

Integration of ICT in Culture Education of Vocational Colleges

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Abstract

The integration of information technology and cultural education is easy to be ignored, especially in vocational colleges. Firstly, this paper constructs a model of integrating ICT into cultural education by studying the actual situation of current vocational colleges. Secondly, based on 1000 different professional vocational colleges students' questionnaire investigation and analysis, found that most of students in vocational colleges that could improve the cultural quality, the proper use of information means has a correct outlook on life, values, correctly treat society, but at the same time, also found that the current vocational colleges culture education teachers' use of ICT capability is insufficient; Finally, we put forward the new classroom model of "student-centered, respect for life, based on life, harmonious development", so as to jointly improve the information quality and cultural quality of vocational college students.

Keywords

Education informatization; Culture Education; ICT.

1. Introduction

In October 2017, the Chinese government put forward that "building a strong country in education is the foundation project for the great rejuvenation of the Chinese nation. We must give priority to education, deepen education reform, and accelerate the modernization of education." The main task of education modernization is to promote the informationization of education [1], to realize the integration of ICT and various subjects [2], including the integration of cultural education curriculum[3]. Educational informationization is the condition and goal of educational development [4], while cultural education is the basis of education. The cultural attainment of college students shows their moral accomplishment, psychological quality, life attitude, aesthetic level, cultural taste and other colorful spiritual world. Under the background of education informatization talking about cultural education, and is the inevitable trend of the current vocational education reform development, is a global about vocational education systems engineering, and to alleviate the problems existing in current vocational education, such as backward teaching concept and mode, lay particular stress on education of utilitarianism and despise quality-oriented education has significant meaning [5].

2. Integration Model of ICT in Cultural Education

2.1 Principle and Process of Model Construction

Based on the ecological theory, this paper constructs the integration model of information and communication technology(ICT) in cultural education(figure 1). From the perspective of ecology, ICT and cultural education belong to different ecosystems, with their own internal material flow, energy flow and information flow[6]. Therefore, if the two are needed to be integrated, the interaction between the systems needs to be studied. Combined with the connotation of information quality and

cultural quality and dimensions, this paper defines the fusion model is defined as Skill (student information retrieval and information processing skills to master degree) and Ability (the Ability to use ICT to enhance the quality culture), Knowledge (including the student's ICT Knowledge and culture Knowledge), Self - cognition (including observation, analysis and evaluation of the students' Self, "Spirituality" (to use ICT to promote the spirit of Self, For example, Humility, Honesly, Compassion, Valor, etc.), Motivation (including the natural and persistent thoughts and preferences that guide, drive and determine college students' social behaviors), Concept (including students' social values, attitudes and self-impressions), and Emotion (students' emotional preference for cultural education under information means).

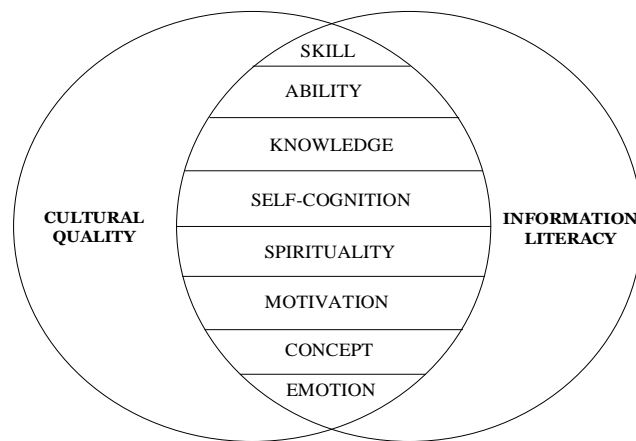


Fig. 1 Integration model of ICT in cultural education(ICTCE)

From the fusion of ecological system theory, for the college students' information literacy and cultural quality of ascension practice provides a new perspective and a more effective tool, it can not only meet the needs of college students' information literacy education and culture quality education requirements, constructing the integration model of ICT in the cultural education, for college students information quality and clear specification is on the characteristics of the humanities, and become the important basis of college students' comprehensive quality evaluation for questionnaire design and research of this paper provides a scientific theory to follow[7].

