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Abstract: Financial literacy plays a positive role in the sound development of the comprehensive ability of college students, including students of Business English major, who, in turn, can benefit from the penetration of financial literacy education into cross-border electronic-commerce (hereinafter referred to as CBEC) course teaching to form appropriate financial knowledge, skills and values related to CBEC industry. Labor market and opportunity cost of career, the two closely linked financial concepts, are of great importance to students of Business English major who are about to graduate from school and enter global labor market and are the initial priorities of CBEC financial literacy education. Through the interactive teaching of CBEC types in the course of Introduction to Cross-border Electronic-commerce, students of Business English major are supposed to know the knowledge of CBEC labor market, master the skills of analyzing opportunity cost of career in CBEC and shape proper values for choosing careers in CBEC industry.

Keywords: Interactive Teaching, Cross-border Electronic-commerce, Financial Literacy Education, Labor Market, Opportunity Cost of Career

1. Introduction

Our highly risky society has increased people’s financial responsibility. And increasing personal financial responsibility has increased the value of financial literacy in recent decades[1]. However, at present, college students' deficit spending, fashion consumption, impulse consumption, and other behaviors rise one after another. What is worse, they often get trapped in financial fraud. In addition, many college students are confused about their future careers or simply think that jobs with high salaries are what one should solely seek in job hunting. In short, quite a few students in colleges and universities, including students of Business English major, are suffering a low-level financial awareness or literacy. A solid financial literacy helps people with personal money management, including everyday financial behaviors (i.e., spending and budgeting) as well as long-term financial decisions, such as saving, investing, and borrowing. Additionally, enhanced financial knowledge improves individuals' abilities to detect fraudulent practices and deter fraud [2]. Hence, it is of great urgency for colleges and universities to unfold financial literacy education for students.

2. Introduction to Financial Literacy Education

2.1 History of Financial Literacy Education

2.1.1 Ancient Financial Literacy Education

Financial literacy education has a long history. As far as the author is concerned, financial literacy education can be traced back to the creation of financial thoughts in our human history.

In western countries, for example, Adam Smith's theory of labor value, the “invisible hand” theory of real economy characteristics and nature liberalism, and David Ricardo's theory of comparative advantage, the idea that each country should concentrate on producing and exporting products with
comparative advantages, are the important theoretical sources of ancient western financial literacy education. In addition, Keynes's general theory of employment, interest, and money, Marshall's economic principles, Samuelson's economic thought in the United States, Buchanan's "public choice" theory and French Walras's theory of subjective value (utility) and marginal revolution have a great influence on the formation of contemporary western financial literacy.

In ancient China, one of the important contents of financial literacy education is Confucius’ “abiding by etiquette to ease the poor” and “enriching oneself with righteousness”. Other financial thoughts such as “proper words for financial management, banning people as non-righteousness” and the idea that “a gentleman loves money and takes it properly” in the Book of Changes and Commentaries, to name just a few, constitute the important content of financial literacy education.

2.1.2 Modern Financial Literacy Education

In modern times, financial literacy education is considered by the governing bodies in many countries, along with initiatives by the Organization for Economic Co-operation and Development, because it is accepted as an important skill in the 21st century [3]. In 1940, the United States began to implement the infiltration education of economics education and personal financial literacy education in primary and secondary schools. In the United Kingdom, the Financial Services Authority established the “Financial Competence Steering Committee” in 2003, which launched the national financial literacy comprehensive plan to work with governments, financial sectors, company representatives, consumers, associations, relevant departments, etc., to promote financial literacy education; in Australia, financial literacy was integrated into the national curriculum and National Framework for Consumer and Financial Literacy was introduced in 2005 [4]. Canada incorporated financial literacy education into the nationwide teaching system and established a 5-year Financial Literacy Partnership Fund of $10 million for financial assistance; Thailand, one of four Asian Tigers, also launched a “financial literacy education” project in 2013. In 2017, it put forward the “Policy of Promoting the Bank Deposit Business System” and formulated its national financial literacy education plan [5].

