Teaching of Employment Guidance Course in Colleges Based on Design Thinking Method

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Abstract—**Employment guidance course for college students is very practical. At present, many teaching methods are difficult to meet the actual needs of students. In order to design a career-guidance course for students to gain a strong sense of employment, we have completed the survey of enthusiasts, heavy users, extreme users and early users by means of Design Thinking method. In this paper, empathy is used to understand the interviewees' real feelings and needs, KANO model analysis method is adopted to evaluate creative ideas, curriculum reform prototype is established, and the means of comparative experimental analysis is adopted to test the effect of curriculum reform. It can be concluded that the Thinking method has many advantages; it is practical in educational reform and has important practical significance.**

Keywords—Sense of gain; Design Thinking; Empathy; KANO model

I. INTRODUCTION

According to the development of society, the change of employment situation and the orientation of students' career development, college students' career guidance course aims to help guide students to understand the basic law of career development, understand and explore their own professional interests and values, and master the basic theory and decision-making methods of career development, so as to promote the realization of the college students better self-development [1].

Through the literature research, the following problems exist in employment guidance courses of colleges and universities.

A. Lack of teaching staff and great difference in teaching contents

At present, there is a serious imbalance between the number of relevant certificates obtained by university teachers and the number of students, such as career instructors and career planners. Most universities offer career guidance courses in their junior year, and there is a great demand for teachers with professional backgrounds. However, schools generally arrange courses for school administrative teachers, and the size of natural classes varies. Because of the inconsistencies in the individual working hours, professional backgrounds, students' professional and administrative work intensity, teachers do not have enough time to study the latest policies, and most of them do not form a special learning and training system. At the same time, most of them go directly to school to work in order to enter the society and have their own employment practice. In addition, most schools lack systematic teaching and Research on employment guidance, and have not formed a unified teaching mode of employment guidance. As a result, the content of employment guidance teaching varies greatly, the quality of teaching varies, and students' evaluation is not high.

B. The content of the course is broad and its practicability is not strong

"Employment Guidance" covers employment situation analysis, personal career development tendency test, employment policy interpretation, introduction of social human resources security system, special explanation of entrepreneurship policy, introduction of employment prospects in professional fields, preparation methods for further study; And resume production, online job hunting skills, interview etiquette, interview skills, and interview. Psychology,

collection and application of employment information, explanation of relevant cases, exchange of experience among graduates, key assistance for employment difficulties, etc. In 2007, the General Office of the Ministry of Education issued "The Teaching Requirements for College Students' Career Development and Employment Guidance Courses". It advocated that the College Students' Employment Guidance Course should be added since 2008, and suggested that the course should be arranged at least 38 hours. However, according to the results of relevant surveys, less than 40% of the school hours set by colleges and universities meet this standard. It can be seen that although most colleges and universities regard the employment guidance course as a compulsory subject, the actual effective teaching time is not guaranteed, which greatly reduces the learning quality of the course [2]. Students generally reflected that the practicality of the course was not strong and students' sense of learning was not strong.

C. *The teaching form is monotonous and lacks curriculum innovation*

The form of teaching needs to be designed according to the content of the course. Most of the content of "Employment Guidance" needs students' participation, interaction with teachers, and also needs to enhance practicality. At present, most of the teaching teachers are counselors and political cadres, lacking systematic learning of teaching methods, combining with their own employment practice, they can only choose the traditional teaching mode, and cannot provide individualized guidance to students.

Colleges and universities attach great importance to the course of employment guidance, but the practicality of the course is very strong. At present, the teaching content provided by many colleges and universities is difficult to meet the actual needs of students. Especially for graduates, there is a lack of systematic guidance in the pre-job-hunting preparation stage, and refined and practical guidance is even less. It is difficult for graduates to achieve high quality employment in the course of choosing jobs.

II. MATERIALS AND METHODS

The Design Thinking education concept comes from the Design Thinking viewpoint in the field of industrial Design. Design Thinking refers to the Thinking mode that designers should have when dealing with Design problems. Based on the preparation of understanding customer needs, systematically think, seek and apply feasible technologies to relevant product design, and then transform it into realistic customer value and market opportunity through corresponding business model [3][4]. Design thinking is a set of methods to deeply observe and integrate cross-domain analysis tools from the perspective of empathy, to obtain customer insights and to design products or services that move and delight customers [5][6]. Design thinking is seen as a pragmatic practice, it provides the idea and analysis model, the framework of an integrated into a system of concepts, processes and methodology, is a more attractive place, the thinking is not exclusive in design, but all

is engaged in the creative industry, looking for new ideas and new ideas will do.

1) Empathize. To confirm the design theme, to determine the concept of innovative value, to identify the interviewees, interviews and observations.

2) Define. Through the interview/observation data shared in Empathize stage, the data story mosaic is carried out to confirm insights and identify design ideas, and to define value innovation opportunities and gaps.

3) Ideate. Start by abstracting and simulating, brainstorm, collect more ideas, and find breakthroughs by thinking across boundaries.

