

# Exploration of College Students' Learning Adaptability Under the Background of Wisdom Education

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## ABSTRACT

This article takes college students' learning adaptability as the research object, adopts B/S structure to develop a learning adaptive platform, designs a learner data model, a learning style model, a learning resource presentation module, and an ability level test module; tests the platform through simulated data; and analyzes college students' learning style, knowledge level and learner collaboration level. The results show that college students' learning adaptation has the characteristics of flexibility, individuality, initiative, and reflection. A self-adaptive learning platform can understand its learning state and effect through learning evaluation, adjust its learning strategies and methods in time, and help college students better understand and master knowledge. The research results provide theoretical data support for the exploration of college students' learning adaptability under the background of wisdom education.

## KEYWORDS

Ability Level, Adaptive Platform, College Students, Wisdom Education

## INTRODUCTION

With the rapid development of internet+, big data, and artificial intelligence technology, the traditional education industry is showing the characteristics of "wisdom." By means of information technology, intelligent technology is applied to education to improve the quality and efficiency of education (Nevzorova et al., 2023). The core of wisdom education is to provide personalized learning resources and teaching methods according to students' individual characteristics and needs, so as to promote students' learning interest and initiative (Yuniata et al., 2023). With the rapid development of smart education, it is very important for college students to learn adaptively (Clunis, 2023). In traditional education, teachers are the main focus, and students passively accept knowledge (Cheung et al., 2021). However, under smart education, students get rich educational resources and information, and they can realize personalized learning according to their own interests, hobbies, and learning styles (Keskitalo & Ruokamo, 2021). This adaptive learning method stimulates students' learning motivation and potential and improves learning effect. Therefore, under wisdom education, the

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study of college students' learning adaptability is of great significance (Ivemark & Ambrose, 2021). This paper takes college students' learning adaptability as the research object; adopts B/S structure to develop an adaptive learning platform; designs a learner data model, a learning style model, a learning resource presentation module, and an ability level testing module; tests the platform through simulated data; analyzes college students' learning style, knowledge level, and learner collaboration level; and provides theoretical data support for exploring college students' learning adaptability under the background of smart education.

## **LITERATURE REVIEW**

Some research results have been presented on college students' learning adaptability under the background of wisdom education. Zhai et al. (2021) studied the construction of intelligent learning environments. By deeply integrating education and information technology, an intelligent learning environment was established based on information technology. Taking the learning environment as the research object, the system model and function model of the intelligent learning environment were presented, which formed the research results of intelligent education development and led to the development model of future learning environments (Zhai et al., 2021). Stevens et al. (2021) studied the characteristics of intelligent learning. With the rapid development of information technology and the new changes in learning environments, learning methods and needs have higher requirements. The intelligent learning environment promotes the generation of intelligent learning, which is student-centered, supported by new technologies, meets the individualized learning needs of different students, cultivates innovative thinking abilities, promotes the generation and development of students' wisdom, and realizes students' individualized development (Stevens et al., 2021). Al-Adwan et al. (2023) studied the adaptive online teaching method. Through course learning and content promotion, the course content was adjusted according to the needs of scholars, and a nonlinear online teaching method was customized based on the knowledge learned by scholars. Learning adaptability was embedded in the online teaching method, and it was concluded that learners decided the online learning content by interacting with the learned content, which was automatically and dynamically completed in the interaction, thus realizing a personalized learning experience (Al-Adwan et al., 2023). Jeong (2022) proposed the adaptive learning method and claimed that adaptive learning runs through the whole online learning process; intelligently records and transmits learning information with the help of situation and online technology; accurately grasps the learning situation of each learner; and analyzes the relationship between each student's learning process and his ability, learning environment, and learning situation (Jeong, 2022). Sobocinski et al. (2022) studied the learning adaptability of college students, improved the learning effect by establishing learning adaptability, and provided personalized learning resources and teaching programs according to the learning characteristics and needs of each student to better meet the learning needs of each student. They then claimed that by choosing learning resources independently and adjusting learning strategies synchronously, students can better adapt to the learning environment and challenges they face and constantly cultivate their autonomous learning ability. Finally, through learning adaptability, students can actively participate in the learning process, improve their learning fun and motivation, persist in learning better, and achieve excellent results (Sobocinski et al., 2022).

## **RELATED MATERIALS AND METHODS**

### **Objectives**

College students' learning adaptation refers to the flexible adjustment of learning strategies and methods according to their own characteristics and needs in the learning process to adapt to different learning environments and tasks. Emphasizing students' initiative and autonomy through this learning

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