

# Application of Knowledge Sharing Decision Model Based on Computer-Aided System in Student Education Management Platform

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## ABSTRACT

The knowledge-sharing, decision-making model can not only combine the two processes but also improve the teaching quality and students' learning achievements. However, the existing knowledge-sharing, decision-making model has many shortcomings. Therefore, for this article the authors applied the computer-aided instruction (CAI) system to the knowledge-sharing decision model and compared it with the traditional knowledge-sharing decision model. They compared and analyzed the application effects of the two processes in the student education management platform, and the experimental comparison was made from the perspective of curriculum and students. When the authors used the traditional knowledge-sharing decision model, the average score of the five people in the course A exam was 78.2. After they used the knowledge-sharing decision model based on the computer-aided instruction system, the average score of the five people in the course A exam was 85.4. Obviously, the knowledge-sharing, decision-making model based on the CAI system can effectively improve students' academic performances.

## KEYWORDS

Computer-Aided Instruction, Computer-Aided System, Knowledge-Sharing Decision Model, Student Education Management

## INTRODUCTION

Education is the driving force of social progress. On one hand, China's education system has achieved all-round reform, social education ideas and educational methods have changed, and the new idea of people-oriented education reform has been adhered to, to find new ways for China's education work. On the other hand, China's education upgrading reform is inseparable from the universal dissemination of school education knowledge resources. Knowledge sharing plays an important role in schooling. In combination with the knowledge-sharing research of current student management, knowledge sharing seeks to expand channels in the field of Chinese school education and encourages the full implementation of current education upgrading. Knowledge sharing in student management is a part of current school education and an effective way to guide the upgrading of Chinese schools.

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The education management of students is related to the growth of students and the operation of schools. Therefore, solving its existing defects is crucial. Many researchers have conducted in-depth thinking on student education management. Among them, Bhaskar et al. (2021) carried out detailed research on the application of blockchain technology in the field of education, providing a basis for educational institutions to explore the implementation of blockchain technology in other fields. Marbun et al. (2020) surveyed 400 university teachers in Indonesia. The data collected revealed that the existence of universities played an important role in supply chain management through structural analysis formula modeling technology. In addition, university management as a regulating variable strengthened the relationship between supply chain education and supply chain management (Marbun et al., 2020). Connelly et al. (2019) analyzed and compared education management and education leadership. The conclusion was that education management needed to assume responsibility for the normal operation of the system in educational institutions where other people participate. Educational responsibility is an important concept and should play a more prominent role in the organizational analysis of educational institutions (Connolly et al., 2019). Supriyanto et al. (2022) understood entrepreneurship education by implementing Islamic professional ethics in the “patchwork” community of Pringsewu Regency. In the regent area of Pringsewu, entrepreneurship education was carried out in “patchwork” communities based on Islamic professional ethics to improve social welfare. The quality of the products produced was maintained by adjusting the prices according to the market analysis carrying out promotional activities and by providing model services for customers (Supriyanto et al., 2022).

The knowledge-sharing decision model can be used to simplify complex problems using natural science. Although knowledge sharing can improve students’ education management, many researchers have conducted in-depth research on how to apply knowledge sharing to various fields (Qiu, 2019). Among them, Islamy et al. (2020) studied the impact of organizational culture on job satisfaction through knowledge sharing. These authors found that organizational culture had a significant positive effect on knowledge sharing and that knowledge sharing had a significant positive effect on job satisfaction, thus finding that organizational culture has a direct or indirect positive effect on job satisfaction (Islamy et al., 2020). After exploring the relationship between individualism-collectivism, knowledge sharing, and innovative work behavior of Vietnamese higher education students, Nghia and Dong (2022) made contributions to the theory of knowledge sharing and innovative work behavior. Biranvand and Akbarnejad (2021) examined the impact of the use of virtual social networks and the dimensions of social capital theory on knowledge sharing and student interaction. These researchers found that the existence of virtual social networks promoted students’ desire to share knowledge. The desire for knowledge sharing increases students’ interaction in individual and group activities (Biranvand & Akbarnejad, 2021). Iqbal (2021) gathered data from 234 academics from Pakistani higher education institutions and used partial least squares structural formula modeling technology to examine it. The results showed that although knowledge-based culture also contributed to the quality of innovation, it did not affect the speed of innovation. In addition, the knowledge-sharing process mediated the impact of all these knowledge management promoters on the speed and quality of innovation (Iqbal, 2021). Although the use of a knowledge-sharing, decision-making model can effectively solve the defects in student education management, there are still some deficiencies.

Students are the flowers of the motherland and are crucial to their education and management. If the defects in student education management cannot be effectively solved, it affects the growth of these students. Using this premise, we used the knowledge-sharing, decision-making model in the computer-aided system to carry out the application and research of student education management.

All students have unique learning needs and characteristics. We studied how to apply knowledge-sharing, decision-making models to build personalized student management models that provide intelligent learning path planning, resource recommendation, and instructional feedback based on students’ data and characteristics to help students develop and grow better.

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