Table 1 ICTCE model dimensions and items

Dimensions	Items(e.g.)
Skill	When you encounter cultural knowledge problems, what channels do you usually take to get answers?
Ability	How to retrieve a scholar's paper on knowledge net?
Knowledge	Name ten famous calligraphers of ancient China?
Self-cognition	How do you feel about your self-confidence?
Spirituality	What should you do when your life is in adversity?
Motivation	What's your purpose on the Internet?
Concept	What do you think is the most important moral sentiment of your major?
Emotion	What is your attitude towards unfortunate events on the Internet?

2.2 Preliminary Investigation and Exploratory Factor Analysis

In the prediction test, exploratory factor analysis was conducted on the scales of various variables such as information literacy, cultural knowledge, humanistic spirit and humanistic accomplishment to determine the convergence validity of each scale. Before factor analysis, need to KMO questionnaire (Kaiser - Meyer - Olkin) and Bartlett sphere test, only the results passed the inspection, to determine the data of this study can make factor analysis, through the KMO and Bartlett's test after exploratory factor analysis was carried out on the questionnaire, when puts forward four elements, it is concluded that the cumulative percentage is 75.20%, there are 34 items of factor loading coefficient were greater than 0.5, and each question belongs only to a composition, have interpreted the component at the same time.

Table 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.804
Bartlett's Test of Sphericity	Approx.Chi-Square	1631.71
	df	236
	sig.	0.000

2.3 Questionnaire Quality Analysis

2.3.1 Distribution and Collection of Questionnaires

Before the study, the reference in the study of existing maturity scale pre survey questionnaire design, the preliminary design of the questionnaire on a small scale, mainly to professional background (teachers and students with research) and part of the college students a questionnaire, and according to the feedback, the structure of the questionnaire, expression of questions such as modification and adjustment, reduce the ambiguity, make questionnaire question more clear to understand. Research object for human industrial vocational and technical college information engineering institute, school of automotive engineering, school of mechanical engineering, electrical engineering institute, institute of economic management, industrial design and art college, business trade college students, a total of 1000 questionnaires, after the screening of recycling questionnaire, eliminate invalid questionnaires, 106 valid questionnaires, 894 valid recovery rate was 89.4%.

2.3.2 Reliability Test

Cronbach's α coefficient test is the most commonly used method for reliability test. SPSS 21.0 was used to conduct reliability test on the sample data of this survey, and Cronbach's $\alpha = 0.908$ was obtained, indicating high reliability of the scale, as shown in table 3.

Table 3 KMO and Bartlett's Test

Variables	Number of Items	Cronbach's α Coefficients
Information Literacy	16	0.908
Cultural Knowledge	11	0.923
Humanistic Spirit	10	0.895
Humanistic Accomplishment	8	0.906
Overall Reliability	45	0.908

In this paper, SPSS statistical analysis software was used to test the internal consistency of the scale in this study. Cronbach's α coefficients involved in the study were 0.908 (Information Literacy), 0.923

(Cultural Knowledge), 0.895 (Humanistic Spirit), 0.906 (Humanistic Accomplishment), and the overall reliability of the scale was 0.908, as shown in table 3. Therefore, Cronbach's alpha coefficients of all scales in this study are above 0.79, indicating that the scale in this study has good reliability.

2.4 Analysis of Questionnaire Results

2.4.1 Analysis of Survey Results on Information Literacy

College students have a good command of search engine and BBS, but they make use of literature database. Overall, 95% of students can master the general information retrieval method, but only 70% of students have completed the retrieval and collation of academic materials.

2.4.2 Analysis of Survey Results on Cultural Knowledge.

In terms of humanistic knowledge reserve of college students, it shows a distinct feature of "three more and three less", that is, college students master more and better knowledge of history, politics and geography, but not enough knowledge of literature classics and poems and lyrics (especially science and engineering students). On the whole, college students have a large knowledge reserve of history and lands, with an average correct rate of 89%, while for the general knowledge of literature, the average correct rate is only 61%.

2.4.3 Analysis of Survey Results on Humanistic Spirit.

According to the results of the humanistic spirit survey, 11% of the students have become CPC members in terms of spiritual beliefs. 35.2% of the students have submitted applications to join the party; 19.8% of the students have the desire to join the party, but have not submitted the application. Contemporary college students have a strong sense of social responsibility and mission, and a clear purpose of life. They are able to tolerate and understand each other in interpersonal communication, but 42.8% of them think that the communicative ability is not so good. On the whole, contemporary college students should continue to firmly deal with the spirit of social life, and further improve interpersonal skills.

