성능 기술 기반 3D 애니메이션 기술 훈련 연구
– R 애니메이션 회사 3D 애니메이션 기술 훈련 중심으로 –
3D Animation Skills Training Research based on Performance Technology
– based on the 3D Animation Skills Training in R Animation Company –

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Abstract

In recent years, the rapid development of 3D animation industry promoted the 3D animation skills training progress. In this article, the author analyzed deeply the 3D animation skills training situation based on the training practice and comprehension in R animation company, constructed the 3D animation skills training mode, and made further discussion of improving the performance of training.

I. Introduction

3D animation, is an emerging technology along with the development of computer software and hardware in animation field in in recent years[1]. Both in scientific research, military, education, or in movies, advertising, art and other fields, 3D animation is widely used[2]. With the three dimensional animation, special effects films increasingly popular, a new star, the 3D animation skills training appeared on the market, so how to improve the effectiveness of its training is an urgent problem. The author participated the R company's 3D animation skills training in Wuhan for one year, tried to research 3D animation skills training using performance technology, to improve training efficiency and to solve the shortage status of talented persons in animation skills training field. and further promoted the development of 3D animation skills training.

II. The Case of 3D Animation skills Training

R animation company is founded in 2005,and the headquarters is located in China Optical Valley. The company dedicated to the original development of 3D animation cartoon、domestic and international markets 3D animated film and television animation services and vocational training of personnel. Now it becomes more powerful content providers and 3D animation animated feature processors.

1. The Overview of the Case

The personnel structure of Training consists of the learners and training division, training policy is not clear, course design is not logical and evaluation results is not made specific research.

2. Determine the Performance

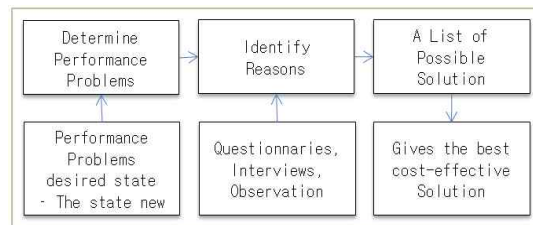Robinson proposed a general model for performance analysis[3], the model Fig.1 is following.

Fig.1 Performance of proposed model of Robinson

3. Performance Analysis Results

The expect standards and the actual level of contrast Fig.2 of the 3D animation skills training is the following. The red line indicates the expected standards of training, the black line represents the actual average level of the company, the position relationship between the two lines is the R animation company's performance gap about skills training.
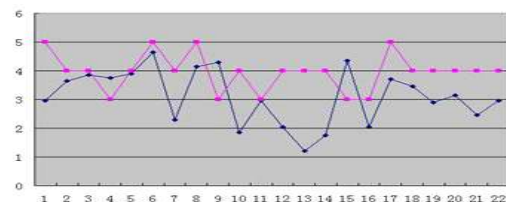

Fig.2 The chart about the expect standards and the actual level of contrast

By the percentage of the students who reached the standard to see the training result Fig. 3. The abscissa is the skills training goal, the number of vertical axis is the percentage of compliance. Compared to the number of students who reached the knowledge and skills standards, the result was relatively satisfactory
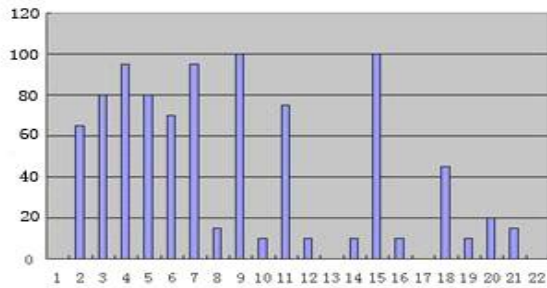

Fig.3 The percentage of students Compliance in R animation company about every objective

III. Construction Of 3D Animation Skills Training Model

The author sum up the ideas and process of skills training to build a training model are as follows Fig.4, the model will be combination of two process models which are performance technology and instructional design, including five modules, these are needs analysis, cause analysis, instructional design, implementation and evaluation.
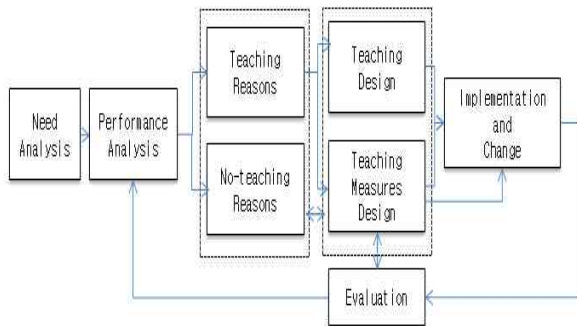

Fig.4 The model of 3D animation skills training

IV. Specific Measures To Improve Training Performance

By the performance analysis of R animation company skills training and for the problems in training, we make the following measures to improve training performance.

1. The Learner Analysis

Different learners have different learning needs, but generally fall into two categories: to continue learning and to lay the foundation for new jobs. The students to continue learning already have some relevant learning experiences, so should be avoided psychological contempt to learning content; While the latter is to be able to make his career a new beginning, so in addition to learning the basic content, they also have a strong need to add some practical content.

2. Identify Teaching Objectives and Adjust Teaching Content

Teaching objectives are determined based on comprehensive consideration of various conditions, such as principles and policies, market demand, the understanding level of students' actual situation and analysis of teaching situation. such as R animation skills training for the 3D animation principles and policies, market demand, the evaluation results, the students level of understanding of the actual situation and the training of teachers teaching analysis. According to teaching objectives, the set of teaching content should be adjusted accordingly. Setting curriculum should meet the following requirements.
· Complete and logical skills and knowledge system.
· The combination of theoretical and practical knowledge.
· A reasonable study schedule.

3. Design Teaching Strategies

We can take different teaching strategies to promote teaching depending on different course content. Specifically, the following points:
· Teaching strategies related to industry knowledge.
· Teaching strategies related to theoretical knowledge of 3D animation.
· Teaching strategies related to skills knowledge of 3D animation.
· Self-evaluation before the training.

V. Summary

The rapid development of 3D animation technology, has formed a certain scale of the market and employment needs. The performance technology research into 3D animation training to optimize the training effect is a relatively new field of study. More similar studies are needed to continue exploration and validation, making 3D animation skill s training continuous developed in promoting animation industry to play a greater role.

References

[1] Feng Cheng, "3D animation technology in film and television advertising industry in China Application". China business, No.10, pp.30-33, 2009.
[2] Tian Lu, "Talk of 3d animation techniques", Silicon valley, No.5, pp.55-58, 2009.
[3] Zhihui Jiang, "Teaching system design, Knowledge expansion: General performance analysis model", 2010.