 How 0 Und 18-2 21-2 25-2 30 0 What i Male Fem Non Pref Q5 Your a Soci Ecor Busi Perf Psyc Med Law	old are you? Jer 18 20 24 29 or older is your gender?
Q2 How 0 Und 18-2 21-2 25-2 30 0 What i Male Fem Non Pref Q5 Your a Soci Ecor Busi Perf Psyc Med Law	old are you? Jer 18 20 24 29 or older is your gender?
How of Und On 18-2 On 21-2 On 25-2 On 30 o	ter 18 20 24 29 or older is your gender?
Q3 What i O Male O Prefi Q5 Your a O Busi O Perfi O Psyc O Med O Law	ter 18 20 24 29 or older is your gender?
Q3 What i O Non O Prefi Q5 Your 8 O Soci O Ecor O Busi O Perfi O Psyc O Med	is your gender?
Q3 What i O Male O Prefi O Por O Prefi O Por O Busi O Perfi O Por O Description O Law	24 29 or older is your gender?
Q3 What i O Male O Fem O Non O Pref Q5 Your a O Soci O Ecor O Busi O Perf O Psyc O Med O Law	is your gender?
Q3 What i O Male O Fem O Non O Prefi Q5 Your a O Soci O Ecor O Busi O Perfi O Psyc O Med O Law	is your gender?
Q3 What i O Male O Fem O Non O Prefi Q5 Your 8 O Soci O Ecor O Busi O Perfi O Psyc O Med O Law	is your gender?
Q3 What i O Male O Fem O Non O Prefi Q5 Your 8 O Soci O Ecor O Busi O Perfi O Psyc O Med O Law	
Q3 What i O Male O Fem O Non O Prefi Q5 Your 8 O Soci O Ecor O Busi O Perfi O Psyc O Med O Law	
O Male O Fem O Non O Pref Q5 Your 8 O Soci O Ecor O Busi O Perf O Psyc O Med	
Q5 Your 8 O Soci O Ecor O Busi O Perf	
Q5 Your 8 O Soci D Ecor D Busi Perf	ė
Q5 Your 8 O Soci O Ecor O Busi O Perfi O Paye	ale
Q5 Your 8 O Soci O Ecor O Busi O Perfi O Psyc O Med	-binary / third gender
Your 8 Soci Ecor Busi Perf Psyc Med	er not to say
Your 8 Soci Ecor Busi Perf Psyc Med	
O Soci D Ecor D Busi Perf Psyc Med Law	
O Ecor O Busi O Perfi O Psyc O Med	academic fi eld is best described by which of the following designations
O Busi O Perfi O Psyc O Med	ial Sciences (except economics and psychology)
O Perfi O Psyc O Med	nomics / Finchaces
O Psyc	iness (other than economics / fi nance)
○ Med	orming Arts
O Law	chology & Social Work
O Mau	hematics / Statistics / Computer Science
	-
	d Sciences (Chemistry, Biology, Physics) cation or Library Science
	ed Health: Nursing, Occupation or Physical Therapy, Nutrition, etc.
	h and Environmental Sciences
O Histo	h and Environmental Sciences nitecture, Fine and Visual Arts
O Othe	h and Environmental Sciences nitecture, Fine and Visual Arts

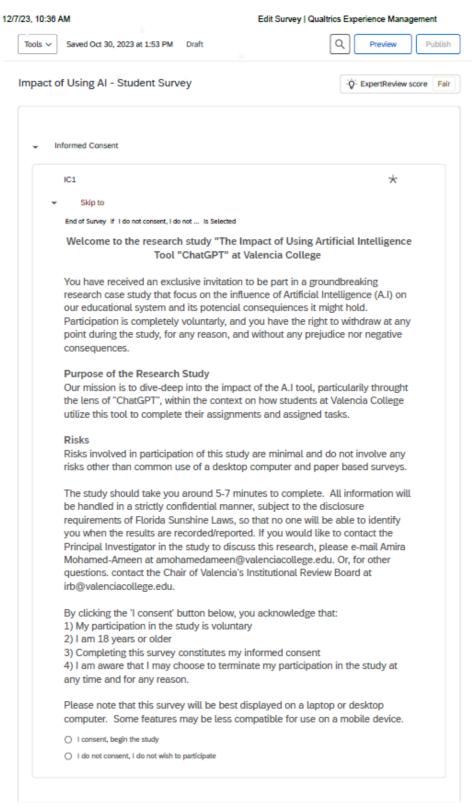
 $https://valenciacc.yul1.qualtrics.com/survey-builder/SV_3flvwlGDHyo92p8/edit?SurveylD=SV_3flvwlGD$

