Original Paper

Construct a Multi-Modal English Learning Pattern

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Abstract

The construction of multi-modal English learning needs to create an intelligent environment for students to acquire English learning information adequately. This study will explore the psychological basis of English multi-modal learning as well as the channels and related integration of English multi-modal learning.

Keywords

Multi-modalities, English learning, Construction approach

1. Introduction

Multi-modal English learning refers to the interaction between students' senses (such as visual sense, auditory sense, etc.) and the external environment (such as people, machines, objects, animals, etc.). Interaction with a single sense is called single-mode, with two is called double-mode, and with three or more is called multi-modality. We are of the opinion that normal people's interactions are multi-modality. The meaning of any language is rooted in the experience of human cognition, including the cultural world, the social world, the mental world and the physical world. English is no exception. The diversity of experiences determines the multi-modality of acceptance and acquisition. Multi-modal English acquisition method is to use information technology to provide students with a 4A (Any one, Any time, Any where, Any device) study of English learning activities in any place, at any time, using any scientific and technological device available at hand**.** The construction of multi-modal English learning needs to create an intelligent environment for students to adequately acquire the information for learning English , which is different from letting students go to the library or other places for learning. This is also quite different from just obtaining the information for English study through the Internet. The goal of multi-modal English learning is to create an educational environment where students can learn English anytime and anywhere by using any terminal. In this way, a more effective multi-level interactive model of English learning education can be achieved. To discuss the construction of multi-modal English learning, we must focus on the following three core questions: What is the psychological basis of

multi-modal English learning? What are the construction channels of multi-modal English learning? How to integrate multi-level interaction and multi-modality?

2. The Construction of Multi-modal English Learning

In the ubiquitous English learning environment, students conduct multi-level interactive learning in various spaces and ways according to their own needs, making all the actual spaces become learning spaces. In the optimized intelligent environment, which contains English knowledge acquisition, English knowledge storage, English knowledge edit, English knowledge performance, English knowledge imparts and English knowledge creation, which will also improve students' creativity in English language application and problem-solving ability.

2.1 Psychological Theory Foundation in Multi-modal English Learning

The use of English learners' learning beliefs and learning strategies is not making a one-way and isolated advance, but presents a circular improvement, which is mutually influenced by each other. The English learners' self-efficacy, their sense of value in oral English and motivation in essential belief determine the multi-modal characteristics of ubiquitous English multi-level interactive learning in college. Of course, the appropriate and effective use of learning strategies by English learners will not only help students to monitor themselves in learning, but also motivate them to become real autonomous learners, so that the whole process of ubiquitous English learning becomes a virtuous cycle. Behavioristic psychology generally defines "learning" as "the change in learners' behavior" caused by experience. This definition is more appropriate for studying learning behavior in animals. The survival response of the acclimatization of animals on behaviors is a kind of learning by this definition , called adaptive learning. Humans are no different from other animals in this respect. In fact, language learning is also an experiential process, and the channels through which it causes long-term changes in behavioral potential are extremely effective. Therefore, we must emphasize the language learning process and distinguish between actual behavior and behavioral potential. Actual behavior is the behavior that English learners take after learning English and can be observed by themselves or others. Behavioral potential refers to the fact that although English learners have learned certain knowledge of grammar and vocabulary, for example, learners have remembered the way of expression in Implements English through learning, but they don't have the opportunity to use the expression they have learned. Here we say that the English learner has the behavioral potential to use this vocabulary and grammar to refer to specific objects. Once English learners encounter concrete objects, the potential of language behavior can become actual language behavior. Language behavior potential is actually hidden in the brain and stored in memory.

2.2 Perspective of Language Cognition

Cognitive psychology emphasizes the role of the brain in the process of learning. When human beings interact with the external environment (including the natural environment and cultural environment), they do this through the intermediary of "meaning", rather than through the direct external observable

interaction. I will use a simple example to illustrate. When we see a red thing hanging on a tree, we don't pick it off and put it in our mouths in a casual way, but first construct a "meaning": what is it? (Classification of things) Can I eat it? (attributes of things). We construct that meaning in our brain and then we do something external. Behavioristic psychology focuses on external behavior, while cognitive psychology pays more attention to the construction of meaning behind external behavior. When researching learning under the theoretical framework of cognitive psychology, learning becomes the behavior of constructing meaning. It should be emphasized that the "construction meaning" mentioned here does not mean that learners create an unprecedented meaning out of nothing, but means that learners make it clear what the external environment means to learners when they interact with the external environment (textbooks, teaching behaviors, etc.). To put it bluntly, it is to construct a meaning understood by learners in a multi-modal way.

