Physical education learning model and construction mechanism in online learning environment

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ABSTRACT

In the teaching process, according to the characteristics of the teaching objectives and objects, through teaching, reasonable choice online learning is an organic combination of traditional teaching methods, to achieve the optimal teaching effect. In the 21st century, the application of online learning technology has brought opportunities and challenges for physical education, so it is imperative to create an online learning environment. Based on communicative competence theory and input-output hypothesis theory, through the comparison between the proposed learning mode and online learning mode, the learning mode, the pass-acceptance model, the interactive mode, the cooperative learning model, teaching mode and the found learning mode are proposed. Further, design steps of teaching environment and teaching mode based on online learning is pointed out. As the expansion of the traditional single teaching mode, online learning teaching mode provides the concept of revelation and practical reference for application of a full range of online learning technology in physical education teaching.

KEYWORDS

Online learning environment; Information technology; Physical education mode; Teaching theory; Constructivism.

Online learning is an inclusive term that describes educational technology that electronically or technologically supports learning and teaching. Bernard Luskin, a pioneer of online learning, advocates that the online is also called e-learning, "e" should be interpreted to mean "exciting, energetic, enthusiastic, emotional, extended, excellent, and educational" in addition to "electronic". This broad interpretation focuses on new applications and developments, and also brings learning and media psychology into consideration. Parks suggested that the "e" should refer to everything, everyone, engaging, easy. The rapid development of online learning technology provides physical education teaching for unprecedented favorable conditions and state-of-the-art teaching methods, and new expectations and demands of physical education training of personnel are proposed too. So it is a major and urgent task in the physical education field that studying how to use online learning technology presentation and dissemination of the knowledge of the language and culture, the training of qualified physical education professionals in the 21st century. Abroad online learning research is self-contained: the theoretical discussion focused on constructivism interactive of Theory and online learning teaching fit; applied research focused on online teaching, teaching and artificial intelligence of the computer-aided teaching software development. Many domestic scholars have some research: but theory is lack of thought; in the practice, it is mostly software design and development; application of online learning technology in physical education teaching is more limited to the audio-visual teaching. Overall, level of research on electronic teaching is narrow and direction is single, related disciplines theory and online learning technology has not been combined organically[1], it is unable to form a true sense of the theoretical framework of online learning English language teaching and teaching model as a system. In view of this, the paper, based on the humanistic theory, constructivist theory and the Hypothesis of Krashen input, combined with characteristics of physical education teaching[2], is mainly exploring the meeting point of the physical education teaching theory and online learning technology, try to construct a diversified online learning environment Physical education mode, to provide new ideas and perspectives for the physical education teaching practice.

WHAT IS ONLINE LEARNING TEACHING MODE

In the teaching process, according to the characteristics of the teaching objectives and objects, through teaching, reasonable choice online learning is an organic combination of traditional teaching methods, to achieve the optimal teaching effect. The information symbols system includes text, images, audio, video, animation, and so on. Abstract concepts or principles can be showed in text or animation Virtual Reality process, or current news can be showed in audio-visual. In the teaching practice, teachers can create an open teaching environment with online learning equipment to provide students with the nonlinear dynamic knowledge, and combine vividness of external teaching content with scientific internal structure closely and lively. Teaching model can be defined as a relatively stable teaching activities established under the guidance of some teaching ideas or teaching theory structural framework and activities program[3]. As a structural framework, internal relations and functions between the overall teaching activities and elements of the teaching mode in macro are emphasized; orderly, as the active program operability of the teaching mode is highlighted. Its purpose is clear; the structure is stable and strong practicality. Reference to the definition of the online learning and teaching mode, we believe that online learning teaching mode is as the basis of teaching elements, anchored to optimize the combination of teaching elements, as an intermediary of online learning technology, and presented teaching content with different teaching strategies,then achieve the intended purpose of theorized teaching program. Such open model focuses on a choice of teaching content, collaboration and mutual assistance in the form task teaching activities, and contributes to develop the students' communication ability.

INTERACTIVE TEACHING IN ONLINE LEARNING ENVIRONMENT

Communicative Competence

Theory of Communicative Competence provides teaching theory for interactive language teaching. And language skills are mainly for communicative competence, which involves in language forms and language ability[4]. Communicative approach changes the focus on language form in passing teaching method, it emphasizes that aim of rules of language learning is communication. And enough interactive language activities must be given to training language communicative ability. Interaction refers to the process of two or more people exchange ideas, pass information and mutual influence. The Theory of Communicative Competence stressed that importance of "interaction" is to negotiate meaning, to pass information to each other in the purpose of using language in verity background[5]. This shows that the interaction is the main content embodied in communicative language teaching. It is the core of physical education teaching that training students to master the language using, to communicate with appropriate and decent physical educations in a particular social environment.