In China, as early as 2006, the Ministry of Education and the China Insurance Regulatory Commission jointly issued the Guiding Opinions on Strengthening School Insurance Education and then issued relevant policy documents from different perspectives such as insurance education, financial knowledge popularization, and financial consumer publicity and education [6]. In 2018, China Collaborative Innovation Center for Financial Literacy Education developed China’s Standard Framework for Financial Literacy Education to provide an action guide for financial literacy education in all academic periods. Relevant schools also practised financial literacy education under the guidance of the standard framework. Financial literacy education first appeared in Shanghai, Guangzhou, and other places, mainly aimed at the education methods of primary and secondary schools, and made great achievements [7].

2.2 Definition of Financial Literacy Education

The definition of financial literacy education cannot be separated from the notion of financial literacy. Financial literacy represents the knowledge necessary to manage one’s financial affairs in a way that contributes to overall well-being [8]. Financial literacy is a life skill that, in theory, is highly related to the well-being of individuals and companies [9]. Financial literacy is a proxy for rational decision-making instruments [10]. All these definitions emphasize the knowledge and skill aspect of financial literacy. However, rather than being only about knowledge and skills, financial literacy is also about the emotional ability toward one’s financial affairs. Just as OECD (2012) stated, financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation, and confidence to apply such knowledge and understanding to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life [11]. All in all, financial literacy is the nurtured quality encapsulating knowledge, ability, idea, belief, etc. related to finance. That is to say, rather than being born with it, students need to be taught or educated to possess financial literacy. This is the basis on which what is financial literacy education.

China Financial Literacy Education Standards Research Group (2018) also put forward the definition of financial literacy education with the concept of financial literacy. Financial literacy is the integration of economic knowledge, financial skills, wealth management, life belief, and other basic accomplishments necessary for individual social life, while financial literacy education means the organized, planned, and quality implementation of basic cultivation activities related to financial life to
individuals by various entities [12]. The implementation of financial literacy education by different cultivators can often be undergone by taking the consideration of students’ level, subjects or disciplines, national development, economic society, etc.

2.3 Methods of Financial Literacy Education

In terms of methods, financial literacy education is carried out so far mainly in two ways. One is short-term organized and planned school or social activities or other training programs. For example, to establish and cultivate college students’ financial literacy, various colleges and universities have launched relatively diversified activities, such as holding financial security publicity meetings and financial security theme class meetings, etc., and there are other relatively varied measures, such as using the exemplary role of class cadres in good financial affairs and the warning role of financial fraud cases to promote the popularization and development of financial literacy in colleges and universities. These, of course, helps to improve the development of financial literacy education.

The other method of financial literacy education is long teaching. Long-term teaching is often done by merging financial literacy education into subject teaching in primary and secondary schools or course teaching in colleges and universities. For instance, one approach to incorporating financial literacy into educational curricula is the integration of it into closely related courses such as mathematics [13]. This kind of subject or course incorporation accompanies students’ subject or discipline learning for a relatively longer period of time, is closely connected with subjects or disciplines and is more often than not deeper, more systematic, comprehensive and sustainable. This paper, taking labor market and opportunity cost of career as an example, is to explore how to carry out interactive teaching of CBEC financial literacy education in the course of Introduction to CBEC for students of Business English major.

3. CBEC Financial Literacy Education

3.1 The Course for CBEC Financial Literacy Education

The comprehensive CBEC financial literacy education can be done through the course of Introduction to Cross-border Electronic-commerce, which is one of the Business English major courses stipulated in China’s National Standards for the Teaching Quality of Foreign Language Undergraduate Courses in Colleges and Universities. The course covers main concepts of CBEC, CBEC business models and revenue models, electronic payment technology, online laws, and other knowledge and skills, which is conducive to the overall integration of financial literacy education into CBEC course teaching for Business English major and to the comprehensive exploring of the mechanism of CBEC financial literacy education. It finally can directly promote the formation path of financial literacy for students in this major in the digital era, and can also provide a professional and course supplement to financial literacy education for Business English major.

