

Research on the Effectiveness Increment Evaluation of College Students' Aesthetic Quality based on Aesthetic Education Course

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Abstract. Based on the analysis of the current status of aesthetic education course effectiveness evaluation, this paper constructs an evaluation model of aesthetic education course effectiveness appreciation for the improvement of college students' aesthetic literacy. This paper studies how to realize the effective unification of value-added evaluation and aesthetic education efficiency measurement and the scientific correlation between aesthetic education efficiency and the improvement of college students' aesthetic quality.

Keywords: Aesthetic education course;college students' aesthetic quality;efficiency increment evaluation.

1. Introduction

In recent years, the policy system of aesthetic education is becoming more and more perfect, and the importance and influence of aesthetic education are gradually recognized by the society. Compared with the gradual improvement of the policy system of aesthetic education there are still obvious bottlenecks in the reform of aesthetic education and teaching. Especially at the critical moment when the state vigorously carries out the action plan of education informationization 2.0, when the CPC Central Committee and The State Council issue the Overall Plan of Deepening the Reform of Education Evaluation in the New Era, the construction of aesthetic education effectiveness evaluation should be fully integrated into information technology and mobile Internet. We should deal with the relationship between fairness and development of aesthetic education efficiency evaluation, the relationship between aesthetic education spirit transmission and teaching organization, pay attention to teaching experience, and focus on the improvement of students' aesthetic quality. [1]It can be said that it is urgent to construct the effectiveness evaluation of aesthetic education courses which are scientific and meet the requirements of The Times.

2. The evaluation model of aesthetic quality of college students

2.1 Multi-level factors affecting the aesthetic quality of college students

Mr. CAI Yuanpei believes that "the equipment of aesthetic education can be divided into three aspects: school, family and society". All three aspects are very important and indispensable, and they are interrelated and influence each other. According to the survey of the students in our school, the data shows that the surveyed students think that 78% of their aesthetic education mainly comes from the school, 66% from the society and 52% from the family.

2.2 Target of aesthetic education and index system of aesthetic literacy

Aesthetic education is the education of enriching imagination and cultivating innovation consciousness, which can stimulate the vitality of innovation and creation. "Some of them come from the views on the content nature of the subject, some from the situation and trend of the whole society, and some from a set of philosophical propositions about school and a good life", while the aesthetic education goal of "improving students' aesthetic and humanistic quality" is expected by the international community. It is a comprehensive reflection of the needs of aesthetic education,

social development trend and "people's yearning for a better life". Professor Zhao Lingli, deputy director of the Aesthetic Education Professional Committee of the Chinese Education Society, proposed a three-tier structure of aesthetic education goal system and aesthetic education quality. Among them, for higher education, the goal of aesthetic education includes improving aesthetic quality, promoting the comprehensive and harmonious development of morality, intelligence, body, the United States and labor, promoting personality development, and promoting creativity development.

2.3 Dynamic system model of aesthetic education for the improvement of college students' aesthetic literacy

Through sorting out the goals and indicators of aesthetic education in college and reflecting on the restrictive factors, the paper summarizes the needs of aesthetic education objects (namely students receiving aesthetic education) as the center. The dynamic system model of aesthetic education is composed of seven basic elements, such as aesthetic education object, aesthetic education subject, aesthetic education content, aesthetic education subject-object relationship, curriculum objective, teaching design and teaching reform[2]. The improvement of college students' aesthetic quality is the result of various dynamics in society, school and family. Each driving force not only has its own relatively independent laws and unique functions, but also restricts and interacts with each other[3]. According to certain laws, it organically combines into an internal drive whole -- that is, dynamic system, which promotes the development of aesthetic education with a continuous resultant force. In the long process of the diversified development of aesthetic education, there are always some factors that play a universal role in the development of education in the theory of aesthetic education, which constitute the basic elements of the dynamic system, including: the object needs of aesthetic education, the content of aesthetic education, the relationship between the subject and object of aesthetic education, teaching objectives, teaching design, teaching reform. These factors have multi-dimensional and multi-directional cross-permeation relations, forming a multi-level three-dimensional network structure in the universal interaction.

3. The mechanism of value-added evaluation of aesthetic education courses

3.1 Investigation on influencing factors of curriculum effectiveness

3.1.1 School environmental factors

In the survey, students were asked to estimate the importance of factors influencing their effectiveness in learning Film and Television Appreciation. As can be seen from Table 2 below, more than 80% of the students think the following factors are very important: school level, school cultural atmosphere, school investment in aesthetic education, etc.

3.1.2 Family environmental factors

Family environment is a crucial factor for individual learning, absorption of new knowledge, and knowledge growth. A good family environment will directly affect students' learning performance. Family environment mainly includes factors such as family economic condition, parents' education level, family structure and parents' occupation.

3.1.3 Students' individual basic factors

Students' individual aesthetic quality and gender may have an important impact on the effectiveness of aesthetic education courses.

