Analysis of Optimization Design of Art Auxiliary Course System Under WeChat Platform

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Abstract. The development and progress of mobile communications and intelligent mobile devices affect all aspects of people's lives, and also bring new opportunities for breakthroughs in the optimization of the art-assisted curriculum system. Art design is a course that combines theoretical study and operational skills. Sometimes, due to the single teaching method, relatively backward content of teaching materials, less interaction between teachers and students, insufficient school hours, limited equipment and space, etc., it cannot create good learning opportunities for students. For such problems, this article explores the use of WeChat public accounts to assist the teaching of art design courses.

Keywords: Art design course · WeChat · WeChat public account · action research

1 Introduction

This paper is to explore the integration of the construction of art content and the educational theory research and teaching practice of school art education with the help of the analysis of the concept of art and its related aesthetic characteristics [2]. From the perspective of art orientation, the main purpose of research is to let students understand the essence of art, and to distinguish between beauty and ugliness. From the perspective of educational orientation, the purpose of research is to cultivate students' critical thinking, and to guide students to learn to appreciate and distinguish, so as to shape independent personality [1]. The theoretical proposition of this paper is how to innovate and develop school art education under the background of continuous renewal and change of art, so as not to be eliminated by the times, and to fully integrate contemporary art with school art education. Thus reflecting the value of school art education. Therefore, the school's art education has always adhered to the "basic view of flow", "understanding the connection between art and students' life world, and the special value of cultivating students' critical thinking ability [16, 17]. Cultivate students' critical thinking, guide students to learn to appreciate, learn to distinguish, so as to shape independent personality [3].