3.2 Dimensions and Objectives of CBEC Financial Literacy Education

The content of financial literacy education is directed to financial and economic disciplines, including Economics, Finance, Accounting, Business Administration, Insurance, International Trade, Industrial Economics, and so on. China, to standardize financial literacy education, proposed five education dimensions in China Financial Literacy Education Standard Framework. These 5 dimensions are income and consumption, savings and investment, risk and insurance, system and environment, wealth and life. All these five dimensions aim to reach 3 objectives, objectives of financial knowledge, financial skills, and financial values. There is no doubt that this framework offers a reference for schools, organizations as well as individual teachers in China, even in the world, to launch financial education and other related activities. And the study of interactive teaching of financial literacy education in Introduction to Cross-border Electronic commerce in this paper will also be conducted under this framework.

3.3 Teaching Methods for CBEC Financial Literacy Education

As is mentioned above, comprehensive financial literacy education can be based on the course of Introduction to Cross-border Electronic-course and demands the combination of knowledge, skills, and values, which is the internal requirement of interactive teaching. As its name implies, the keyword of
interactive teaching is “interaction”, which means “the collaborative exchange of thoughts, feelings, or ideas between two or more people resulting in a reciprocal effect on each other” [14]. The “interaction” in interactive teaching excavates the language acquisition mechanism based on students’ cognition, affection, and skills through formulating cognitive, affective, and linguistic teaching principles, which correspond to the three objectives (knowledge, skills, and values) of financial literacy education.

What is more, from a macro point of view of interactive teaching, teaching analysis of CBEC financial literacy education can be explored from four contexts: student age, language proficiency, social environment, and school environment, to form the integration mechanism of CBEC financial literacy education. Hence, it is safe to say that interactive teaching matches well with financial literacy education in a sense. The whole map of interactive teaching of CBEC financial literacy education is shown in Figure 1.

**Figure 1: The Map of Interactive Teaching of CBEC Financial Literacy Education**

4. Interactive Teaching of Labor Market and Opportunity Cost of Career in CBEC

4.1. Labor Market and Opportunity Cost of Career

Labor market and opportunity cost of career comprise two key concepts in 3 objectives of Structure 1 (Labor and Personal Income) of the first dimension of China Financial Literacy Education Standard Framework: Income and Consumption. The position of labor market and opportunity cost of career in Labor and Personal Income is shown in Table 1.

**Table 1: Labor Market and Opportunity Cost of Career in Labor and Personal Income**

<table>
<thead>
<tr>
<th>Labor Market and Opportunity Cost of Career in Labor and Personal Income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge objective</strong></td>
</tr>
<tr>
<td>Understand the division of the labor market and its influence on income</td>
</tr>
<tr>
<td>The choice and opportunity cost of career</td>
</tr>
<tr>
<td>Unemployment and its types and problems</td>
</tr>
<tr>
<td>The definition of entrepreneurship and its condition</td>
</tr>
<tr>
<td><strong>Skill objective</strong></td>
</tr>
<tr>
<td>Being able to analyze the economic plan through crowdsources</td>
</tr>
<tr>
<td>Being able to analyze and calculate the opportunity cost of different careers</td>
</tr>
<tr>
<td>Being able to design market surveys and write starting up a plan</td>
</tr>
<tr>
<td><strong>Values objective</strong></td>
</tr>
<tr>
<td>Education is conducive to improving the competence in labor market and income level.</td>
</tr>
<tr>
<td>Opportunity cost should be compared from employment, cause, personal specialty, and hobbies.</td>
</tr>
<tr>
<td>One should adapt to market change and heighten competitive advantages to reduce structural unemployment.</td>
</tr>
</tbody>
</table>

As can be seen from the above table, labor market and opportunity cost of career, the two closely related concepts, are not only useful to build financial knowledge of labor and personal income for students, but also help to cultivate students’ skills towards career choices after their graduation and can even answer many problems for students’ present various task choices. What is even more important is
that it aids to shape students’ financial value that besides money, education, cause, personal specialties, and hobbies are also critical factors for their consideration of future careers. It is thus of great significance to merge labor market and opportunity cost of career in CBEC course teaching.

