Study on Thinking and Reform of Design Arts Course of Colleges and Universities under Core Literacy Concept—A Case of Plane Composition

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Abstract. In this paper, the course of plane composition is taken as an example to trigger the thinking of the art design course of colleges and universities under core literacy concept. By developing the core literacy and sorting out its definitions, it puts forwards the cultivation targets of the core literacy of design arts courses, namely, social responsibility, learning ability as well as personalized emotion. By rethinking the characteristics of the course of plane composition and teaching objects, the reform schemes are put forwards from four aspects of teaching contents, teaching modes, assignment tasks as well as teaching evaluations. When the teaching contents are implemented by “two increases and one decrease”, it also introduces multidisciplinary knowledge; the teaching mode is conducted by four steps including “evaluation, teaching, practice and guidance”, and moreover, it also combines with CBL, HPS, Seminar as well as task driven teaching method; the assignment tasks are deployed from four aspects including meticulous, interesting, practice as well as emotion; the teaching evaluation emphasizes the combination between self-evaluation and others evaluation, increasing the assessment of the daily assignments. By the reform on these four aspects, the cultivation target of the core literacy of design arts courses can be reached effectively.

Introduction

“Core literacy” was initially the theoretical basis and evaluation framework established by Organization for Economic Co-operation and Development (OECD) for “International Student Assessment Scheme” of OECD countries in 1997. In 2002, the “21st century skills partners association” of the United States put forward to effectively “21st century core literacy” which effectively transfers knowledge and skills; in 2006, European Parliament and European Council put forward the “for lifelong learning core literacy: Europe reference framework”; in 2013, Japanese national institute of education put forward that the “21st century ability” shall be constructed by “taking thinking ability as the core” and concurrently equipping with basic ability and practical ability these three layer of structural framework. In 2014, China started to enter the seminar of core literacy cultivation. In 2016, China issued the report of Core Literacy Development of Chinese Students (exposure draft), and in the report, it put forward that Chinese students developing core literacy refers to the necessary quality and key ability which shall be equipped by students and are suitable for lifelong development and social development needs, and by comprehensive, it shows as nine literacies, namely, social responsibility, national identity, international understanding; Humanistic deposits, scientific spirit as well as aesthetic taste; physical and mental health, learning to learn, as well as practice innovation[1].

According to the viewpoints on the cultivation of core literacy in the report, the author considers that the cultivation of the core literacy of the design arts courses shall develop the following aspects:

First, it shall value the cultivation of the sense of responsibility of students. The school education is a social process for students stepping towards the adult life. [2] second, value about the cultivation of students’ study ability. Learn to study, change from passive acceptance of knowledge to actively digging of knowledge, and lay a foundation for lifelong study. The most important thing of design arts courses is the cultivation of innovative thinking, respecting and tolerating the students’ personalities.

After confirming the above teaching thought, the author sets up the teaching goal of the basic course of Plane Composition in design arts courses into the cultivation of the core literacy of students.
Starting from the characteristics of discipline and basic situation of students of the course of Plane Composition, it thinks about the course teaching links and teaching evaluation systems and starts to implement a series of reform measures.

**Rethinking of the Basic Situation**

**The Teaching Questions Based on the Discipline Characteristics of Course of Plane Composition**

As the basic course and required course of design, plane composition is opened in the majors such as visual communication, product design, as well as environmental art design. The course mainly trains students’ transfer from concrete thinking to abstract thinking, and it is the bridge for students to enter into the professional study. The course of plane composition of the school is arranged in the first semester, a total of 4 weeks and 48 class hours. The course characteristics are tense teaching time, simple knowledge structure but strong practicality. We put forward the following teaching problems: how to make students learn about the methods and significance of plane composition within the limited time period? How to guide and stimulate students’ study enthusiasm on the basic knowledge? How to link the basic courses with the professional courses? How to improve students’ core literacy by the course study?

**The Teaching Issues Based on the Characteristics of Students**

The teaching objects of this course are the freshmen who basically have the psychological characteristics such as confident, strong self-esteem, as well as full of expectations and doubts about the professional direction. We put forward the following teaching issues for study: how to design the course units which students are interested in? How to tactfully link up plane composition with different major directions? How to make students establish the correct design thinking logics by courses? What kinds of course design links can improve students’ core literacy?

**The Course Reform Schemes**

The American scholar C. Rogers considered that the goal of education is to make students gain personal significance from it, ..., and the function of the courses is to provide every student with the experience which is beneficial for their free development and has intrinsic reward. This kind of theory regards students’ self-realization as a kind of basic demand, and therefore, the core of the courses is to integrate the emotion (emotions, attitudes, as well as values, etc.) with cognition (knowledge and intellectual skills and so on) and students’ actions. [3] By taking the cultivation of students’ core literacy as the teaching goals, the author puts forward the reform schemes from four aspects including classroom teaching contents, teaching modes, assignment tasks as well as teaching evaluation.

