


# Chapter 6

## Chatbots as Motivational Agents: Chatbots – The Value of a Digital Tool in Pedagogy

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### **ABSTRACT**

*Chatbots have offered numerous useful applications to a range of market industries due to their absolute benefit of saving costs and eliminating unneeded work for employees. This state had a greater impact on other features than on itself. With the aid of chatbots, the efficiency, competency, and productivity of labor and processes have been maximized on a scale that transcends human capabilities. As a result of such a profitable conclusion for firms and businesses, which stimulates additional skills of both humans and machines, it is argued that chatbots are not only a useful tool but also motivational agents.*

### **INTRODUCTION**

Today, every company relies on information and communication technology (ICT) for efficient service delivery and resource usage. The global chatbot industry is expected to accelerate over the next decade due to increased demand for faster

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services and acceptance of artificial intelligence (AI)-based solutions by global corporate operations. In the age of artificial intelligence, the chatbot business is booming because more and more people are using smartphones and messaging services. In recent years, the food delivery, finance, and e-commerce businesses have all embraced chatbot technology.

“Education 4.0” is the name for a system of learning that uses artificial intelligence and is centered on the learner. The learner-centered education system advanced from the previous tutor-centered education system. The improvement of education is vital for adapting to changing lifestyles, economies, technology, and student demands. Furthermore, the scarcity of teachers in our educational system has impelled the use of new technologies. According to studies, chatbots will help to resolve some of the current challenges in the education industry. This article investigates the inclusion of chatbots powered by artificial intelligence into the educational system.

Chatbots have been used for educational reasons for quite some time. There are two categories of chatbots: those with educational objectives and those with nothing. Chatbots with no educative goal are used in administrative tasks such as student advising and assistance. The ones built specifically for education are used to promote teaching and learning. They fit under this category because they provide a framework for the learning process, which includes selecting and arranging content to meet the needs and pace of the students, as well as assisting in reflection and learning motivation. These bots work as learning partners, encouraging interaction, cooperation, and reflection. There are also exercise and practice chatbots, which present a stimulus as a question, to which the learner responds with a response that the chatbot evaluates and then delivers feedback. Because they require a communicative conversation between the bot and the student, chatbots augment conversational learning.

On the other hand, those without educational objectives work mainly as consultants to detect, alert, and notify people who earn authority. One of the chatbots with that function is called a motivational agent or psychological assistance. These bots are responsible for diverting their concentration to the mental side of users. They operate through the conversational mechanism or send a random survey to users and gather as much information as possible. Meanwhile, chatbots are also in the form of companions for managers or administrators. Simplifying office work and increasing productivity over a wider time frame, chatbots are useful because of their increased precision and localization. In other words, they follow the procedure smoothly and guide users in the exact steps without taking too much effort from humans.

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