# Research on Information Teaching Design Scheme Based on Deep Learning

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STRACT. The so-called deep learning, in fact, refers to the learning of higher-order thinking ability. This is a kind of learning state, and also a comprehensive statement of learning process and learning results. Deep learning focuses on the integration of new and old knowledge, so that students can reflect on the real problems of life after learning. Teachers can set up the teaching process according to the content of deep learning, and design the three links of preliminary preparation, deep learning, experience process and deep learning evaluation. According to the relevant content, this paper discusses the design of teaching strategy and evaluation.

**KEYWORDS:** Deep learning, Information teaching design, Learning resources

## 1. Introduction

China's relevant education literature clearly pointed out that the main task of education development is to promote the integration of information technology and education, so that students can master learning ability in the information environment. At the same time, it also emphasizes the need to use information technology to diversify and individualize the teaching of students, so as to help students enhance the ability of multi-dimensional problem-solving. And the relevant content also requires education from the characteristics of information technology, the development of human thinking and a number of influences to re-examine, to change the teaching situation in China, so as to emphasize the focus of information-based courses in the learning process. To change the teaching situation in our country, so as to emphasize the information course in the learning process.

## 2. Start the Preparatory Work of Deep Learning

#### 2.1 Strengthen Situational Teaching

Knowledge comes from life, so putting knowledge in the social context and letting students learn will have more practical significance in learning complex problems. Release it in the scene to let students learn, in fact, the transfer of knowledge use and rationalization of the occasion. In order to transform the basic

knowledge content in the form of problems and projects into a real student learning system, teachers should clarify the key points and difficulties of teaching, deeply analyze the teaching materials, and combine the relevant contents of inquiry nature together to make them become problem scenarios or project forms. In addition, some common sense knowledge content needs to be embedded or distributed in the learning environment with the help of technology intermediary. Blood donors can realize random access learning.

Teachers should also pay more attention to students' daily life in the process of daily teaching, instead of timely understanding the relevant information of the media, and try their best to tap the actual needs of life. At the same time, combined with the relevant content of their own courses, design situational problems closely related to real life, so as to help students improve their learning attention and finally open up deep learning.

#### 2.2 Building a Learning Community with a Sense of Belonging

Related brain scientists have proposed that in the production mode with strong sense of security, the complex understanding and resource allocation of brain related cells will occur in the process of learning and considering new knowledge. Therefore, teachers can design the course according to the relevant content, understand the situation of students before teaching, and carry out corresponding important links before class, so that the process itself becomes an important carrier of teachers' care for students, and students are full of sense of security and belonging in the learning process. In addition, the establishment of a learning team can better realize students' learning from each other's strong points to make up for each other's weaknesses, enable students to achieve interactive learning within the rules set by the group, and also be able to contact a benign competitive environment, and enhance students' interest in learning. In the process of comparing and promoting each other, students can realize common learning and enter the deep learning state.

#### 2.3 Create a Blended Learning Environment

In the traditional teaching process, the digital learning environment and its fusion of the integrated learning environment. From an objective point of view, time is the combination of objectivism and constructivism, and its education mode should be one-to-one, so that students can change from superficial acceptance learning to deep learning. The blended learning environment studied in this paper includes not only the relevant learning materials and hardware facilities of knowledge learning, but also the dynamic combination of interpersonal relationships and elements. At the beginning of learning, students need to put themselves in the position to make use of the corresponding environment for learning in-depth, and then students will become an active contributor to the whole environment and encourage the creation of the environment. Therefore, in the design process of environmental learning, we need to use a variety of learning resources and tools, and at the same time, we should encourage teachers to manage their roles in the process of learning and organization,

give full play to students' subjective status, and enable students to achieve happy learning in such a learning mode, so as to further arouse students' deep thinking and let them enter the deep learning state.

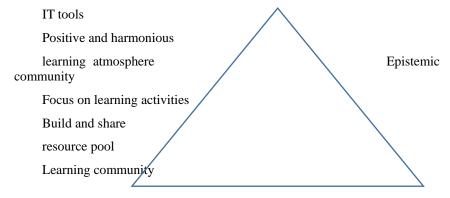


Fig.1 The Construction Model of Network Learning Environment Supporting Deep Learning

As shown in Figure 1, the teacher provides students with corresponding learning tool resources based on students' learning activities. In the process of enjoying each other and learning together, students gradually construct a shared database. Reading the picture shows that students and teachers have formed a learning community in the process of communication. Tools and resources become the three essential elements of the community. They form a knowledge community in the process of interaction, and also create a good learning environment for students.

