

**Assessment of the utilization of Artificial Intelligence technology on learning process for
undergraduate Pharmacy and Optometry students**

Instructions: Please answer the following questions honestly and to the best of your knowledge. Your responses will be kept confidential, and the data collected will be used for research purposes only.

By completing this survey, you are consenting to participate in this study.

- a) Agree
- b) Disagree

Section 1: Demographic Information

1. Gender:

- a) Male
- b) Female

2. Age:

- a) 18-21
- b) 22-25
- c) 26-30

3. Current Year of Study:

- a) Common first year
- b) 1st year (in your college)
- c) 2nd year
- d) 3rd year
- e) 4th year
- f) 5th year

4. Current Semester of Study:

- a) 1st Semester
- b) 2nd Semester

5. Any prior experience with artificial intelligent technology (e.g. smartboards, simulations, online learning platforms)?

- a) Yes
- b) No

Section 2: Integration of artificial intelligent technology

6. How frequently is artificial intelligent technology (e.g., smartboards, simulations, online learning platforms) used in your classes?

- a) Never
- b) Rarely
- c) Occasionally
- d) Frequently
- e) Very frequently

7. Which artificial intelligent technology tools or platforms have you used in your education?

(Please select all that apply)

- a) Smartboards
- b) Computer simulations
- c) Virtual reality
- d) Online learning platforms (e.g., Learning Management Systems)
- e) Mobile applications
- f) Others (please specify): _____

8. What artificial intelligent technology programs or applications have you used in your education?

9. On a scale of 1-5, how satisfied are you with the integration of intelligent technology in your classes?

- a) 1 - Very dissatisfied
- b) 2 - Dissatisfied
- c) 3 - Neutral
- d) 4 - Satisfied
- e) 5 - Very satisfied

10. Do you believe that the integration of artificial intelligent technology has improved your learning experience?

- a) Yes
- b) No
- c) Unsure

Section 3: Impact on Learning Outcomes and Engagement

11. In your opinion, has the use of artificial intelligent technology improved your understanding of course content?

- a) Yes
- b) No
- c) Unsure

12 . To what extent do you think artificial intelligent technology has increased your engagement and active participation in class?

- a) Greatly
- b) Moderately

- c) Slightly
- d) Not at all
- e) I do not use artificial intelligent technology in class

13. How does the use of artificial intelligent technology compare to traditional teaching methods in terms of enhancing critical thinking skills?

- a) Significantly better
- b) Moderately better
- c) No difference
- d) Moderately worse
- e) Significantly worse

14. Has the integration of artificial intelligent technology in classes motivated you to pursue further independent learning outside of class?

- a) Yes
- b) No
- c) Unsure

15. Do you feel that artificial intelligent technology has facilitated collaboration and communication with peers and instructors?

- a) Yes
- b) No
- c) Unsure

Section 4: Barriers and Challenges

16. What are the main challenges or barriers you have encountered in using artificial intelligent technology in your education? (Please select all that apply)

- a) Technical issues or glitches
- b) Lack of training or support
- c) Limited access to required technology
- d) Difficulty in adapting to new tools or platforms
- e) Time constraints
- f) Other (please specify): _____

17. How would you rate the availability of technical support and assistance for artificial intelligent technology in your educational institution?

- a) Excellent
- b) Good
- c) Adequate
- d) Inadequate
- e) Poor

The reasons behind it (if your answer is d or e) are: _____

Section 5: Learning Preferences

18. Do you prefer a combination of traditional teaching methods and artificial intelligent technology or solely rely on intelligent technology for your education?

- a) Combination
- b) Solely rely on artificial intelligent technology
- c) No preference

19. How would you rate your level of comfort and familiarity with using artificial intelligent technology in your education?

- a) Very comfortable and familiar
- b) Moderately comfortable and familiar
- c) Slightly comfortable and familiar
- d) Not comfortable and familiar at all
- e) I have not used intelligent technology in my education

Section 6: Future Implications

20. Do you believe that the integration of artificial intelligent technology will significantly shape the future of healthcare education?

- a) Yes
- b) No
- c) Unsure

21. Do you believe there are any potential disadvantages or limitations of relying heavily on artificial intelligent technology in healthcare education?

- a) Yes, it can lead to reduced human interaction and social skills.
- b) Yes, it may not completely replicate real-life patient scenarios.
- c) No, it enhances accessibility and personalized learning.
- d) No, it improves efficiency and facilitates remote learning.
- e) Unsure, I haven't noticed any specific disadvantages or limitations.

22. Would you recommend the use of artificial intelligent technology to undergraduate students and preceptors for clinical practice?

- a) Yes, definitely
- b) Yes, probably
- c) Undecided
- d) No, probably not
- e) No, definitely not

23. On a scale of 1-5, how would you rate the overall impact of artificial intelligent technology on your education as an undergraduate pharmacy or medical science student?

- a) 1 - Very negative impact, it hinders my learning experience.
- b) 2 - Somewhat negative impact, I prefer traditional teaching methods.
- c) 3 - Neutral, it has both positive and negative aspects.
- d) 4 - Somewhat positive impact, it enhances my learning experience.
- e) 5 - Very positive impact, it significantly improves my educational outcomes.

Thank you for your participation! Your input is greatly appreciated in furthering our understanding of the impact of intelligent technology on pharmacy and medical science education.