**Reform of Classroom Teaching Contents**

The author divides the contents of course into three modules including basic, application and comprehension. The basic module covers the composition of the basic composition element of point, line as well as surface, the formation of simplex and group and other contents; the application module includes imagine composition, study of composition method, composition of 2D and 3D spaces, as well as the application of the law of beauty in form; the comprehension module shows as the whole process from pattern to graph and to application. The author tries to reform the teaching contents. By “two increases and one decrease” on contents of course and the integration of multidisciplinary knowledge, it expands students’ horizon and opens students’ thinking, to improve the students’ core literacy.

“Two Increases and One Decrease” on the Basic Module. In the basic module, the traditional teaching mostly values about the recognition on tools, graphs, texture, as well as the application of the point, line and surface nature. As for the students who just entered the university, their professional
literacy is still in the initial stage, and their art horizon is still not open. Because of lacking the supports from the art theory and coupled with that there are no clear directions in the assignment tasks, students are easy to create the vague and general works without the theme thinking in the making process of point, line as well as surface, which violates “art is an intentional form” and makes students loss direction and loss the interest in study.

After reform: “two increases”, add in the study of design history and bibliographic retrieval in the basic part of the course. In class, add the introduction to design history and clarify the design context for students, show different design styles, open students’ professional horizon and guide students to find out their favorite art styles. After class, in virtue of the means such as new media, recommend students with the “Mooc” videos of related masters of the history. “One decrease”, because the course schedule is relatively tense, the author deletes the texture and graph contents. The tool familiarity with texture presentation can only be mastered and controlled after long-term practices. In the balance between teaching contents and method teaching, the author choses to take the method teaching as the emphasis for students to study the course of plane composition.

Integrate the Multidisciplinary Knowledge into Course Teaching Contents. The design art theorist Professor Yin Dingbang once said that “the modern design is pure art and is not the pure natural sciences and social sciences, but it is the comprehensive discipline which is highly crossed by multidisciplinary.”[4]As the design basic course, the course of plane composition not only reveals the inherent law of art design elements but also makes the emotional art design issues conceptualized, logical as well as scientific, and its own contains the multidisciplinary knowledge systems. In the process of narrating the point element, the author takes “SAS” virus as an example to guide students to observe from a new angle starting from medicine, biology, geography, physics, as well as chemistry, etc. When stating segmentation and proportion, the author integrates the knowledge of geometry, architecture and aesthetics, and guides students to learn about Fibonacci sequence and find out the beauty of mathematics.

Reform of the Classroom Teaching Modes

As for the phenomena existed in the traditional classrooms such as cramming education, low participation of students, insufficient classroom process supervision, and late classroom effect feedback, the author makes the students become the master of the classroom by changing the unit time and diversifyed teaching methods, increasing the interaction of the classroom teaching links.

The Unit Course is Conducted in Four Steps of “Evaluation, Teaching, Practice and Guidance”. The time of unit course of art category is basically set into four class hours, the first class gives priority to evaluation. The teaching objectives are a connecting link between the preceding and the following and showing students’ assignments. By self-presentation of the works, it makes students overcome the psychology of shy and gain confidence from it. The second class is mainly about teaching. During the process of migration of new and old knowledge, teachers guide students to “teach” the new course contents under different angles according to the existing knowledge reserves. Teachers serve as the roles of the guiders and suppliers of knowledge. The course contents are refined, striving to achieve one class one point. The third class gives priority to training. Students conduct the innovation thinking by taking the assignment tasks as the orientation, and teachers guide. This stage is mainly teachers enlightening students to enter the creation stage, and draw students’ cutting of course knowledge points. When teachers respect the students’ creativity, teachers implant the task of realism in virtue of the assignment tasks; the fourth class gives priority to guidance. Here guidance refers to students’ mutual communication during the production process, making students solidify the knowledge points by discussion; on the other hand, teachers dredge students when students are confused about the knowledge understanding by the observation on training.

For the design of four links including “evaluation, teaching, practice as well as guidance”, teachers improve students’ management ability on time by effectively distributing the teaching time, and improve students’ class listening efficiency, which is very helpful for cultivating students’ core
literacy. In addition, this kind of course time distribution can improve the drawbacks such as low participation degree of students, insufficient process supervising, and late class effect feedback of the traditional teaching modes.

