

# The Design of “Graphic Animation” Micro Video Based on the Concept of Micro Learning

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**Keywords:** Micro-learning; Micro teaching video; Graphic animation; Design

**Abstract.** With the popularization and application of information technology in school teaching, micro learning has become an important supplement to traditional teaching. Taking the "graphic animation" curriculum as an example, introduces the design of "objective plane animation" micro teaching resources, and then describes the design of planar "animation" micro teaching resources to follow the principle, overall design and development of "graphic animation" micro teaching resources, for the next step of "plane animation" micro teaching resources development and make the necessary preparations.

## Introduction

In recent years, with the continuous development of network technology and communication technology group, the emergence of various new media such as "micro-blog", "WeChat", these new things bring great impact on all walks of life, influenced by the process of reform of education informationization, the birth of "micro class" is a new teaching mode of teaching resources, change the drive however, classroom teaching is no longer confined to the traditional, enrich the mode of mobile learning.

Compared with the traditional teaching video, micro class advantages such as subject clear, clear, targeted, and easy communication, semi structured, extensible and open. In view of the advantages and characteristics of micro course, not only to take care of micro class learners "attention model", but also conform to the era of "micro" requirements for mobile learning, blended learning provides a more convenient, more fit the actual demand of the learners, so the development of micro class research and related resources have great value, is imperative.

## Graphic Animation Micro-teaching Resources are Designed

The graphic animation production is a compulsory professional courses in educational technology, is a very strong practical courses. Requirements focused on students of actual using making capacity, but currently of traditional of teaching in the, teachers main is to explained and demonstrates mainly, due to by time of limit, class Shang does not can to students enough time for practice operation timely of actual practice using, appeared learn has Hou a knowledge points forget has front of knowledge points problem; knowledge structure chaos limit students of apply, creative using by learn knowledge. Individual differences are more important things, inconsistent knowledge absorption, class does not take into account the individual lead many to keep up student interest in learning in the classroom.

For this reason, in this study comply with micro teaching video production requirements, design and development of the graphic animation of the micro-teaching video series to meet the learning needs of diverse learners, and after a series of knowledge using examples can inspire learners to apply their knowledge, improve learner's learning interest and learning efficiency.

## The Principle of Design and Implementation of the Teaching Resources of Micro Course in "Graphic Animation"

Integrated Principles of teaching as a new micro-video teaching resources, education information technology products, specifically to improve the efficiency of learning and learner autonomy designed and manufactured. Teaching micro video is designed to complete the knowledge in a logical partition as a scattered a little knowledge points. So as to maintain a certain logical relationship between the various micro-video teaching, to each knowledge points strung together a complete knowledge of the subject system. In this paper, the "flat animation" knowledge one level segment, in the first level is divided into a large displacement animation module, deformation animation module, the module frame by frame animation, path animation module, mask animation module, Scripting animation module. Then the displacement animation module, and then subdivided, divided into oval tool, into how the three elements, the concept of the frame, the strength of the animation - the ball move, rectangle and polygon tools, spare parts set the document element attributes, animation strength - ball fade fade, layer 1, layer 2, layer 3, the relationship between the library and the panel element in example 1, the relationship between the library and the panel element in example 2, animation examples - 1 elastic smiley, animation examples - 2 elastic smiley, animation examples - Flexible Smile 3, 15 small knowledge points. This series of small knowledge constitutes knowledge displacement animation module.

Micro-course there must be a system of things to support. Micro-video teaching basic grasp of good performance in the form of good, and then there is the system of structural support, and ultimately to achieve a better learning outcomes.

Student principle. student refers to the student in question preview, classroom, after-school review process and other learning encountered by watching video teaching micro to answer, play a guiding role in student learning. There is a big difference in students' learning situation, micro-video teaching to meet the diverse learning needs. Truly individualized. In the present paper provides 16 animated displacement knowledge module contains, for the needs of learners can select a point to learn the knowledge; In addition, the paper provides examples of multiple animations, can inspire learners use of knowledge.

The principles of simplicity teaching micro-video as much as possible will be controlled within 10 minutes time to cut to the chase straightforward, accurate language to refining, preferably with a brief summary at the end, making a short video to lean to fully reflect the teaching micro-video "micro" advantage. In this paper, the design and development of the thesis, long hours are generally less than 10 minutes and at the beginning of the video are highlighted in the micro-video learning knowledge points. Simple video overall interface, no other interferences irrelevant.