3.1.4 Teachers' ability factors

American scholar Saunders' research shows that from the perspective of promoting students' academic progress, there are significant differences between efficient teachers and inefficient

teachers. For this topic, that is, teachers' teaching ability has a very important impact on the improvement of students' aesthetic quality and the increment of the effectiveness of specific courses. In general, Teachers' working attitude, educational ability (including the ability to teach by word and example, fully understand students' ability, correctly evaluate students' ability, organize class activities, cultivate class collective ability, etc.), teaching ability (including the ability to master and use textbooks, write teaching plans, organize classroom teaching, stimulate students' interest, guide students' learning methods, and cultivate students' thinking ability Force, scientific research ability, etc.), these factors will have a profound impact on students.

3.2 Mathematical model of value-added evaluation of curriculum effectiveness

In this paper, the evaluation method of curriculum effectiveness adopts the value-added evaluation method, that is, the combination of qualitative and quantitative, and the quantitative evaluation. Compared with the traditional method of simply using average score to generate value-added, this project uses the method of multiple linear regression analysis to calculate value-added.

According to the needs of this research project, the following multiple linear model will be adopted:

$$\text{(Individual) Level 1: } Y_{ij} = \beta_{0j} + e_{ij} \quad (1)$$

$$\text{(Organization) Level 2: } \beta_{0j} = \gamma_{00} + \mu_{0j} \quad (2)$$

$$\text{Among them, } \begin{cases} u_{0j} \sim N(0, \sigma_{N0}^2) \\ e_{ij} \sim N(0, \sigma_e^2) \end{cases}$$

β_{0j} at the individual level is set to 0 for all units j . It is assumed that residuals R_{ij} at the individual level follow a normal distribution, with a mean of 0 and a variance of 9, i.e., $R_{ij} \sim N(0 \sim \sigma^2)$. At the group level, only one parameter, intercept β_{0j} , is used to predict the results of each unit at the individual level. In this case, β_{0j} is the average of the JTH unit. Therefore, by substituting method (2) into equation (1), we can get:

$$Y_{ij} = \ell_{00} + U_{0j} + R_{ij} \quad (3)$$

3.3 Implementation process of value-added evaluation of aesthetic education courses

3.3.1 Implementation indicators

There are four important indicators in the implementation of the value-added evaluation of aesthetic education curriculum effectiveness, which are pre-course test scores, post-course test scores, individual variables of students and school variables. The pre-test score and the post-test score of the student refer to the score of the student in the two tests before and after the beginning of the designated course. Pre-test results are usually the strongest predictor of students' post-test results. The post-test result is used as the dependent variable to investigate the teaching ability of the teachers of this course. Individual variables of students include class, grade, gender (aesthetic education needs, family economic conditions, parents' education level, etc.). School variables include school running level, school cultural atmosphere, school investment in aesthetic education, teachers' working attitude, teachers' educational ability, teachers' teaching ability, teachers' scientific research ability, etc.

3.3.2 Specific implementation process

The evaluation of the effectiveness of aesthetic education curriculum needs to go through three stages, which are the initial evaluation, the final evaluation and the value-added evaluation. The so-called initial evaluation refers to the performance of students before the commencement of the designated course; As the final evaluation refers to the students' achievement at the end of the designated course; The so-called value-added evaluation is to subtract the scores of the two stages

of the final evaluation and the initial evaluation, and the value obtained is "value-added", and then use the multiple linear model to substitute into the operation and statistical analysis, that is, to get the conclusion of the value-added evaluation of the effectiveness of the aesthetic education course.

3.3.3 Implementation guarantee

The validity of value-added evaluation results needs certain conditions to guarantee. The first is to ensure the reliability and validity of the collected data, and the second is to ensure that the difficulty coefficients of the initial evaluation and the final evaluation test items are the same.

4. Research conclusions

4.1 Stimulate the "precise" aesthetic education management efficiency of the school

From the level of school management, value-added evaluation can enable schools to focus on the improvement of students' aesthetic quality, and provide accurate information for schools from different levels through effective data, so as to accurately find the existing problems of school aesthetic education at the present stage, and effectively improve the management work, to show the net impact of school aesthetic education management on the improvement of students' aesthetic quality[4].

4.2 Promote the professional development of aesthetic education teachers and improve their teaching level

From the perspective of aesthetic education professional teachers, evaluation is not to prove, but to improve. Through the feedback of the quantitative results of value-added evaluation, it can stimulate teachers' work enthusiasm, mobilize their enthusiasm and creativity, and promote their continuous development, growth and improvement.

4.3 Guide students to focus on their own development and potential driven by aesthetic education

From the perspective of students receiving aesthetic education, value-added evaluation is better than simple examination results. As a measure to improve students' aesthetic quality, value-added evaluation is more indicative, more able to predict students' potential, and guide the direction of education.

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