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A Study on the Application of Design-Based Learning Model for Innovative Teaching of Sustainable Landscape Design.

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Abstract:

The evolution of the times, the development of digital technology, and the popularity of the Internet have changed the way people live and produce, as well as the way education is conducted. In the past, the traditional teaching mode of landscape education was professor-centered classroom lectures, which could not effectively stimulate students' original design ability and logical calculation thinking. Therefore, both the diversification of teaching styles and the change of teaching methods are bound to change and breakthrough. In recent years, due to the change of educational philosophy, the development of learner-centered flipped classroom model and the integration of digital technology media for teaching has become a new trend in teaching practice.

In this way, we apply the Design-Based Learning (DBL) model to guide students to learn in segments, explore design problems, propose solutions, and collect concepts for immediate classroom feedback to strengthen teacher-student interaction. The students then write the parameters

through Visual Programming Language (VPL), control the modeling, learn from peer groups, repeatedly generate solutions to complete the optimal design, and finally present the results in 3D printing.

Through a series of innovative teaching and learning, we hope to shorten the time and space constraints of learning, enhance students' concentration, stimulate their interest in learning, and increase their participation in learning, so as to achieve effective learning.