Comprehensive Application of Multiple Teaching Modes Based on “Evaluation, Teaching, Practice and Guidance”. Aiming at the link of “evaluation”, besides constructing the exhibition platform for students, it also needs to combine with the teaching method of CBL. The core for implementing the CBL teaching method is the discussion teaching through guiding by students’ assignment presentation, taking the questions as the basis, the students as the subject, and leading by teachers. Reach the cultivation on students’ study initiative, critical thinking and innovation, and improve students’ ability of gaining design thinking and problem solving. Aiming at the link of “teaching”, it adopts the combination between HPS education and Seminar teaching method. Introducing HPS educational concept is mainly to include the contents related to design history, design philosophy and design sociology into the course, avoid the teaching methods of “valuing technology but ignoring theory” and “splitting the technology and theory” in the traditional design basic teaching, open up students’ professional horizon, and facilitate to establish the good design moral ethics when cultivating students’ humanistic literacy. Seminar teaching paradigm aims at cultivating students’ methods of scientific thinking and research technique, expanding students’ scope of knowledge, cultivating students to learn how to conduct research, consult materials, propose problems and solve the problem of ideas, methods and technical routes in accordance with the discussion topics, and making students learn about and master the viewpoints, methods and means of problems solving in modern scientific technology research.[5] Aiming at the link of “practice”, it mainly adopts the task driven teaching method. In accordance with the unit assignment tasks, it provides students with the situational experience of realistic problems, This kind of study mode is beneficial for students to cultivate the behavior habits of lifelong study. Aiming at the link of “guidance”, it is conducted by the teaching mode of the combination between group discussion and teacher teaching. After experiencing three links including “evaluation, teaching and practice”, “guidance” becomes the ultimate tackling link of the knowledge points. By the course study, students will gain the qualities and abilities such as basic knowledge quality, humanistic quality, exploratory self-learning ability as well as team communication ability. Advocating students to boldly put forward questions in the link of “guidance” is beneficial for solving the knowledge difficulties and the development of the creative thinking.

By setting up four links of “evaluation, teaching, practice and guidance” of teaching method and applying the targeted and diversified teaching methods, it changes the phenomenon of cramming education in the traditional class, greatly improves students’ participation, makes students become the master of the classroom, and lays a foundation for students’ cultivation of core literacy.

Reform of the Classroom Assignment Tasks

Here the mentioned tasks mainly refer to the assignment tasks assigned by teachers for students in the teaching process. The traditional assignment tasks are mainly according to the requirements of the teaching outline and the setting of the teaching goals, inclined to the theoretical application in contents. By practice, it is found that for such kind of assignment tasks, students’ interests and participation degree are not high, and they do assignment for doing assignments. The author tries to protocol the assignment tasks from four aspects including meticulous, interesting, practice as well as emotion.1) Meticulous, recording the process of the assignment tasks in detail. 2) Interesting, the assignment tasks shall fully fit with the students’ life. 3) Emotion, on the one hand, value about the students’ emotional changes, and reflect students’ emotional expression in assignment tasks. 4) Practice, on the one hand, it is understood as the strong practicability, and namely, the assignment tasks shall be associated with the students’ professional development, distinguishing the assignment tasks under the same teaching contents of different majors. By designing the practical assignment tasks, it makes plane composition become a true bridge, and makes students possess a more profound understanding on the future specialty development and social reality.
Reform of Classroom Teaching Evaluation

The reform of evaluation system is mainly conducted from the changes of the evaluation modes, evaluation scale as well as evaluation standard. The evaluation mode changes from the traditional teacher evaluation to the combination between self-evaluation and others evaluation, establishing the new evaluation mode; opening the evaluation mode is beneficial for students to find out their deficiencies in comparison and improving students’ awareness of competition. Adjust the evaluation proportion from traditionally valuing final assignment but ignoring the ordinary assignment to classroom performance including 10% attendance record grade, 40% ordinary assignment as well as 50% final assignment. The final assignment is the comprehensive application of the course contents, and it cannot comprehensively covering the course knowledge points. Changing the evaluation proportion can more comprehensively investigate the master degree on course. The evaluation standard also changes from the original valuing the application of knowledge points only to whether the design theme has practical significance, whether the design thinking process records are complete, and whether the knowledge point is clearly reflected, and meanwhile, it values more about the cultivation on students’ professional literacy and humanistic quality.

Conclusion

As for the course of plane composition under the guidance of the target of core literacy, the reform scheme is put forward from four aspects including teaching content, teaching method, assignment task as well as teaching evaluation. When the teaching contents are implemented by “two increases and one decrease”, it also introduces multidisciplinary knowledge; the teaching mode is conducted by four steps including “evaluation, teaching, practice and guidance”, and moreover, it also combines with CBL, HPS, Seminar as well as task driven teaching method; the assignment tasks are deployed from four aspects including meticulous, interesting, practice as well as emotion; the teaching evaluation emphasizes the combination between self-evaluation and others evaluation, increasing the assessment of the daily assignments. By the reform on these four aspects, the cultivation target of the core literacy of design arts courses can be reached effectively.

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References

[1] Anhui Basic Education Reform and Development Cooperative Innovation Center, Core quality of Chinese Students' Development (Draft for Comments), Research on Basic Education in Anhui Province, 14(2016).

[2] G.Q. Wu, Research on Design Education and Creativity Training Model, Art & Design, 09(2004)98-99.

[3] X.Y. Yang, The Paradox of Transcendence—Selection of Literary Theories on Xiangyang History Education, Xue Lin Publishing House, Shanghai, 2012, pp. 86.

[4] Y.B. Gu, Exploration and Practice of Innovative Artistic Design Talents Training Model, Art & Design, 11(2005)74-76.

[5] B. Chen, M. Huang, The Characteristics and Enlightenment of Seminar Teaching Paradigm in American Universities, Academic Forum, 08(2009)193-196.