4.2. Interactive Teaching of CBEC Labor Market and Opportunity Cost of Career

4.2.1. Overall Teaching Analysis

As is mentioned above, the interactive teaching of the CBEC labor market and opportunity cost of career can be analyzed from student age, language proficiency, school environment, and social environment. In terms of student age, learners of Business English major’s course of Introduction to Cross-border Electronic-commerce are Senior students, adults at the age of 21 or 22. It is not hard for them to understand abstract concepts such as labor market and opportunity cost of career, which suggests the feasibility of explicit teaching of the two concepts. In terms of language proficiency, Senior students of Business English major have quite a good command of English and are supposed to be able to engage themselves in English in the group discussion and writing assignments, two representative activities of the interactive teaching. In terms of social environment and school environment, although there is still very fierce competition in global labor market of CBEC, there are still abundant chances of employment. Therefore, on the one hand, those students who are going to graduate and hunt for jobs the next year must know something about labor market and opportunity cost of career. On the other hand, it is very important for them not to follow suit to find high-income jobs but to be composed to go in for some careers or jobs that are of their interests and specialties. In the meantime, universities and colleges are full of many part-time jobs or activities, which also necessitates the consideration of both physical benefits and psychological well-being. So financial knowledge, skills and values should be well balanced in the interactive teaching of CBEC labor market and opportunity cost of career for students of Business English major.

4.2.2. Teaching Steps

Step 1: Lead-in: Warming up.

At the beginning of the class, to arouse students’ interest, thinking, and interaction, the teacher can start by simply showing students several authentic pictures of home pages of CBEC companies and ask them what companies they are and what major customers they have. These 8 home pages are from Dell.com, Alibaba.com, GE.com, UC International College.com, AliExpress.com, Tmall Global.com, ebay.com, and WCPE.com. Each of them represents one kind of CBEC. The teaching step of warming is shown in Figure 2.

![Figure 2: Teaching Slide 1: Warming up](image)

To give students a clearer view of these home pages, the teacher can show students these pictures separately. For example, from the authentic picture of the home page of Alibaba, students can see clearly “the leading B2B e-commerce platform for global trade” and “become a supplier” and interact with the teacher that main customers of Alibaba.com are businesses. This is the effect of authentic teaching material. It can help students engage themselves in classroom interaction. Authenticity of language use relates to the response of the language user. It is thus a factor of the activity or task the user-learner undertakes, and of his/her perception and conviction of the task [15]. The teaching material
of the home page of Alibaba.com is shown in Figure 3.

![Figure 3: The Teaching Material of the Home Page of Alibaba](image)

Step 2: Constructing financial knowledge.

CBEC, a new form of international trade based on Internet technology, falls into three main broad categories. These are the basic business English knowledge for financial literacy education to be built on. The 3 main categories of CBEC and their definitions are shown in Table 2.

**Table 2: Three Main Categories of CBEC and Their Definitions**

<table>
<thead>
<tr>
<th>Example companies</th>
<th>Main customers</th>
<th>3 Main Categories of CBEC</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell.com</td>
<td>Other businesses</td>
<td>B2B</td>
<td>Companies doing business with each other such as manufacturers selling to distributors and wholesalers selling to retailers</td>
</tr>
<tr>
<td>GE.com</td>
<td>Other businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alibaba.com</td>
<td>Other businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC International College.com</td>
<td>Other businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AliExpress.com</td>
<td>Individual customers</td>
<td>B2C</td>
<td>Any business or organization that sells its products or services to consumers over the Internet for their use</td>
</tr>
<tr>
<td>Tmall Global.com</td>
<td>Individual customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eBay</td>
<td>Individual customers</td>
<td>C2C</td>
<td>Individuals doing business in an online environment, typically utilize the Internet in one way or another</td>
</tr>
<tr>
<td>WCPE.com</td>
<td>Individual customers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Firstly, after students have some initial understanding of the above 8 companies, they are encouraged to work in pairs to classify them into 3 main categories and then the teacher can ask them to fill the definitions of these three main categories in the right column of Table 2 according to the textbook. The interactive teaching of 3 main categories of CBEC is shown in Figure 4.

