

Animation Arts Teaching Under New Media Environment

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Abstract

The immediate and convenient nature of new media technology broke the territorial limit of school or classroom and allowed students' study to be communicated with global information. It broke the limitations of textbooks and teachers, thus highlighted the flavour of life and age in art curriculum. This paper intends to use the concept of new media as an entry point, and through analyzing current educational situation of animation arts curriculum to explore the interactive course of animation and arts and its practical application.

Keywords: *New media; animation arts curriculum; Interactive course*

1. Introduction

New media is the product of information development society. Being faced with tremendous changes in media sphere, teaching resource construction was exposed to changes and challenges. New media technology, represented by network media, mobile phone media, digital television, with the concept and scale of application has brought profound impact on every aspect of social development and has become a hot topic for research. New media technology's application on education provided teaching resource construction with new possibility and proposition for development. Therefore, it is imperative to research and examine new media to reconsider and re-define relevant issues for the purpose of clearer, more precise study.

2. New Media Conceptual Definition

The term "new media" was coined in the 1960s, and was defined by Price. A in 2007 only witnessed rapid development in recent decades limited by level of technological development. [1] The concept of new media was put forward opposing to traditional media, and used to describe the communication pattern which adopting digital information technology to provide customers with entertainment and information service via various networks, communication channels, terminal devices such as computers, digital television and mobile phones. It is a new media format comes with technological development in information era. With the improvement of age, new media continues to enlarge its scale. As shown in Table 1.

Table 1. New Media and Content of Communication

| Forms of New media | Communication content |
|----------------------|--|
| Mobile TV | News, MTV, entertainment, arts, film, <i>etc.</i> |
| Graphics and Text TV | Communication Bank, tourism, weather information, advertising, <i>etc.</i> |
| Mobile information | News, information, video, advertising, <i>etc.</i> |

| | |
|---------------------------------|--|
| Interactive TV | News, MTV, on demand, advertising, <i>etc.</i> |
| Network broadcasting television | News, variety shows, special topics, TV movies, advertising, <i>etc.</i> |
| Network games | Online games, advertising, <i>etc.</i> |
| TV in Building | Commercials, <i>etc.</i> |
| Software communication | Practical software and text, advertising, <i>etc.</i> |
| Blog, micro blogging, QQ | Article, pictures, video, advertising, <i>etc.</i> |

New media's information propagation is both public and popular, at the same time individualistic and reified. It can dispel the borders between information disseminators and audiences and achieve seamless communication. Comparing to the traditional four medium: outdoors, newspapers and periodicals, broadcast, television, new media with its reproducibility, mobility and interactivity was also called the fifth media [2]. It also brought the sense of immersion and hyperlink experience to audiences, and therefore caused qualitative transformation in media history which in turn give new media a highly competitive edge.

Moreover, the concept of new media is multi-dimensional for its existence beyond a mere advanced technology. The definition can be expanded to interpret from aspects of man-machine interface, division of industries, art movement and its multimedia forms when new media combined with different fields such as technology, industries, art, mass media *etc.* Simultaneously, new media gained more openness and liberty for ridding itself of material limitations.

3. Interactive Participation

Identifying problems in the above context, selecting the related learning, with the current topics, real events or problems as the center of learning content can make students face the practical problems, which also can drive them to learn and deal with the problems immediately. The teachers can teach the students indirectly, who should teach students how to solve the problems and provide clues, so as to solve the problems, making the students explore knowledge independently. At the very beginning, teachers guide students and inspire them to find out solution (for example, teachers can demonstrate the similar concepts), then teachers let the students themselves make their own analysis to recognize the importance of learning.

3.1. Teacher's Start

In animation teaching class, making the rational use of interactive teaching, teachers are the premise to start communication and interaction. As shown in Figure 1. Guiding principles for teachers is to cultivate students' autonomous learning consciousness, so as to change the dependent mentality of students, which puts emphasis on autonomous learning during the process of learning animation. In this way, it can enable students to cultivate their learning abilities consciously. Teachers' start refers that teachers guide the students to start activities, who also can create more opportunities for students to use knowledge and skills.