12/7/23, 10:35 AM	Edit Survey Qualtrics Experience Management
Q6	
For how m	any years have you worked at your present institution
○ 1 Year or le	ess
O 1+ years to	o 3 years
○ 3 + years t	o 5 years
○ 5+ years to	o 10 years
O 10+ years	to 20 years
O More than	20 years
Q8	
	stments have you made n the classroom as a result of the to students of the artificial intelligence application ChatGPT?
Q9	
To the best	t of your knowledge, have any of the following developed guidelines atGPT and similar programs should be used in class? (choose all
☐ My college	e administration
☐ My acader	nic department
☐ Me person	ally for my own classes
Other:	
Q10	
In your ow	n classes and assignments, How frequently do you believe your re using ChatGPT?
○ Widesprea	nd, common and alarming
O Frequent	
	parent occasional use
O Infrequent	
O Have not e	encountered any use
	Page Break
Q11	
If you have you done s	e successfully integrated use of ChatGPT into your classes, how have so?

 $https://valenciacc.yul1.qualtrics.com/survey-builder/SV_3flvwlGDHyo92p8/edit?SurveyID=SV_3flvwlGD$

12/7/23, 10:35 AM	Edit Survey Qualtrics Experien	ice Management
Q12		
To what exwritten as:	xtent do you agree with the following statement: Papers and c signments should now be written in class or in some other sup e students do not have access to ChatGPT or similar applicati	pervised
○ Strongly a	igree	
○ Agree		
O Neither a	gree or nor disagree	
○ Disagree		
○ Strongly o	lisagree	
Q13		
	xtent do you agree with the following statement: We should being students to use ChatGPT and integrating it into our educations.	
○ Strongly a	gree	
○ Agree		
O Neither a	gree or disagree	
○ Disagree		
○ Strongly o	lesagree	
Q14		
effectively	fied are you with your college's efforts to develop policies to d with the educational consequences of the availability of Chat	
and simila	r applications?	
O Very satis	fied	
○ Satisfied		
	atisfied nor dissatisfied	
O Dissatisfie		
○ Very dissa	itisfied	
•	Import from library	Add new question
	Add Block	
End of Survey		
	We thank you for your time spent taking this survey.	
	Your response has been recorded.	
	rour response has been recorded.	

Appendix C



https://valenciacc.yul1.qualtrics.com/survey-builder/SV_6D2byDfdhRdFDFA/edit

	Edit Survey Qualtrics Experience Manageme
•	Add Block
	ALCO STOCK
→ Demographic Information	
D1	*
▼ Skip to	
End of Survey if Under 18 is Selected	ı
How old are you?	
O Under 18	
O 18-20	
O 21-24	
O 25-29	
O 30 or older	
D2	
Are you a full-time or part-t	ime student?
O Full-time (4 classes)	
O Part-time (3 classes or less)	
D3	
What is your gender?	
○ Female	
O Male	
O No response	
Other	
	Page Break
D4	
Please select the most app	propriate ethnicity
Cuban	v
	ent 26 Oct 2023 10:10pm by Kenji Coronado Nakanishi

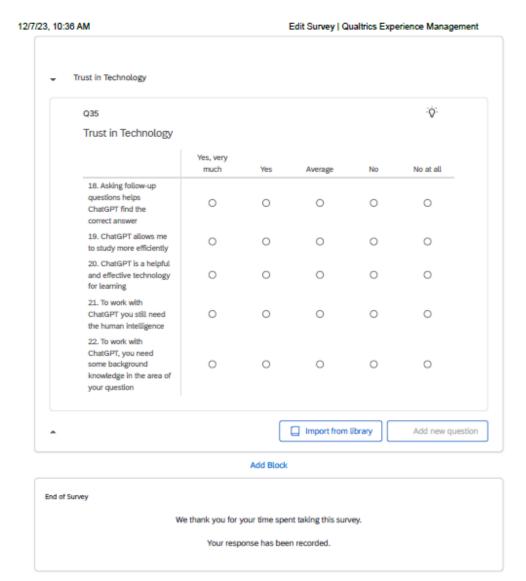
https://valenciacc.yul1.qualtrics.com/survey-builder/SV_6D2byDfdhRdFDFA/edit