## 3. Design of Teaching Strategies for Deep Learning

#### 3.1 Organizational Strategy

Its main performance is that teachers organize all aspects of teaching in an organized and formal way, and at the same time run through the whole teaching process, including students' information files and students' grouping and reporting activities. Before the beginning of the course, teachers need to establish students' files, use the network to collect questionnaires, and then organize and arrange students purposefully in combination with personal data in the course, so as to effectively guide students into the deep learning state. If we can also carry out relevant topics on the network according to the actual learning situation of the students, we can answer questions and solve problems encountered by students in the organization of learning, so that students can communicate with each other on

the network. After the end of the learning task, students can also be arranged to exchange learning results. Through discussion and evaluation, teachers and students, students and students can realize mutual criticism, and point out the shortcomings of each other. In the process of thinking collision, it can inspire new learning ideas and promote learners' deep thinking, And help them to realize the deep processing of knowledge content.

## 3.2 Support Strategy

Scaffolding Strategy refers to teachers' understanding of students' performance, knowledge and emotion through observation at fixed time. If we understand the relevant content, we can make targeted feedback to students, further help students ask, reflect on their own learning methods, so as to further improve their cognitive ability. When students return to normal learning state, teachers can no longer intervene. In fact, stent strategy also includes several aspects, such as timely feedback, individual counseling and so on. For example, teachers can use scaffolding strategy to guide students to complete learning tasks. First of all, they can establish a framework to give full play to the advantages of traditional classroom teaching, so that students can achieve the connection between the old and the new knowledge, and then realize the common integration of old and new knowledge, so as to truly form effective thinking strategies. Let the students to the knowledge can do the new and old connection, later realize the common integration of the old and new knowledge, so as to truly form an effective thinking strategy. Let the students to the knowledge can do the new and old connection, later realize the common integration of the old and new knowledge, so as to truly form an effective thinking strategy.

## 3.3 Management Strategy

The so-called management strategy refers to the management and evaluation of students' learning. When reporting the students' traditional classroom works, we should strengthen the communication with the students, let the students actively participate in the learning interaction, create a good learning environment, highlight the students' main learning status, and take the performance of the learning process as an important basis for evaluation. In the context of e-learning, teachers can also use social software to understand the enthusiasm and experience value of students' participation in activities, so as to bring these data into the learning evaluation system. In the process of students' learning, the different input of their learning efforts will lead to different learning situations. The development of a good evaluation method can also standardize students' learning. These data will be incorporated into the learning evaluation system. In the process of students' learning, the different input of their learning efforts will lead to different learning situations. The development of a good evaluation method can also standardize students' learning. These data will be incorporated into the learning evaluation system. In the process of students' learning, the different input of their learning efforts will lead to different learning situations. The development of a good evaluation method can also standardize students' learning.

#### 4. Put Forward a New Teaching Evaluation Design

The current education ecology redefines the content of education. The Ministry of education of Blues only needs to pay attention to the students' learning knowledge, and at the same time, it also emphasizes the identification of individual identity, so that students can give full play to their subjectivity in the learning process, and then cultivate complete people as the educational goal in the teaching process. Ecological learning environment allows learners to use the environment in the form of consumers, so that they can enter the learning environment as producers and make their own contribution. The learning environment has certain interaction skills, providing nutrients for students, but also need to let students contribute from it. This is a dual development of identity, but also expresses the love of learning.

Combined with the characteristics of the effect of deep learning, we can construct six standards to evaluate deep learning, including facing real problems, emphasizing rational learning, loving learning and so on. The so-called understanding learning is that students can learn through the employment they have learned, and learn by integrating and connecting the old knowledge. After mastering the knowledge, students can also use the corresponding knowledge to solve the problems in real life.

#### 5. Conclusion

Since the new concept of deep learning was put forward, it has become an effective scientific basis for improving teaching, and also provides a standard for teachers to observe classroom behavior. In the modern society with rapid development, the implementation of deep learning into the education process can not only improve the quality of students' learning, but also promote their all-round development. Therefore, teachers should give full play to the important role of deep learning in the process of education, strive to grasp its learning connotation, use its internal technology and role to design the framework of information technology for teaching, and promote the integration of education and information technology for teaching, and promote the integration of education and information technology in China.

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