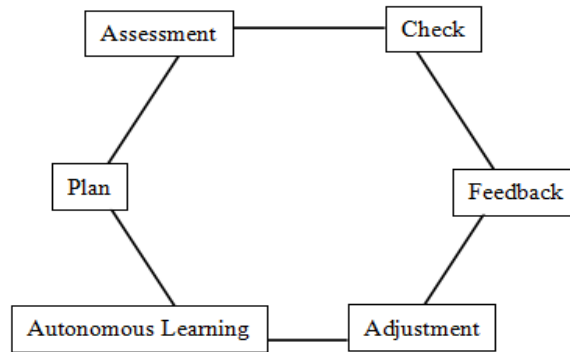


Figure 1. Monitoring Process of Teachers

The relationship between new media and traditional media is of inheritance and improvement, and of integration. Traditional media can transferred to new media with the help of digital technology, and new media then become mainstream media. Environment would influence any kind of information communication. Sharing content, channel confluence and media convergence is the new trend. Technical form, media form and communication pattern constitutes new media structure. It is the key to pinpoint the informational environment and media-scape of teaching resources; the significant premise to seek ways of teaching resource construction and planning teaching resource development space; and basic condition for setting up teaching resource platform.

Animation Arts Interactive Teaching under New Media Environment

Classroom Interactive Teaching Using New Media as Auxiliary System

Under new media education environment, animation arts interactive teaching mainly perform between teacher, students and media through “language interaction”, “action interaction”, “affective interaction” generated by specific scenario and teaching activities, then finally achieve “thinking interaction” [3]. In terms of time, interactions in new media classroom generally are real-time exchanges. More specifically, entity structure elements of classroom interaction supported by new media include: Learner, teaching community (teachers or other tutorship), media environment, teaching information. Teaching information and other three elements’ relationships while in other three elements or occurring during interaction are shown in Figure 2. It is clear that entity interactive elements are main bodies of classroom interactive teaching. Through competitive interaction, mutual aid interaction, cooperative interaction, role-play interaction between entities to realize expected teaching effect.

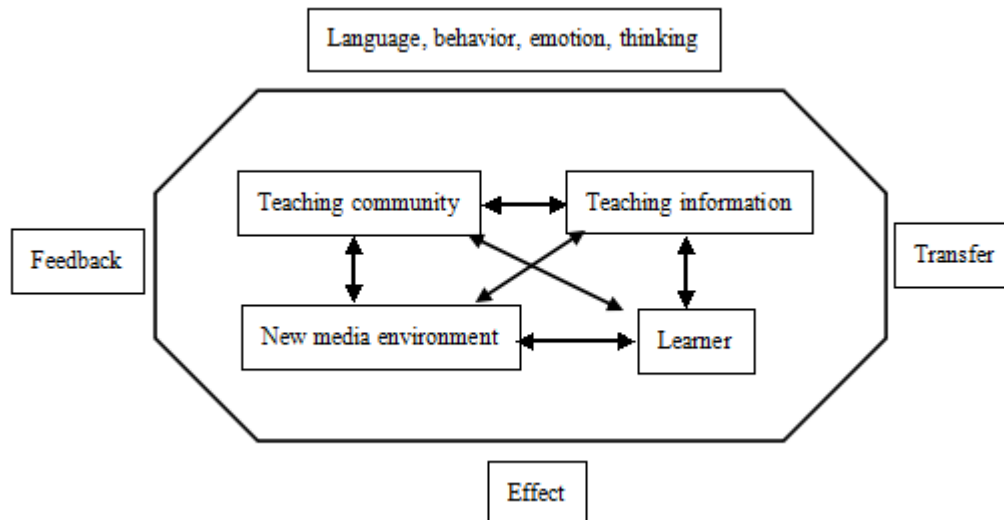


Figure 2. Interaction Structure of Classroom Teaching Under New Media Environment

The teaching mode called "multiple interactions", is a new teaching structure that under the information technology environment, the teaching activities should be as diverse and dynamic interaction process; through optimizing the interactive teaching, various teaching elements related to learning should be made full use of to adjust the contact and effect between them, and to arouse and promote students' active learning activities to conduct learning activities, which can form omni-directional, multifaceted harmonious interaction teaching mode to produce teaching resonance and improve the teaching effect. As shown in the following Figure 3:

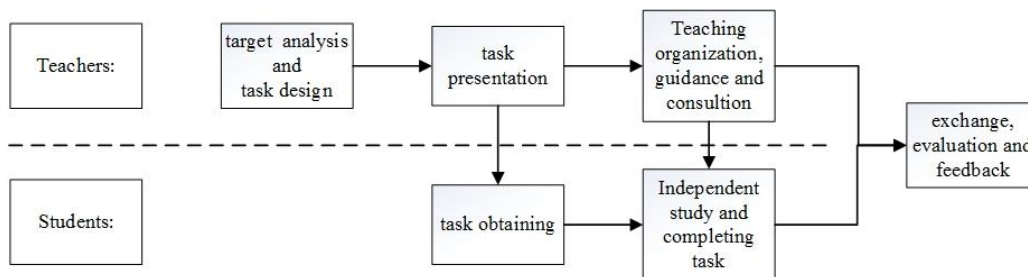


Figure 3. Multiple Interactions Teaching Mode

Based on the above definition, the Conceptual Model of multiple interactive teaching mode of college Foreign economic law we build under the environment of information technology, is defined with a quaternary equation: $CM=(KM, KMS, TM, TMS)$. Among them, $KM=\{K, CK, SK, PK, k \in \text{Basic Knowledge}, CK \in \text{Composite Knowledge}, SK \in \text{Strategic Knowledge}, PK \in \text{Proceduralized Knowledge}\}$;

