



FACULTY OF EDUCATION  
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# Promoting Students' Engagement in Flipped Learning via Chatbot Activities

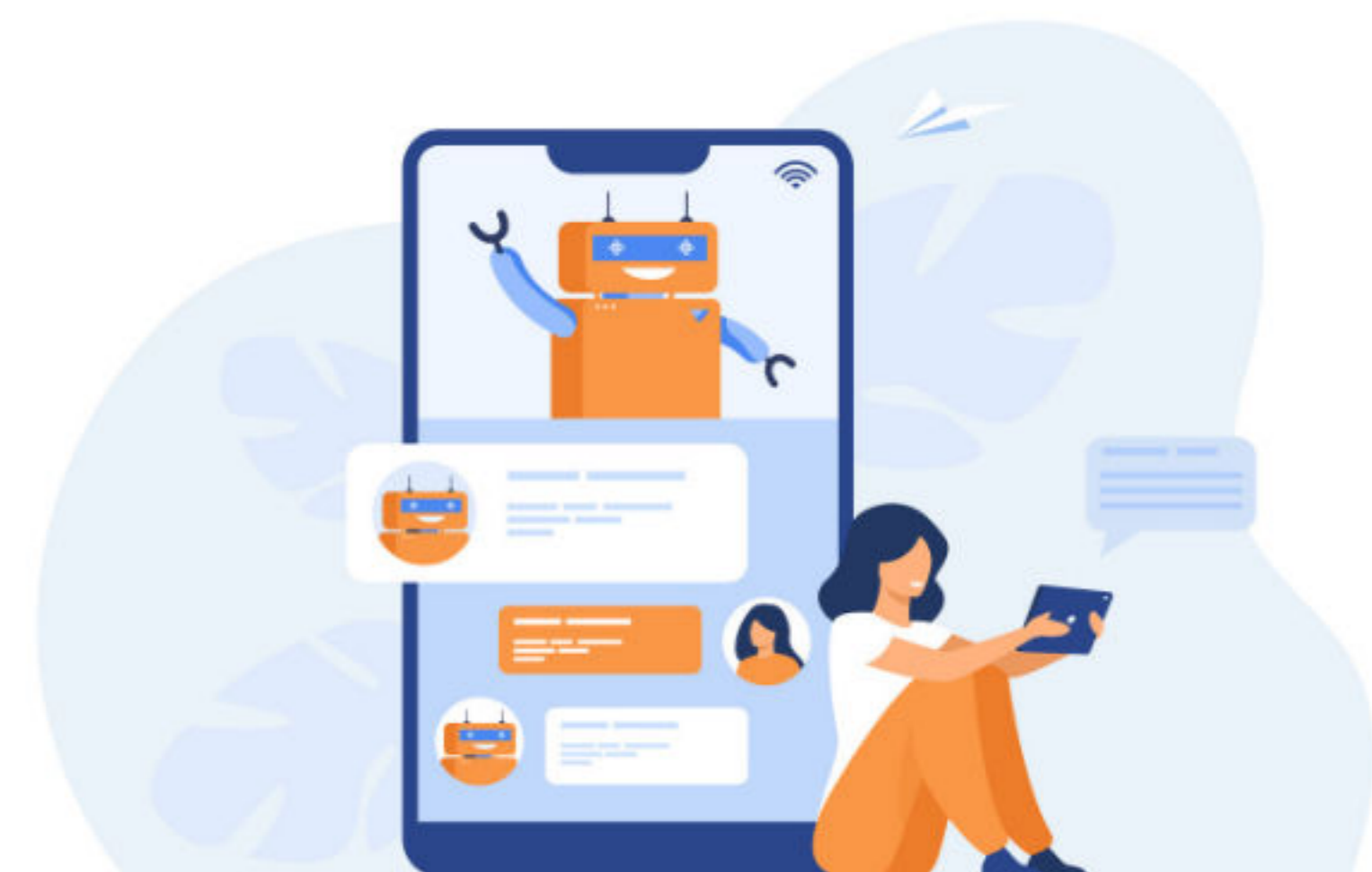
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## BACKGROUND

The flipped learning approach has attracted much attention from many universities, including HKU, where students learn course materials typically through online video lectures before class so that



they can do more active learning in the classroom. The actual implementation of the flipped learning approach, however, is often beset by challenges such as the lack of student self-regulation, and the sense of isolation.



## CHATBOT AS A LEARNING PARTNER

We developed two chatbot-supported learning activities in students' pre-class online learning to foster their engagement: Quiz chatbot and Goal-setting chatbot.



Doing quizzes with the chatbot



Setting goals with the chatbot

## STUDENT FEEDBACK



*"The goal-setting chatbot gives me the idea of how to use these strategies, for example, I need to set a goal before I start to learn, and I need to know what to do for each week, and how to learn. And I think I can apply these strategies in my future learning!"*

*"The chatbot gives me timely feedback at every step of learning, rather than only receiving the feedback in the end conventionally."*

## TEACHER FEEDBACK



*"I feel that the students would enjoy doing the chatbot activity much more than answering multiple-choice questions from the teacher."*

*"The learning report from the chatbot was found to be very helpful in my discussion with the students in our first session when communicating the expected learning outcomes to them with heightened sensitivity to their learning styles and preferences."*

## RESULTS OF STUDENTS ENGAGEMENT

### Student perceived engaging factors

Getting students prepared for the pre-class online learning and the following face-to-face learning

Simulating social interaction and a friendly learning environment

Triggering students interest in exploring the domain-related topics

### Student perceived Usefulness & Ease-of-Use of the chatbots

(1 = Strongly Disagree, 5 = Strongly Agree)