12/7/23, 10:36 AM

Edit Survey | Qualtrics Experience Management

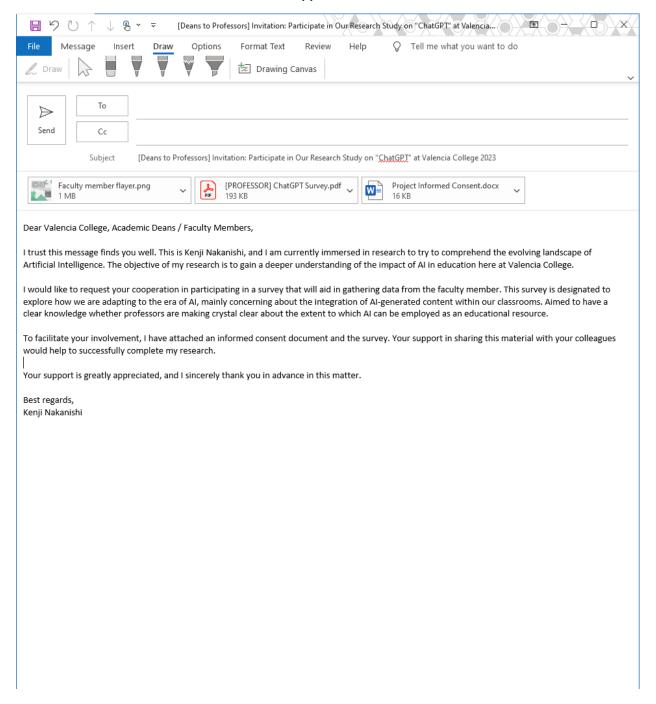
P1 Perception					.Q.
Гегеерион					
	Yes, very much	Yes	Average	No	No at all
1 - ChatGPT is easy to use	0	0	0	0	0
2 - ChatGPT provides good explanations	0	0	0	0	0
3 - ChatGPT a makes human-like friendly impression	0	0	0	0	0
4 - ChatGPT answers are well structured	0	0	0	0	0
5 - ChatGPT is better than other search engines like Google	0	0	0	0	0
6 - ChatGPT is interesting	0	0	0	0	0
7 - I feel motivated to use ChatGPT more	0	0	0	0	0
8 - ChatGPT answers are accurate	0	0	0	0	0
9 - ChatGPT is not perfect and needs to be improved	0	0	0	0	0
10 - ChatGPT will make academic cheating easier	0	0	0	0	0
11 - ChatGPT will open the door for manipulations and malicious use	0	0	0	0	0
12 - ChatGPT will affect learning negatively because students will find answers and solutions without effort	0	0	0	0	0
13 - ChatGPT will threaten people jobs	0	0	0	0	0
14 - I feel quite uncertain about the impact of ChatGPT and how it will change our life	0	0	0	0	0
15 - I feel optimistic about ChatGPT	0	0	0	0	0
16 - I am amazed by the capabilities of ChatGPT	0	0	0	0	0
17 - I think the quality of ChatGPT will improve soon	0	0	0	0	0
			☐ Import from	library	Add new qu

Add Block

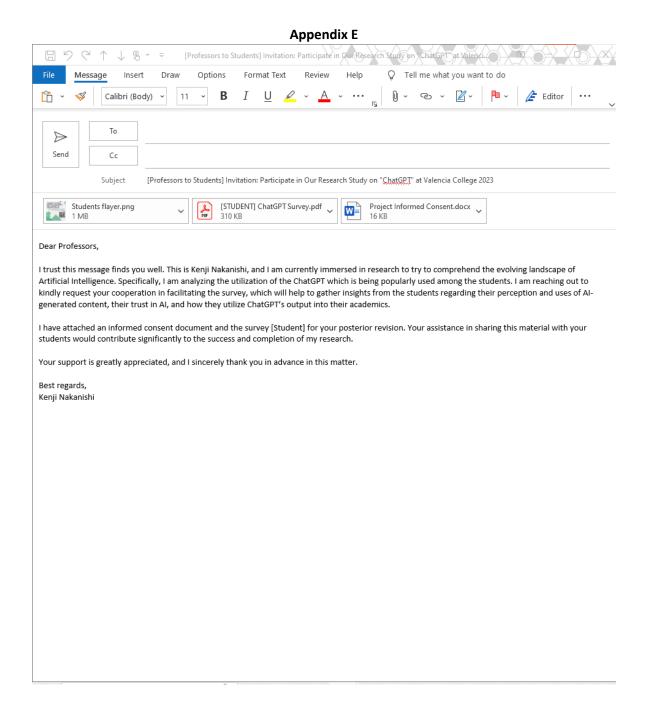


THE IMPACT OF USING ARTIFICIAL INTELLIGENCE TOOL CHATGPT AT VALENCIA COLLEGE 2023

Appendix D









THE IMPACT OF USING ARITIFICAL INTELLIGENCE TOOL "CHATGPT" AT VALENCIA COLLEGE

HONORS RESEARCH PROJECT

STUDENTS ARE WELCOME TO COMPLETE THE SURVEY



2023