The principle of compatibility with the continuous development of mobile devices and communication technology, mobile learning learner increasingly being accepted. To meet the needs of learners, teaching micro-video design and development should be compatible with different playing environments. In video output you can choose a variety of play modes, this paper mainly in MP4 format can support different playing environments.

Practical principles of teaching micro-video design and development should be combined and applied to the actual teaching practice to the actual needs of teaching, otherwise it would lose the micro-video teaching the core values and meaning. Teaching Methods Video is a teaching and learning resource, its application should be considered with other teaching and learning resources, co-ordination and convergence, so as to avoid unnecessary resource redundancy. Teaching micro-video application timely manner; teaching micro-video application mode has certain directivity, designed micro-video teaching, the school should be based on hardware and software facilities, environmental factors, and other emergency situations that occur in the teaching of Teaching micro-video application modes make the appropriate adjustments and changes in order to make the teaching effect optimization.

## The Design of the Teaching Resources of the Micro Course in the Graphic Animation

Front-end analysis. with the development of information technology, science and technology, education and education into the information age, the use of modern information technology, teacher education is an essential skill. "Flat animation" is an educational technology of compulsory courses, practical strong, has great significance for practical skills and creative ability learners. Thus, the learner must pay attention to the actual operation of the creators do exercise capacity, improve flat animation capability. "Flat animation" is the educational technology course grade school sophomore, commonly used "classroom demonstration explain + classroom training" teaching mode, teaching micro-video application can make up for many deficiencies of classroom teaching, improve learning efficiency learners.

knowledge refinement of the "flat animation". teaching design and development of micro-video major displacement animation module, displacement animation-related knowledge to refine the segmentation detailed description and analysis. After a series of knowledge points to explain the corresponding animated examples of several small knowledge connect them. A knowledge of a micro-video teaching, independent of each other, is a progressive, has a certain logic. Each micro-video teaching control within 10 minutes. As Table 1 show in the animation module displacement knowledge segmentation.

Table 1 knowledge Division

Module	Displacement animation	
Contains the knowledge points	01	Use of Ellipse Tool
	02	How will the parts into components
	03	Frame concept
	04	Animation examples - sphere displacement
	05	Use of rectangles and polygons
	06	Property documents, parts, and components
	07	Animation example - sphere fade
	08	Layer 1
	09	Layer 2
	10	Layer 3
	11	Library panel and the relationship between components and instances 1
	12	Library panel and the relationship between components and instances 2
	13	Animated examples - elastic smiley 1
	14	Animated examples - elastic smiley 2
	15	Animated examples - elastic smiley 3

Determine the type of micro-lesson. to determine the type of video is the basis of micro-teaching and teaching micro-video production are closely linked. After determining the teaching and knowledge of micro video segments, according to the nature of the study subject characteristics and teaching content to determine the appropriate type of micro-video teaching. "Flat animation Experiment Course" is a strong operational experiment course, here in this paper to develop a micro-video teaching by demonstration method to meet the learning needs of learners.

"flat animation" Teaching Methods of Video Design Case. "flat animation" knowledge of this course very much, here to block a moving painting "Using the ellipse tool" for the case, introducing the teaching micro video designing process.

## Acknowledgements

This is the Guangdong Province in 2015 the characteristics of the project of innovation "outstanding teachers under the background of Local Normal University pre service teachers' information technology application abilities to develop new exploration -- Based on the design and application of micro course" (project number: 2015GXJK135); Jiaying University, the thirteenth batch of higher education and teaching reform project "key project" Internet plus "perspective based on mobile intelligent terminal personalized micro learning system construction and application of modern educational technology, with curriculum as an example" (project number: JYJG20160115); Guangdong Province Institute of higher education laboratory management Specialized Committee 2014 fund project "based on flipped classroom micro class resources in the application of experimental teaching in Applied Research" (project number: GDJ2014077); 2015 Jiaying University innovation school project "outstanding teachers under the background of Local Normal University pre service teachers letter A new exploration on the cultivation of the application ability of information technology -- Based on the design and application of micro course (project number: CQX044).

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