Online learning process

The most basic channel of human language acquisition is the understanding of language input. Language materials Earners hared or read should be slightly higher than the learner has mastered, which is conducive to learning language acquisition. According to this view, in order to make classroom interactions possible, the output language between the two must be comprehensible, comprehensible Input is the requirment. Language output is equally important for language acquisition, language output promotes learners be aware of the problems in their own language, and test assumptions in the learning process of language form formed and language structure formed. And in language output process, learners are often able to get the feedback they need, such as whether you understand each other[6], etching this sense, the language output is a

necessary complement to the language input. Because of accepting language, language internalization, language outputting mostly, again and again, language acquisitionist promoted [7].
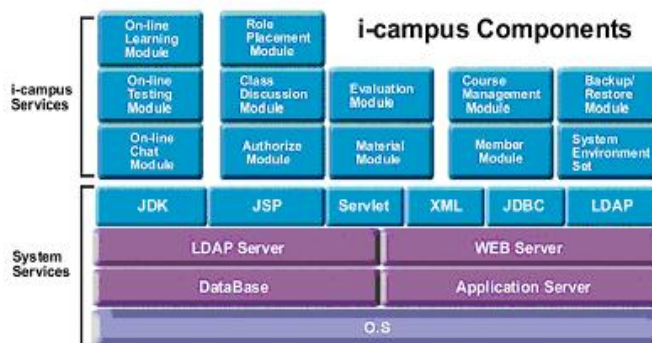

Figure 1 : Online learning process

COMPARISON OF TRADITIONAL TEACHING AND ONLINE LEARNING TEACHING MODE

Traditional teaching mode

In conduction of certain teaching ideas, teaching theory and learning theory, teaching mode is the stable structure in process of teaching and learning. Composed of elements of the teaching and learning activities include teachers, students, teaching materials, and media and so on. The traditional mode of teaching always has the phenomenon of neglecting students. The measure of the standard of the teaching process is whether preparation for class is seriously detailed, lectures whether vivid and rich, structured distinctive measure of teaching effectiveness is mainly quantitative assessment. On this basis, traditional college English teaching method is teacher lectures, students mainly listen. Therefore, the characteristics of traditional teaching are as follows: Firstly, the teaching and learning environment remains unchanged, and the teaching process is relatively rigid[7]; secondly, teachers are the focus of class, opportunities of listening exercise and using the languages fewer;Thirdly,too much emphasis is put on grammar and reading, listening is neglected;forthly, teachers are good at splitting the language into fragmented syntax and vocabulary, explaining classified, they are all deviated from the substance of the application of the language, pay no attention to the practicality;fifthy, autonomous learning outside the classroom is not planning.
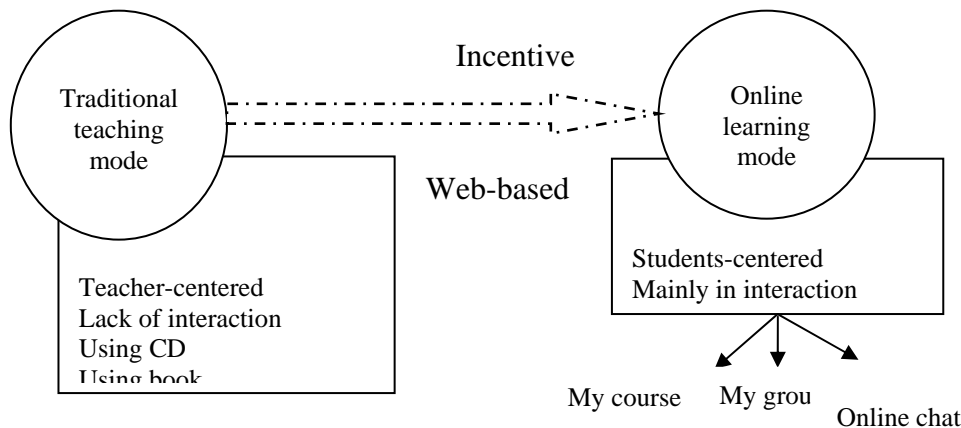