$KMS= \{KR|KR. \text{Constructing Relation in KM}\}$;

$TM= \{STD|STD \text{ E Sub-teaching Design and Related Template}\}$;

$TMS= \{STDR|STDR. \text{Constructing Relation in TM}\}$

The conceptual model defines the applied basic frame structure of college Foreign economic law teaching mode under the environment of information technology. KM (Knowledge Model), KMS (Knowledge Model System) are corresponding to the Knowledge representation, and are the maps of constructivism learning theory, cognitive teaching theory and learning theory of behaviorism in the aspect of Knowledge, which refers to the students' learning content layer, namely the basic Foreign economic law

elementary knowledge, Knowledge of learning strategies and encyclopedic knowledge related to study, life and major that students must master; In a certain environment, students need to restructure the gained knowledge to realize the interaction [4]. TM (would Model), TMS (would Model System) are corresponding to design the teaching process, and are the maps of constructivism teaching theory, cognitive teaching theory and behavioral teaching theory in the teaching design, which refers to the teachers' teaching design level. Under teaching environment of information technology, teachers need to restructure the different teaching design according to students' actual situation to realize the interaction among various teaching elements fully.

Animation Arts Interactive Teaching Mainly Rely on Computers and Internet

In interactive teaching primarily achieved through computers and internet, every student has a computer for creative practice, and the interaction happen between teacher, students, and media environment as well. However, the frequency of language and action interaction witnesses obvious decrease, affective and thinking interaction become dominant. With the usage of computers and internet, the interactions can be both real-time and non-real time. As shown in Figure 4, in the interactive teaching process, media environment generally acts as intermediary agent to help achieve sharing of information, communication and cooperation between teacher and students, and help both teacher and students to construct, manage, control and display.[5].

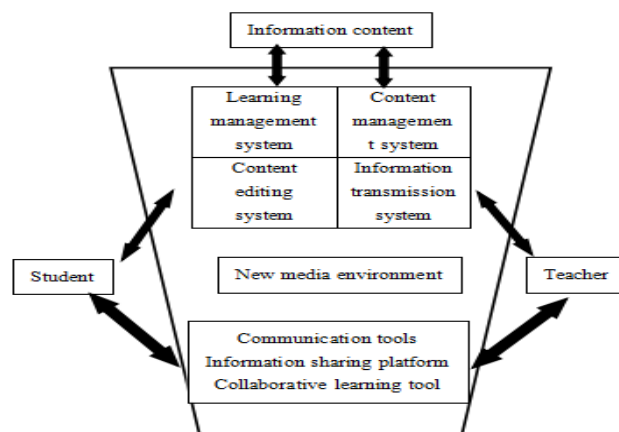


Figure 4. Interactive Structure Between Human and New Media Environment in Animation Arts Classroom Teaching

Implementation Steps of Interactive-Based Learning

Detail description as shown in Figure 5:

1. Determine the interactive: one or several interactive ideas are generally made by teachers and then are discussed with the students to finalize the objectives and tasks of the interactive.
2. Make interactive plan: generally the students develop the interactive work plan and determine the steps and procedures, which should get teacher's approval.
3. Make decisions: teachers consider various aspects of the conditions permit based on student's interactive plan, and make a decision to agree the interactive implementation.
4. Implement the interactive: In this phase, the students themselves have a clear division of labor and cooperation tasks and pattern of team members in the group, and then follow the work steps and procedures that have been established. Students can avoid unnecessary detours, wasting time and energy.

5. Check control: teachers make check control in the course of the interactive of the students in a phased manner.
6. Inspect and evaluate: After the interactive is completed, summarization should be done in a timely manner, in order to promote the consolidation of student knowledge. First divide several teams for students to work on their own self-assessment results, and then check the ratings by teachers. Teachers and students all together discuss, judge the problems in interactive work, and students learn problem-solving thinking and action features.
7. Consummate summarization: By comparing the results of the evaluation of teachers and students, summarize the entire interactive, and find out the cause differences in the results. Teachers get this feedback, which is good for follow-up interaction.