3. The Channels of the Construction of Multi-modal English Learning Pattern

Firstly, Role Modeling Language is one of the channels to construct multi-modal English learning pattern. The so-called learning behavior model is to abstract the real learning behavior, highlight the real object researchers focus on the study, eliminating those that don't need to be researched. This is borrowed from a method commonly used in natural science research. We use three basic roles to build the model framework of learning behavior: 1. The role of external environment interaction, represented by information acquisition — role representation; 2. The brain processes the information acquired by the interactive roles in the external environment and uses the meaning construction — role representation; 3. The external behavior of learning effect is represented by practical ability — role representation. Each basic role has its own sub-role. The sub-roles of the acquisition of information-role are: visual-role, auditory-role, touch-role, olfactory-role, gustatory-role, the empty chief role (the role imitating the spatial body). The sensory roles listed here are for the general situation of learning. Meaning construction-role simulates the human brain's processing of external information. Although modern medicine has made many important discoveries in the physiological and neural activities of the brain, yet much of the cognitive activity of our brains remains a mystery. The five senses of sight, hearing, touch, smell and taste are more accurately called the "five modalities". Each modality has its own sub-modalities. Modal receptors are either external receptors, which process incoming information when interacting with the outside, or internal receptors, which receive and process information from the inside of the body.

Secondly, proper modal conversion between ontologies is the second channel to construct multi-modal English learning. Because modal conversion can enhance the degree of internalization of the learned content and improve the persistence of the content memory. The brain has to spend more resources in modal transformation to combine the external new information with the existing personal knowledge, which enhances the effect of English learning. Moreover, it is quite normal for various modalities of human beings to support each other. For example, if someone shows you a picture of an old school

friend whose name you can't remember when you're recalling about it, you're more likely to immediately remember his name. Similarly, computer multimedia materials include: digital text materials, images, photos, forms, audio streaming, video streaming, animation and so on. The multi-modal interaction between human and computer includes vision, hearing, touch and articulation organs. Through visual interaction with video, it is intuitive and experiential. The ratio between the cost and effect of English learning compared with other modes, according to our observation of students' English learning, can be summarized as half the work with double results. When the video streaming records human activity, observers can learn interactively without special training. Intuitive experiential learning is often a "implicit learning" that people acknowledge something in a natural way. Intuitive and experiential learning through interaction between vision and video streaming is the key to skill learning. Learning skills through visual and verbal interaction is a way of learning with more effort and less gain. Therefore, we believe that proper handling of the relationship between multimedia resources and the input and output of multi-modal English language is the optimization of computer-aided instruction.

4. The Integration of Multilevel Interaction and Multi-modal

There has been a shift in the research methods and focus of the ubiquitous English multi-level interactive learning model, which is mainly reflected in the shift from the empirical and qualitative study of English learning model to the quantitative experimental method to verify the scientific and effective construction of the model. This involves the integration of multi-level interaction and multi-model. Learning is originally a process of connecting knowledge points, including English learning. English language chunks are the elements in the reconstruction and establishment of various language relations and language nodes in the structure of English learning knowledge network. The ubiquitous multi-level interactive learning model of college English should be combined with various modes. Input is the key to interactive learning. For the ubiquitous multi-level interactive learning model of college English, autonomous learning is the starting point. Teachers create a situation and students study independently according to the outline, which is the starting point of the interaction of guidance and learning and the basis of mutual communication. Therefore, English teachers should give students enough time for independent learning after class, so that students can fully study the texts after class and try English language communication, so as to ensure the efficiency of autonomous learning after class. To avoid the multi-dimension of English learning model verification and the complexity of the nature of the model, multi-level interaction and multi-modal integration should be the breakthrough point to solve the problem.

So far we have made a preliminary analysis of the multi-modal English learning. The continuous development of cloud computing technology provides a supporting platform for ubiquitous college English learning. Permanence of application, convenience of acquisition, immediacy of use, strength of interactivity, authenticity of teaching activities, universal adaptability of scope and cooperation of

125

learners are the basic characteristics of ubiquitous English learning. Ubiquitous English learning is the future way of English learning in ubiquitous computing environment. To maximize teacher-student interaction, student-student interaction and student-machine interaction is the core connotation of the ubiquitous multi-modal English learning model, and multi-level interaction is the basic element of its operation. Otherwise, it is to abandon the essence and deviate from the purpose of collaboration, conversation and semantic construction.

References

Gu, Y. (2006). *Role-based modeling language (AMI) I: Dynamic behavior modeling*.

Gu, Y. (2007). *Multimedia, multi-modal learning analysis*. Shanghai: Technology Enhanced Foreign Language Education.

Si, P. (2011). *Construction of multi-interactive teaching mode -- constructivism perspective*. Haerbing: Journal of Foreign Languages.

Wang, L. F., & Wen, Y. (2008). *A multi-modal approach to applied linguistics*. Shanghai: Technology Enhanced Foreign Language Education.

Yang, X. (2010). *Construction of curriculum teaching resources under network environment*. Nanjing: Journal of Jiangsu Radio and TV University.

Zhao, H. (2007). *Analysis of key technologies that support ubiquitous learning (U-learning) environments*. Beijing: China Electronic Education.