Figure 2 : Comparison of the traditional teaching mode and online learning mode

Online learning teaching mode

Online learning teaching refers to the use of online learning computer with pre-made online learning teaching software to carry out teaching activities, it has come to be known as computer-aided instruction (CAI). Because of the vivid expression, true abundance environment, teaching space computer online learning built are extends infinitely, English teaching resources are greatly enriched, and students' enthusiasm is stimulated. Primary characteristics of the online learning technology is the richness of resources and diversification of vision, it can be presented on the screen in three-dimensional with collection of text, images, audio[8]. Online learning courseware includes complicated types, is the integration of graphics and audio-visual. Students using online learning courseware to study are brought into the learning space mixed with sound transmission, text comprehension, and vivid video playback. Sensory stimulation can promote the enhancement of the learning effect. In addition, online learning in simulated situations is incomparable, in the process of courseware producing;

the combination of sound, image, animation can be close to reality, enable learners immersive. Traditional teaching and online learning teaching is not diametrically opposed, there is great complementarily between them, only combining two organic the two, talents with both solid basic language skills and language ability to communicate may be cultivated.

CONSTRUCTION OF ONLINE LEARNING TEACHING MODE

From the view of information dissemination, teaching is a bi-or multi-media dynamic process which communicators transmit teaching information through online learning. Media is t carrier of teaching information, and channels of the information sources. Therefore, in order to transmit of linguistic information timely and efficiently, combine the teaching elements (teachers, students, media) ornately[9], language learning theory and education theory are based on, make full use of online learning software and hardware facilities, integrate of teaching strategies, and create a natural language atmosphere, spread closed-end, unidirectional knowledge of the physical education teaching transition to an open, multi-directional information dissemination.
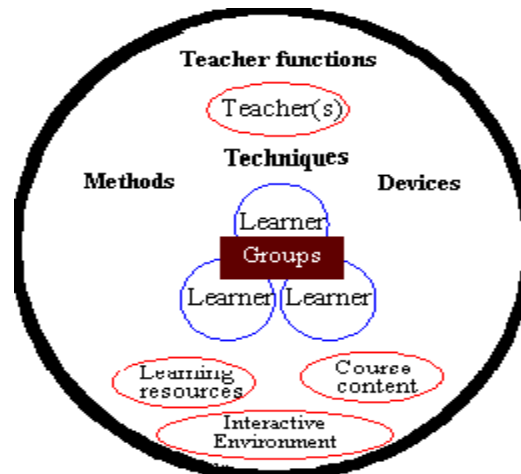

Figure 3 : Model of Online course teaching / learning system

Self-counseling-teaching model is an independence learning mode under the guidance of teachers. This teaching mode develops students' ability of thinking independently; there are a lot of teachers making use of it in teaching practice. Theoretical basis starts from the humanistic, pays attention to the students, aims at developing students' learning ability. This teaching model bases on independent learning and then guide students according to specific situation. It recognizes the value of learning process of trial of students, develop students' ability of independent thinking and learn how to learn. Learning-teaching program is consolidation of self-study - discussion - inspired - Summary – exercises [10]. The mode aims at passing the systematic knowledge, developing basic skills. Its focus is to fully tap the role of human memory, reasoning ability and indirect experience in the mastery of knowledge, so that students master the more amount of information more quickly and efficiently. The model emphasizes the guiding role of the teachers, which holds that knowledge is the role of a one-way transfer from teachers to students, and attaches great importance to the authority of the teacher. The design of its theoretical foundation bases on the principle of behavioral psychology, especially reflectedby operant conditioning training psychology of Skinner, stresses that control the behavior of the learner to achieve the desired goal[11]. According to the cognitive level of the student's knowledge structure, teachers' process teaching content, strive to link knowledge taught and cognitive structure of students. Give full play to the leading role of teachers who need high language skills when impart knowledge, while teachers should be aware of the questions when some students often encountered in mastering knowledge.

Teaching is an information exchange process of teacher-student interaction. The traditional English teaching tend to focus on imparting knowledge of the language, neglect of the cultivation of students' intercultural communicative competence. In view of this, according to interactive learning theory of American psychologist Albert Bandera, combined with the dissemination of information principles, explore the electronic interactive mode from view of the teaching interaction,Bandura emphasis on observational learning[12], and cognitive process and the process of self-regulation in learning, stresses intertwined influence between the individual behavior and environment. He believes that human behavior is acquainted mainly through direct experience and observation / imitation learning. To this end, the model focus on the construction of the locales, advocates the use of online facilities (such as electronic bulletin boards, e-mail, etc.) to assisted instruction, provides students with the observed imitate real language input and output, so that they communicate through the form of man-machine interaction, teachers and students interaction, students interaction. The acquisition of knowledge is a positive cognitive process that students access new knowledge through independent thinking, while learning creates a zone of proximal development, which awakes a variety of internal development process. This cognitive process helps positive migration of learning, cultivate the capacity of language decoding, encoding. Canada cooperative learners' advocates that cooperative learning is assigned by teachers and students cooperate as a team to complete the task. The basic idea of

cooperative learning includes teaching objectives oriented, diversity of the teaching, the naturalness of learning atmosphere and interaction among teaching elements. Combined the principles of cooperative learning theory (Cooperative Learning), to encourage the learner to explore problems[13], to do multidimensional concurrence learning, to develop students' entrepreneurial spirit, the sense of competition and cooperation ability, so that meet the requirements of the new foreign talent.