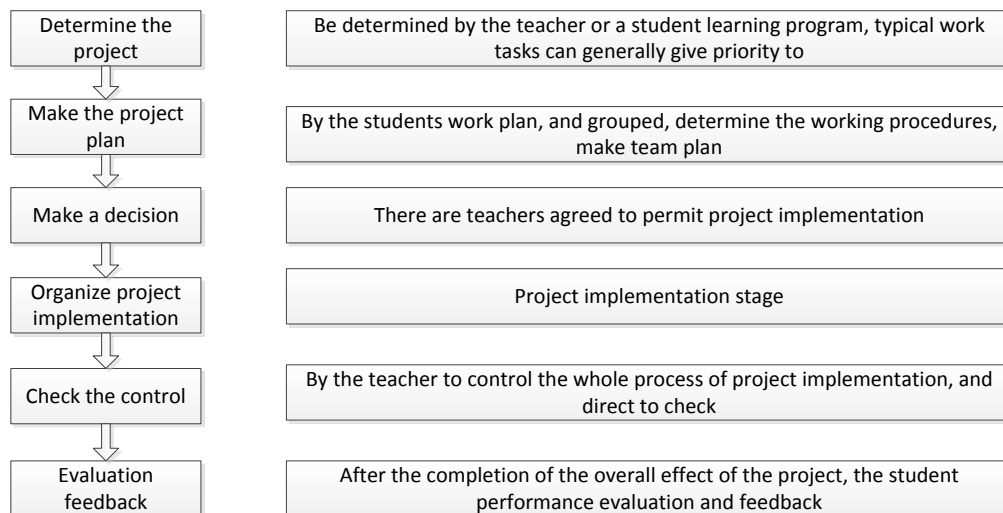


Figure 5. Implementation Steps

New Media Technology's Application in Animation Classroom Teaching

Applying new media technology to teaching allows teachers to impart much art knowledge and skills possible in limited lecturing time, to better guiding students to appreciate art and to join cultural inheritance and communication for students' personality formation and integrated development [6]. Moreover, the enormous data resource provided on Internet is beneficial to stimulating students' desire for knowledge and to effectively improving teaching efficiency. Teacher's role in teaching process thus changed drastically to authenticator of teaching objective, organizer of teaching process and instructor. For students, the main gain is cultivating favourable behavioral habits.

New media technology offered various methods for teaching demonstration, such as inserting demonstration video, flash, objects projection, Photoshop, to express and appeal to students more powerfully. Methods with good expressive force can boost students' learning initiative to capacity. For example, in previous teaching of *Drawing Basics-Composition*, the illustrations of composition requirements normally done by drawing at the scene or showing exemplary drawings.

Now teachers can use Photoshop to insert pictures of vegetables, fruits and pots and then explain the requirements of composition via move and free transform function. Reasonable composition of pictures can be show through different kinds of demonstrations. Furthermore, teachers used to paint in the classroom to show students in professional painting training classes. However, due the limitations caused by angles and distances, most students won't be able to fully observer and learn teachers' skills. This problem can be solved by display screen and dv video. Teachers can prepare the dv

machine for a good camera shooting angle, and then connect it to the computer and the display screen. Teachers' whole painting process can be seen clearly in details. In addition, amplifying certain parts of painting is even more convenient for students to learn how to depict details. When in color painting training, turning the screen effect to black and white can help clarify sketch relations for students.

Advantage of Interactive-based Learning

Interactive-based learning can cultivate the innovation and cooperation consciousness of students.

Students participate in practice through interactive-based learning interactive, learning from acceptance to active learning, transforming from a learning goal to develop their professional ability by the application of knowledge [7-9]. Through group learning, fully develop the students' thinking and innovative ability, not only mastering professional skills, but also enhancing their sense of innovation. In an atmosphere of teamwork, the students can develop the collaboration spirit of each other in the team.

The teaching model of interactive-based learning conforms to requirement of universities to the training of personnel.

Personnel training objectives of universities is "serve as the aim, employ as orient", mainly for production and social practices of the first line and personnel with primary and intermediate technical applying skills. Therefore, the key for higher education personnel training is the cultivation of students' skills, so that students have comprehensive quality and professional competence employment required. Student-centered, interactive-based self-study interactive-based learning can face the need of the entire work process; integrate the knowledge of many courses through the work process systematic training to master the integration of knowledge, technology and skills in the practice action.

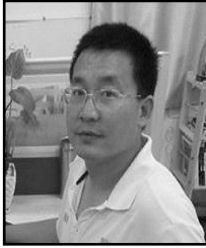
Conclusion

Organic integration of new media technology with college fine arts teaching brought great vitality, as well as great challenge, to animation arts interactive teaching. Teachers in animation arts teaching need to break the old mind-set and make good use of high quality courseware in class for well integration of knowledge and technology to keep up with the development.

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