4) Prototype. By making prototypes, ideas, concepts and solutions can be seen, heard and touched to form an educational system.

5) Test. Through experimental comparison, continuous modification and optimization, re-understanding of customer needs, customer experience records are collated to form continuous improvement data.

III. RESULTS AND DISCUSSION

A. *Empathizing*

According to the "The Teaching Requirements for College Students' Career Development and Employment Guidance Courses" issued by the general office of the ministry of education, the design theme is determined as follows.

Definition of success. Understand their career interests, career values; understand their career matching; have access to career related channels; have the skills to win career related expression; have the ability to career planning.

Measure mode. Realize the test of professional interest and value, actively obtain career-related information, and have multiple career intentions.

Through to the employment guidance course enthusiasts (of course highly attention, attention to detail is), heavy users (everyday use of the service workers), extreme users (users under special conditions), early adopters (in the early stage of product development) began to use this kind of product for the interview.

In this paper, audiophiles were selected as teachers in the employment guidance center of colleges and universities, and the heavy users are seniors (those who have completed the course). The extreme users are students who have taken the postgraduate entrance examination, and the early users are students who have graduated for one year.

By sorting out the interview transcripts, AEIOU (activity, environment, interaction, object, and user) was adopted for classification, and empathy was used to enable people to feel in their own place. The interview and observation were translated into insights to form problems and opinions related to the course (See table 1).

TABLE I. INTERVIEW AND RECORDING ADOPTED BY AEIOU

Basic data of respondents	Recording and finishing
Enthusiasts (2 teachers from school employment guidance center)	Students do not understand the needs of enterprise talents. Many students begin to create resumes only when they are looking for jobs.; Students have never participated in job fairs, so it is inevitable that the first few meetings will hit a wall.
Heavy users (4 graduates in the class of 2016)	After class, finding everything is not ready. Finding a job is useless at all. We should make less analysis of the situation and have more practical opinions, so that we can best use it in actual combat.
Extreme users (2016 postgraduate 2 students)	I do not find a job; the content of the course has nothing to do with myself. Resume and interview are helpful to me;
Early users (3 graduates of 2015)	Prepare your resume well, buy your formal clothes, take photos and introduce yourself in advance. It's better to have different resumes. I am not clear about my situation. I have settled my work in a hurry and I don't know what I want. Students should be allowed to take part in several recruitment fairs in advance. The curriculum should not be too much theory, more practice, can do simulation recruitment.

B. Defining

First, in the previous step, the interview data of each person was sorted out into a process, some actions or events through interviewing enthusiasts, heavy users, extreme users and early users, and then restored through vivid stories.

Secondly, the data stories of four people were jigsaw with empathy, and they used empathy to infer their real thoughts and understand their desires, pain and needs (See table 2).

Finally, found the common characteristics among the four groups of data, according to the common characteristics of causality, relevance and so on, found out the design points, and seek innovation opportunities and gaps.

TABLE II. STDF ANALYSIS ON SIMPLIFIED EMPATHY MAP

SAY	THINK
Students do not understand the needs of enterprise talents. After class, finding everything is not ready. Finding a job is useless at all. We should make less analysis of the situation and have more practical opinions, so that we can best use it in actual combat. Resume and interview are helpful to me; Prepare your resume well, buy your formal clothes, take photos and introduce yourself in advance. It's better to have different resumes. I am not clear about my situation. I have settled my work in a hurry and I don't know what I want. The curriculum should not be too much theory, more practice, can do simulation recruitment.	Students want to know the business, but the teachers do not understand the business. Students did not feel the sense of acquisition; it is better to practice more. The situation is clear to us. The Internet is everywhere. It would be better if we could get some dry goods to meet our actual needs. Resume and interview skills are helpful in finding jobs, and you can do more guidance. Make every preparation and make a brief introduction to different employment requirements according to the plan. Understanding oneself is very important. Panic is taboo. One should know oneself and the other and know oneself clearly so as to make a better choice. Be tired of preaching, it can simulate the future and improve them.

DO	FEEL
I do not find a job, and the content of the course has nothing to do with myself. Students have never participated in the job fairs, and they will inevitably encounter the first few meetings. Many students begin to create resumes only when they are looking for jobs. Students should take part in several job fairs in advance.	I have nothing to do with me, I do not care about it unless I take the postgraduate entrance examination can also be used; Students will feel ashamed and lose confidence when they run into a wall for the first time, but this is a necessary process. Temporary cramming anxiety, not fully prepared self-confidence. Let students feel anxiety and self confidence in finding jobs early, and find self-confidence.

C. Making Innovation

First, brainstorming and TRIZ are used to generate a lot of creative ideas, and to organize and merge them to form the final ideas.

The KANO model analysis method is used again to evaluate innovative ideas.