![Figure 4: Teaching Slide 2: Teaching 3 Main Categories of CBEC](image)
Secondly, the above 3 categories of CBEC can be further divided into 8 sub-types, which make CBEC an increasingly varied provider of jobs and can offer at least 8 types of labor market divisions for the CBEC industry. Hence, students can be asked to further divide these 3 categories into 8 sub-types. The interaction between the teacher and students on this part can be shown in Figure 5.

![Figure 5: Teaching Slide 3: Teaching 8 Sub-types of CBEC](image)

Thirdly, these 8 sub-types of CBEC are of distinct features and advantages. Students can be asked to work in groups to fill in Table 3 about the features and advantages (influences on income) of these 8 sub-types of CBEC. Group work generates interactive language [14]. What is more important is that below the table, tips should be added such as “Attention: these 8 sub-types of CBEC are nearly equal to 8 divisions of the labor market of the CBEC industry. Working in different division means different income for both companies and employees. For example, working in seller-controlled B2B market, employees may get larger amount of commission since he or she has more chances to deals with larger transactions between companies.” This helps students associate CBEC sub-types with financial knowledge of labor market. Features and advantages (influences on income) of these 8 sub-types of CBEC are shown in Table 3.

<table>
<thead>
<tr>
<th>3 Main Categories of CBEC</th>
<th>8 Sub-types of CBEC</th>
<th>Features of Labor Market Division</th>
<th>Advantages: Influences on income</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B</td>
<td>Seller-controlled B2B</td>
<td>Sellers aggregate their market power</td>
<td>Larger sales volume; reduced marketing and sales costs</td>
</tr>
<tr>
<td></td>
<td>Buyer-controlled B2B</td>
<td>a consortium of buyers aggregate their purchase</td>
<td>Less procurement cost and higher purchasing productivity</td>
</tr>
<tr>
<td></td>
<td>Third-party Exchanges</td>
<td>Platform matching buyers and sellers</td>
<td>High sources of income from transaction fees; lower search cost and time for buyer and seller</td>
</tr>
<tr>
<td></td>
<td>Collaborative Commerce</td>
<td>Activity other than buying or selling</td>
<td>More opportunities for collaboration</td>
</tr>
<tr>
<td>B2C</td>
<td>Export-oriented B2C</td>
<td>Selling domestic products to foreign markets</td>
<td>Increasing sales volume by exporting</td>
</tr>
<tr>
<td></td>
<td>Import-oriented B2C</td>
<td>Selling foreign products into domestic markets</td>
<td>Incremental income from selling products to domestic consumers</td>
</tr>
<tr>
<td>C2C</td>
<td>Comprehensive C2C</td>
<td>one industry/industry segment</td>
<td>Much larger sales volume thanks to increased affordability, convenience, and increased customer bases</td>
</tr>
<tr>
<td></td>
<td>Vertical C2C</td>
<td>all types of industries</td>
<td>Quite large sales volume by specializing</td>
</tr>
</tbody>
</table>

Step 3: Cultivating financial skills.

The teacher can ask students to work out in groups the disadvantages of each sub-type of CBEC,
which is tantamount to the opportunity cost of choosing jobs in each sub-type. Opportunity cost is “the economic concept...where the value of the use of a resource is understood in terms of the value of an alternate use of the same resource [16]. This is to cultivate students' awareness and the ability to analyze opportunity cost of career. Tips should also be added below the table such as “Attention: the opportunity costs of working in these 8 sub-types of CBEC means the forgone benefits that you do not choose to work in other labor market divisions of CBEC and are nearly equal to disadvantages of 8 divisions of the labor market of CBEC industry.” The opportunity cost of career in each division of CBEC labor market is tentative to be shown in Table 4.