Discovery learning is a teaching model of knowledge that training students to explore and found knowledge as the main target. The most fundamental places of this mode can make students experience the process of knowledge generation like the scientists found. The Bruner (J.S.Bruner) teaching method has four advantages: improve students' knowledge retention; teaching provide information to facilitate the students to solve problems can increase the potential of their wisdom; find out the intrinsic motivation to motivate students triggered their interest in knowledge; increase students problem-solving skills[8]; According to Many psychologists study of this teaching model, it is more suitable for low-grade teaching and using too time-consuming in the classroom, and difficult to master.

ONLINE LEARNING TEACHING ENVIRONMENT

Currently, the online learning teaching environment in the following categories in schools: (1) Integrated Online learning Classroom. This teaching environment usually increases the online learning computer, projector, CCTV systems and public address equipment on the basis of the general classroom. (2) Online learning CAI network classroom. This teaching environment built dozens of student workstations as students individualized learning environment, it can be centralized presentation in classroom teaching. There are many schools built revamped online learning CAI network system on the basis of the original computer room. Some online learning CAI network classroom of schools even connected to the Internet for online learning distance learning[14]. (3) Special online learning classroom. This teaching environment add specialized hardware device or software systems based on the characteristics and needs of subjects in teaching and on the basis of comprehensive classroom and small computer network foundation, in order to have the special teaching role and function to adapt to the different disciplines and skills training requirements. (4) Online learning Electronic Reading Room. This teaching environment consists of multiple online learning computers for the second classroom or extracurricular learning. Online learning Electronic Reading Room of some schools connected to the Internet, students can browse Internet for information, learning information retrieval and processing of information [15].
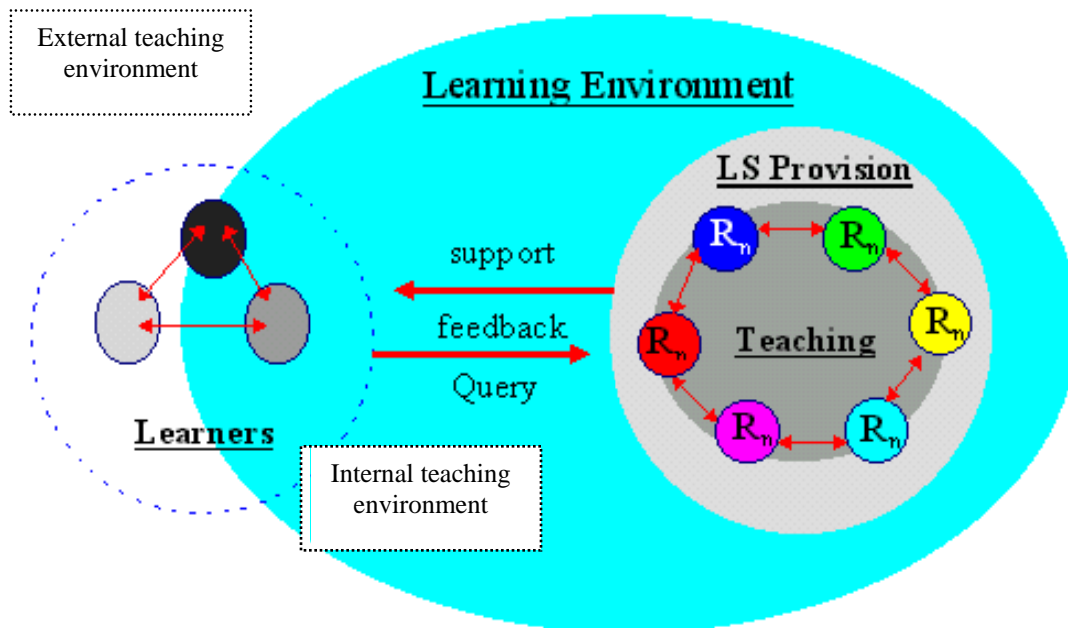