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```
# Include<stdio·h> Main (
) {int r[10]={3, 9, 34, -34, 55, 4, 85, 34, 75, 2};
    int i, j, t;
    for  (i =0;i＜9;i++ )
    for  (j =i+1;j＜10;j++  ＝  if  (r[i]<r[j]) {t=r[i] ;
r[i]=r[j]; r[j]=t }
    For ( i=0;i<15; i++) Printf ( “%5d”,r[i] );
    Getche();  }  # Include<stdio·h>
    Main () {  int r[10]= {3,9, 34, -34,  55,  4, 85, 34,
75, 2  } ; int i, j,  t; for  (i =0;i＜9;i++ )
    for  (j =i+1;j＜10;j++  ＝
    if (r[i]<r[j]) {t=r[i] ; r[i]=r[j];
     r[j]=t } For ( i=0;i<15; i++) Printf ( “%5d”,r[i] );
Getche();
    } main ( )
    { int a, b, c=0;
    int D=0;
    printf (“please input a, b, c”);
    scanf (“%d, %d, %d”, & a, &b, &c);
    D=b*b-4*a*c;
    x1= (-b+sqr (D))/2*a;
    x2= (-b+sqr (D))/2*a;
    if  (D＞0)printf (“x1=”, “x2=”, x1, x2);
    if  (D=0, )x=  -b/2*a;
    printf (“x= ”x);  }
```

2 The Purpose and Significance of the Research

This article attempts to explore the application methods of art design courses with the help of WeChat public account. Taking WeChat as a carrier, study how to make full use of the characteristics of WeChat (convenient information release, strong interaction, instant communication) to establish a harmonious relationship between teachers and students, so as to mobilize students' enthusiasm for learning. Integrate life with students, so that

students can experience stress-free learning, and learning is not limited to the classroom [4].

Creating a relaxed and pleasant learning atmosphere can further improve the teaching effect and improve the learning outcomes of students. Transform the teaching of art design courses from a single classroom to a diversified form [15].

3 Domestic Research and Results of Using Social Media to Assist Teaching

Through the research on the usage time of three domestic social media, we can find that the earliest used software is QQ. The application was developed in 1999, the blog appeared in 1997, put into use in 2005, and Sina Weibo only started to use in 2009. The author searches the literature with "blog, Weibo, QQ comparison" as the keywords, but there is no research literature; searches the literature library with the keywords "blog, Weibo, QQ teaching", but there is still no corresponding literature; "Blog Weibo" "Teaching" as the topic keyword and article title keyword search, there are 182 articles and 19 articles, of which half are the application of microblog in teaching; use "blog teaching", "microblog teaching" and "QQ teaching" Do a search to find more and more research articles [6].

4 Art Design Course System of Secondary Vocational Technical School

The first stage: the basic quality ability training stage of design majors. The basic quality ability training stage of the design major trains students to learn the quality of art. Sketch, color, plane composition, pattern, and three-dimensional composition courses are offered in the first and second semesters [7]. This course is a compulsory course and a basic course for design majors, which can cultivate students' aesthetics, mobilize students' interest in learning art, lay a solid theoretical foundation, and play a role in promoting future learning. Many studies have shown that the use of WeChat-assisted teaching can not only broaden students' horizons, but also further enhance students' enthusiasm for learning art and design courses, and improve students' interest in professional learning. So as to solve the problems of the art design course teaching content and social disconnection [5].

The second stage: Design professional design theory and basic drawing skills training stage. The design theory and basic drawing skills training stage of design majors cultivate professional theoretical ability and design software operation skills. The following courses are offered in the third and fourth semesters: architectural decoration materials and budget estimates, engineering drawing (CAD), preliminary construction, construction Mechanics, decorative construction, COREDRAW courses, which are design theory courses and design performance courses, and also lay a solid theoretical foundation for learning design thinking courses.

The third stage: the comprehensive quality training stage of design majors [14]. In layman's terms, it is the learning stage of the computational thinking course. In this stage, it is necessary to highlight the cultivation of students' comprehensive design ability. The following courses are arranged in the fifth, sixth, seventh and eighth semesters: Architectural Decoration Design, Public Space Design, Furniture Design and Furnishing, Environmental Landscape Design, PS, Architectural Decoration Equipment, Examination Appraisal Course Students need to learn accounting methods, complete design projects, Design project or scheme research (customer demand analysis), creative expression, design scheme production, construction drawing production, scheme rendering production, and complete the design with personal characteristics. Although the final results are quite impressive, there are still problems such as "insufficient depth and breadth of push content, learners distracted by mobile learning, imperfect platform function development, insufficient