Table 4: Opportunity Cost of Career in CBEC Labor Market Divisions

<table>
<thead>
<tr>
<th>Types of CBEC</th>
<th>Sub-types of labor market</th>
<th>Opportunity cost of career (disadvantages) in each labor market division</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B</td>
<td>Seller-controlled B2B</td>
<td>Hard for small and medium companies to find customers, channel conflicts</td>
</tr>
<tr>
<td></td>
<td>Buyer-controlled B2B</td>
<td>Less initiative to find new suppliers</td>
</tr>
<tr>
<td></td>
<td>Third-party exchanges</td>
<td>Less strength of brand power</td>
</tr>
<tr>
<td></td>
<td>Collaborative commerce</td>
<td>Fixed or even no commission</td>
</tr>
<tr>
<td>B2C</td>
<td>Export oriented B2C</td>
<td>Higher tax and higher risk of returns</td>
</tr>
<tr>
<td></td>
<td>Import oriented B2C</td>
<td>Restriction on the total purchase volume</td>
</tr>
<tr>
<td>C2C</td>
<td>Comprehensive C2C</td>
<td>High upfront cost</td>
</tr>
<tr>
<td></td>
<td>Vertical C2C</td>
<td>Limited in one industry/industry segment</td>
</tr>
</tbody>
</table>

Step 4: Sublimating financial values.

In choosing careers, one should consider salary but merely doing so is definitely improper. On the one hand, the teacher should raise students' awareness about the importance of major education and that the mastery of the knowledge of CBEC industry can help them to undertake high-income careers in it; on the other hand, the teacher should also tell students that they cannot have a long-term, steady and happy persistence in a labor market division of CBEC industry if they choose it without considering other factors such as causes, personal specialties and hobbies. This is to reinforce students learning of previous steps and sublimate their financial values towards labor market and opportunity cost of career in CBEC. Writing is sometimes used as a production mode for learning, reinforcing, or testing [14]. The writing task can be assigned as follows.

“Choosing future jobs in the CBEC industry should be based on not only salary but also causes, personal specialties and hobbies. The former can ensure your income and the latter can promise you long-term and steady achievements in the labor market. Please write an essay which can answer at least the following 3 questions: what are the main divisions of CBEC labor market? If you are going to work in the CBEC industry, what division would you like to choose as your profession and why? What is the opportunity cost of your choice?”

5. Summary

The cultivation of financial literacy is a long-term process, which requires a comprehensive, systematic, and professional financial literacy education mechanism. To assist college students to cultivate profound and long-range financial literacy, it is vital to conduct financial literacy education in course teaching besides school and social education activities. Comprehensive and systematic CBEC financial literacy education for Business English major can be predicated on the course of Introduction to Cross-border Electronic Commerce with the method of interactive teaching. For example, the financial literacy of the labor market and opportunity cost of career can be merged in the interactive teaching of CBEC types, a significant part of Introduction to Cross-border Electronic-commerce.

Financial literacy education is being integrated into school curricula at an increasing frequency. However, the majority of teachers lack the required competencies and teacher self-efficacy to effectively teach financial topics [17]. This study of financial literacy education in the interactive teaching of Introduction to Cross-border Electronic Commerce can provide a reference for the organic integration of major education and financial literacy education, the optimization of the curriculum setting, the improvement of the teaching design, and the integration of financial education into the teaching system of Introduction to Cross-border E-commerce. It can form and enrich the teaching cases of curriculum financial literacy education for other majors. Of course, other CBEC courses such as Cross-border Customer Service can also be grounded to realize CBEC financial literacy education in specific areas.
Acknowledgments

This work was supported by 2022 Undergraduate Teaching Quality and Teaching Reform Project of Zhanjiang University of Science and Technology “Interactive Teaching Practice of Cross-border E-commerce Financial Literacy for Business English Major in Private Universities” (Project No. JG-2022493).

References