2.4.4 Analysis of Survey Results on Humanistic Cultivation

The results of humanistic cultivation survey show that students are poor in daily behaviors, but good in social responsibility awareness and action, with correct professional ethics and strong sense of responsibility[8]. For example, in terms of daily behaviors, there are often uncivilized phenomena. Students do not use civilized language, and they do not pay attention to appearance and dress in public places. In terms of social responsibility, we can take the initiative to protect the social environment and save water and electricity resources. In terms of behavior towards others, most students can be generous and decent, and can respect the old and love the young. National security will affect the feelings of students, patriotic stand firm. Therefore, college students should strengthen their daily behavior cultivation, and make their daily language more civilized and their appearance and dress more appropriate.

It can be seen from the above that most contemporary vocational college students can use information means to improve their cultural literacy, have a correct outlook on life and values, and treat society, others and themselves correctly. It is worth noting that although most students have a strong sense of social responsibility, there are still a large number of students with uncivilized behavior. For the present situation of the humanity quality education and the humanities atmosphere and school courses in humanities class teaching content, teaching methods, teacher ratio etc. Now, about 38% of students think generally, 12% of the students are not satisfied with the status quo, so should vigorously carry out the cultural quality of online and offline education, improve higher vocational students' information quality and cultural quality[9].

3. Strategies for Integrating ICT into Cultural Education

It is a method and direction of teaching reform to integrate ICT means into cultural quality education in higher vocational colleges. In the research and practice of methods, methods and countermeasures, we should fully consider the background and the particularity of the group, according to the

characteristics of higher vocational education, and strive to build the characteristic classroom form of "student-oriented, respect for life, based on life, harmonious development".

Establish a Student-oriented Thought.

The purpose of education is to cultivate and develop students. According to the characteristics of students in higher vocational colleges, we put forward the central idea of respecting, cultivating and developing students' subjectivity in the cultural curriculum[10]. Respect students, respect students' individual character development and individual differences, in limited teaching time to discover students' interests, hobbies, markers, even is the ideal and the future of professional demands, the use of information means to do it according to their aptitude and improve the occasion, stimulate the learning enthusiasm of the students, improve the students' information literacy and cultural quality.

Make ICT Education into Daily Life

The emergence and development of computer science cannot be separated from the social environment and background. Various versions of ICT courses contain more or less humanistic knowledge and connotation, which come from and serve life. How to explore and refine the humanistic connotation in teaching materials and combine it with teaching content is the basis and key to integrate humanistic quality education into computer teaching[11]. In theory teaching into the history of computer development, people and major events, combined with current events to focus on the introduction of China's computer development technology and the status quo, imperceptibly cultivate students' sense of nationality and responsibility; In practice teaching, we should focus on cultivating students' sense of cooperation and teamwork, and provide more opportunities for innovation and autonomy, so as to integrate computer teaching into life and into the direction of art majors of vocational college students.

Improve Teachers' ICT skills

Teachers are the leaders of students. In the practice of deep integration of ICT and cultural quality education, teachers should constantly improve their own quality and professional level to meet the needs of education modernization and fundamentally improve teaching quality. From the thought clearly own teacher's status, in the practice insists on teaching and educating people and teaching by word and deed. Education is the foundation of the centenary plan. Education is a kind of influence, a kind of interaction and a process of "moistening things silently". "Integration" is not achieved overnight, but requires the patience, efforts and persistence of teachers for a long time. As teachers of public basic courses in art colleges and universities, in such an environment of "discovering beauty, pursuing beauty and creating beauty", we should try our best to expand our scope of knowledge, constantly update our knowledge structure and improve the level of educational theory. At the same time, more to establish a good image, with the idea of beauty to infiltrate and infect students.

4. Conclusion

Vocational colleges should attach great importance to humanistic quality education, integrate ICT into cultural education courses, achieve the unity of scientific spirit and humanistic quality, carry out elective courses of information quality and humanistic quality, and encourage college students to improve their personal cultivation and cultural quality. Create a good campus "hard environment", "soft environment" and "network environment", foil the harmonious campus cultural atmosphere.

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