There are six demands in KANO analysis, which are: the must-be product must have certain functions or services,

which are taken for granted. If such functions or services are available, users will not be satisfied, but if they are not, users will be very dissatisfied; O (One-dimensional). It's better for one-dimensional products to have this feature, but it doesn't have to be. If it does, user satisfaction will be higher; A (Attractive). The function of Attractive needs can make users feel pleasantly surprised. If it is available, users will be satisfied, but if it is not, it will not show obvious dissatisfaction. I Indifferent users are Indifferent to this factor; R (Reverse) does not need or even object to the function of Reverse; Q (Questionable) is the result of a doubt that is not likely to occur and is likely to be an error in the form of an answer. Priority: M>O>A>I, the detail are shown in table 3, table 4 and table 5.

TABLE III   COLLECT THE EVALUATION OF EACH CREATIVE IDEA ACCORDING TO THE QUALITY EVALUATION

How would you feel if (none) had this feature				
Adore (A)	Ought to (O)	Just as well (J)	Tolerable (T)	Dislike (D)

TABLE IV   TABLE 4 CONTROL CORRESPONDING RESULTS ACCORDING TO THE CLASSIFICATION OF KANO EVALUATION RESULTS

Product/service requirements		Negative (none)				
Positive (yes)	Scale	A	O	J	T	D
	A	Q	A	A	A	O
	O	R	I	I	I	M
	J	R	I	I	I	M
	T	R	I	I	I	M
	D	R	R	R	R	Q

TABLE V   THE EVALUATION RESULTS OF INNOVATIVE IDEAS AND QUALITY CHARACTERISTICS

Innovative ideas	A	O	M	I	R	Q	Result
Set up self-exploration content	60%	10%	30%	0%	0	0	A
Resume production work instruction	10%	10%	60%	10%	10%	0	M
Conducting interview skills training	10%	10%	70%	10%	0	0	M
Conducting simulation recruitment	0	70%	30%	0	0	0	O
Network job search skills training	70%	10%	10%	10%	0	0	A
Developing employment and graduation related points	0	10%	20%	50%	20%	0	I

D. Prototype

According to the results of step three evaluations of innovative ideas, combined with the requirements of the employment guidance class hours, the employment guidance curriculum is decomposed (see table 6).

TABLE VI   THE DECOMPOSITION OF EMPLOYMENT GUIDANCE CURRICULUM

Number	Chapter content	Allocation of hours		
		Lecture	*Experiment*	*Else*
1	Self-exploration	2	1	
2	Resume making	2	2	
3	Interview skills	2	2	
4	Network job search skills	2		
5	Employment and graduation related knowledge	1		
6	Simulated recruitment		2	
Summation		9	7	
Keep in reserve				
Total		16		

E. Test

According to the relevant requirements of the control experiment, the relevant specialties of the same subject were selected as the reference group. The experimental group was taught according to the new curriculum arrangement. The reference group was taught mainly according to the original main theory. The experiment was conducted from March to May 2017. The data of the two groups of subjects were collected and the evaluation data were collected from September to December 2017. Monthly employment statistics were conducted (see table 7).

TABLE VII   EMPLOYMENT STATISTICS ANALYSIS BETWEEN 2 GROUPS

Data index	Experience group	Reference group
Course satisfaction (%)	96%	85%
Average number of job opportunities per person (part)	3.4	1.2
Employment rate as of November (%)	86%	68%
Student satisfaction with successful employment (%)	90%	72%

IV. CONCLUSIONS

Design Thinking takes users as the center, breaks the existing restrictions, insists on creative attitude, fully uses the principle of empathy interpersonal relationship, and designs products or services that make users moved.

The selection of respondents is an important part of the research. This paper selected four types of respondents, including enthusiasts, heavy users, Extreme users and early users. Although the amount of survey is relatively small, they are representative, and the pertinence, accuracy, validity and reliability of the survey are very high.

The method used in the survey is interview, which is different from the questionnaire. The investigator writes the outline in advance, and the interviewee can clearly observe the mood changes of interviewees, which is of great help for the insight of empathy in the later stage. At the same time, the recorder can analyze the real thoughts and needs of interviewees in detail by sorting out verbatim manuscripts, and finally collect data with high validity and reliability.

The selection of innovative ideas adopts the KANO model analysis method to let users evaluate the creative design. According to the collected data, the optimal ranking of all creative ideas is formed, and finally, the necessary, expected and attractive creative ideas are selected.

This article is intended to design a strong career guidance course for students. The value of innovation lies in practicality and sense of acquisition. According to the five steps of design thinking, this paper has completed the investigation, insight, creation, evaluation, simulation and test. The effect of curriculum reform is obvious. Students have a full understanding of their professional interests, professional values, and strong ability to obtain career-related information, comprehensive display of personal qualities, and have multiple jobs. Job intention has achieved the yardstick of curriculum design.

Design Thinking plays an obvious role in the fields of design and engineering as well as business and management. This paper establishes a set of complete curriculum reform methods by using Design Thinking method, focusing on students, reflecting the value of sense of acquisition, and taking the effect of after-school practice as the basis of curriculum evaluation. It is believed that with the application of Design Thinking method in the reform of education and teaching, the quality of higher education in China will be better and better.

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