researcher development energy, and lack of WeChat public account promotion" [9]. These problems still need to be further solved and improved. The researcher also hopes that in the future research, the public platform of "Yiyanyixing" will be better designed to assist teaching more effectively, and also hope that more and more art design educators will actively study and explore the development of design education point. Taking WeChat as a carrier, study how to make full use of the characteristics of WeChat (convenient information release, strong interaction, instant communication) to establish a harmonious relationship between teachers and students, so as to mobilize students' enthusiasm for learning. Integrate life with students, so that students can experience stress-free learning, and learning is not limited to the classroom [8].

5 Yiyanyixing WeChat Public Account V2

Through the operation of the official account in the VI stage, the V2 stage determines the functional structure of the "Yiyanyixing" public platform [10]. The function module is set with the following functions: group sending function and the original automatic reply, custom menu function, newly added message management, voting management, appreciation function, original statement function, as shown in Fig. 1.

6 Use of "Yiyanyixing"

WeChat public account to assist teaching case - 16 square meters of interior design the 16 square design tasks in the 14 Decorative Class Construction and Interior Design courses. The implementation process is shown in Fig. 2.

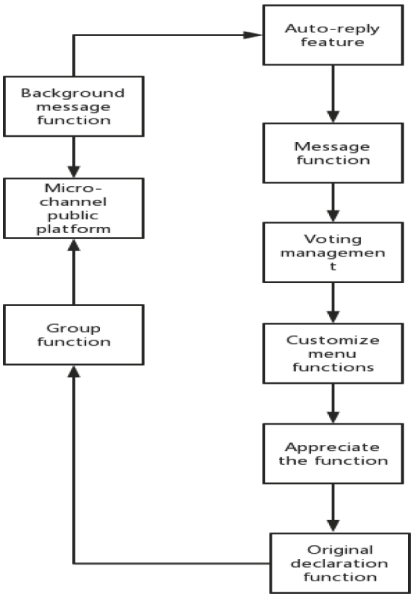

Fig. 1. Functional structure diagram of the public platform of "Yiyanyixing"

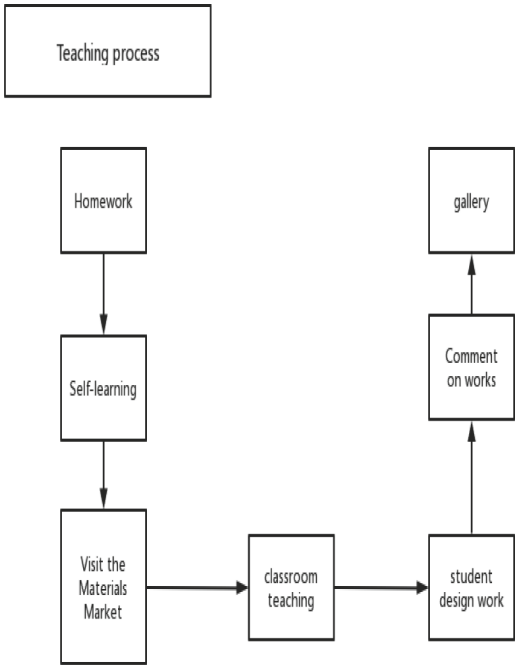

Fig. 2. Teaching implementation flow chart

7 Conclusion

In the research of this paper, by combining teaching of multiple professional courses and WeChat public accounts, it can be found that WeChat-assisted teaching can complete operations such as sharing materials, guiding teaching online, conducting evaluations, and publishing results. Suitable for design courses such as interior design, PS, etc. [12]. However, for basic professional courses, such as: sketching class and color class, the contribution of the WeChat public account is not large, and it still needs to be completed in the classroom. Therefore, it needs to be used after comparison [11].

There are still many deficiencies in the public platform functions of "Yiyanyixing", which need to be further improved [13]. Tencent is also gradually opening up the use of functions. For example, this year, it will fully open up the functions of message and appreciation. However, there are still many limitations, such as: the public platform can only link pictures and texts, the keyword reply note can only correspond to six pictures and texts, etc. There are still many places to improve the "Yiyanyixing" official account, which is also the part of this article. Researchers need to work harder.

The three research actions in this paper are all based on the art and art courses, and the design learning mode is implemented and applied, so as to verify the effect of WeChat-assisted teaching. Although the final results are quite impressive, there are still problems such as "insufficient depth and breadth of push content, learners distracted by mobile learning, imperfect platform function development, insufficient researcher development energy, and lack of WeChat public account promotion". These problems still need to be further solved and improved. The researcher also hopes that in the future research, the public platform of "Yiyanyixing" will be better designed to assist teaching more effectively, and also hope that more and more art design educators will actively study and explore the development of design education point. Pay attention to the update of educational technology, fully combine educational technology with curriculum teaching, collide with more and more educational innovations in ideas and applications, and cultivate more all-round development of high-quality skilled personnel. The educational data statistical analysis platform adopts .NET Framework (.NET Framework) for construction, database selection SQL Server 2008, the development platform mainly uses the C# language, the front end adopts Html page, Css style, combined with JavaScript Language, according to business needs and design requirements, and combined with the actual needs of the platform, choose a more general integrated development loop developed in Microsoft Visual Studio 2010 (Fig. 3).

$$M_{pk} = 0$$

$$= -\int_{\frac{\pi}{4}}^{\pi}(1-\sqrt{2}\cos\xi)P_t R\sin\xi d\xi(R\cos\xi - R\cos\varphi)$$

$$R^2(\frac{1}{12}+\frac{1}{2}\cos^2\varphi+\frac{\sqrt{2}}{6}\sin^2\varphi\cos\varphi-\frac{5\sqrt{2}}{12}\cos\varphi)$$

$$M_{pk} = -\frac{1}{12}P_t R^2 + \frac{1}{2\sqrt{2}}P_t R^2\cos\varphi$$

$$-\int_{\frac{\pi}{2}}^{\pi}(1+\sqrt{2}\cos\xi)P_t R\sin\xi d\xi(R\cos\xi - R\cos\varphi)$$

$$= -P_t R^2(\frac{1}{12}-\frac{1}{2\sqrt{2}}\cos\varphi+\frac{1}{2}\cos^2\varphi+\frac{\sqrt{2}}{6}\cos^3\varphi)$$

$$M_{pk} = \frac{1}{\sqrt{2}}\cos\varphi P_t R^2$$

Fig. 3. Calculation formula

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