Figure 4 : Online teaching environment

DESIGN METHODS OF ONLINE LEARNING INSTRUCTIONAL

Per course is composed of several chapters (or unit), each section (or classes) also divided into a number of knowledge, according to learning content classification method can determine the content of the attributes of each knowledge point in determining the teaching content. Further, according to the characteristics of the subject, the teaching content decomposed into many knowledge, then analysis whether these points of knowledge content facts, concepts, skills, principles, problem solving and categories. Instructional media selection is based on the teaching content and teaching

objectives to choose the recording and storage of teaching information carrier (software). Directly involved in the process of media teaching activities used to deliver teaching information, transformation of information into teaching learners sensory is the most effective stimulus signal of teaching equipment (hardware). Usually these carriers and equipment including a record player and record player, cassette tapes and tape recorders, slide, slide projector, slide projector, the films movie machine, tape and video recorders, computer software and computer and so on.

Autonomous learning is the same as students' self-learning, self-explore. The commonly used method of autonomous learning are instructional scaffolding, anchored instruction randomized into learning, collaborative learning is through group discussion and negotiation based on independent learning, in order to further improve and in-depth on the significance of the theme to construct. Online learning teaching created a lively and interesting teaching situation for students, a silent sound of static to dynamic, stimulated students' interest in learning and improved student learning enthusiasm. In traditional teaching, this made students boring inevitably, because of orienting the static mechanical textbooks and writing on the blackboard. Online learning teaching can overcome this defect, text, images can be moved by the specified trajectory, the color can be varied, and the speed can be controlled. Classroom teaching system is composed of teachers, students, teaching content and teaching media elements. According to the system of scientific theory, make the classroom teaching achieve good teaching results, it must focus on the linkages between these elements of the teachers, students, teaching content and teaching media to form the best organizational structure, therefore, classroom teaching structure need to design. Teaching structure is the form of mutual relations and contact between teachers, students, teaching content[4], teaching media and other elements in the system of classroom teaching. Classroom teaching structure includes two meanings that is the time relationship of the various elements and spatial relations. Time relationship of the various elements in the teaching structure mainly refers to the order of teachers and students in teaching activities, we usually referred to teaching program, teaching steps, the process of teaching; spatial relationships of the various elements of classroom teaching structure mainly refers to the relationship of the level of teaching content, classroom teaching logical relationship[11]. This spatial relationship of the classroom teaching structure can reflect the pattern of classroom teaching and teaching methods better, so the structural design and research of classroom teaching is the basis of exploring classroom teaching mode. Learning assessment, using scientific methods to quantify the measurement data in accordance with certain standards based on clear objectives, it makes a value judgment and quantifiable results. Learning evaluation is based on objective information, so we must design a good variety of evaluation tools to collect students' learning.
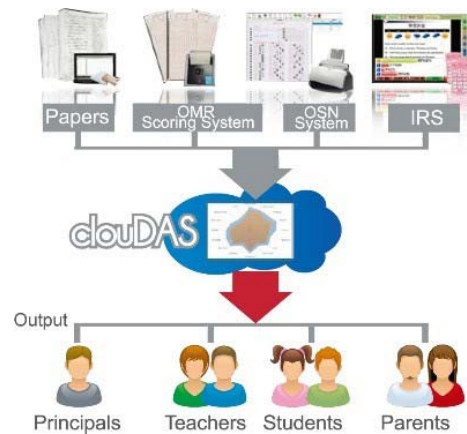

Figure 5 : Design methods of online learning and teaching model

CONCLUSIONS

The worldwide online learning industry is economically significant, and was estimated in 2000 to be over $48 billion according to conservative estimates. Developments in internet and multimedia technologies are the basic enabler of Online learning, with consulting, content, technologies, services and support being identified as the five key sectors of the Online learning industry. Information and communication technologies (ICT) are used extensively by young people. Online learning expenditures differ within and between countries. Finland, Norway, Belgium and Korea appear to have comparatively effective programs. As same as any acquisition of language learning, students learn English aim at application. The introduction of online learning interactive teaching mode can improve students' listening and speaking skills. Specifically, it must follow that the principle of English teaching atmosphere created and the effective combination of online learning interactive teaching and online learning teaching techniques, it can ultimately meet the requirement of English education. Online learning interactive teaching mode not only applies in the teaching of English, but also applies in other subjects teaching reform. In the Construction of online learning environment, professional Physical education mode relates to linguistics, cognitive linguistics, cognitive psychology, language learning theory, the theory of physical education teaching, education, dissemination of technology, computer science, etc. It also has significant diversity and multi-level nature. As the

expansion of the single traditional teaching mode, online learning teaching mode provides the concept of revelation and practical reference for full range of online learning technology application in physical education teaching.

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