Foreign Language Education in an Ethnic University from the Perspective of Economics of Language

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ABSTRACT
China's foreign language education (FLE) in universities has been widely criticized as time-consuming and inefficient in the last decade, and universities sought reforms to improve the situation. An ethnic university in China provides higher education for ethnic minority students who are bilinguals before learning a foreign language. How to value the FLE of an ethnic university and develop it more effectively? According to Marschak's proposition that language has value, utility, costs, and benefits, this paper conducted a cost-benefit analysis of the undergraduate FLE in an ethnic university in Southwest China. By comparing the data with other universities, the paper reveals the unsatisfactory benefits of FLE for non-foreign-language majors and uncorrelated costs and benefits of FLE for foreign-language majors as well as the potential consequences. Based on the economic analysis and the university feature, a development direction of ethnic characteristics and diversified courses with more input into the FLE in the university is suggested.

Keywords: economics of language, ethnic university, cost-benefit analysis, foreign language education

1. INTRODUCTION
In the last decade, there is increasing skepticism about the effectiveness of foreign language education (FLE) in China and the significance of the FLE for all people. Chinese universities have widely carried out reforms of reducing credits of foreign language courses and adjusting course contents. As far as FLE is concerned, an ethnic university should be more cautious since it was established by the government aiming to cultivate highly educated ethnic minority students who have mastered their mother language and Chinese mandarin and who learn a foreign language as their third language. How meaningful is the FLE for the ethnic students? How efficient is the FLE of the university in terms of input and output? Those questions need to be studied.

Because the development of FLE involves issues such as costs, benefits, and public goods, it is difficult to answer these questions within applied linguistics framework. It is necessary to introduce the research paradigm of economics of language to construct a model, collect data, and conduct quantitative analysis. This research attempts to use the theories and methods of economics of language to explore the current situation of the FLE in China's ethnic universities and to suggest possible development directions. Linguistic economics studies the relationship between language and economy and can be used to study the value of FLE. Based on the value, utility, cost, and benefit theory of language proposed by Jacob Marschak (1965),

2. STATUS QUO
Economics of language is a scientific discipline that studies the relationship between language and economy based on human capital theory and education economics [1]. It was first proposed in 1965 by Jacob Marschak, a professor of economics at the University of California at Los Angeles and the pioneer of information economics. He revealed that language has economic characteristics, such as value, utility, costs and benefits [2]. Since then, through the efforts of researchers in economics of language, especially Grin and Vaillancourt, this discipline has made great progress in the relationship between language and income, language and economic development, dynamic development of language, and language policy. Some theoretical viewpoints have been formed, and they have provided useful guidance for the formulation of macro policies on language planning. Its main theoretical points include: first, language itself is a kind of human capital, which can help obtain other capital (such as knowledge and skills); second, learning a second language is an economic investment, and investment costs (costs) and expected benefits (anticipated benefits of investment) must be considered. The cost of the economic investment of learning a foreign language is the time spent on learning the foreign language and the direct monetary expenditure, while the benefits depend on whether the learner has opportunities for using the language and how widely used it is used after learning the foreign language; third, the use of language reflects economic value of the language, which could be high or low; fourth, the economic utility of language depends on many factors [3].

With the introduction of economics of language into China in 1999, the economic analysis of language, as an
interdisciplinary branch of linguistics and economics, has gradually been accepted by Chinese researchers. Domestic research on the relationship between language ability or language education and economic benefits has begun to emerge. For example, Jiang Guiying systematically analyzed the public and personal investment in China's English education with cost-benefit approach [4]; Liu Guohui and Zhang Weiguo discussed the economic return of English ability of China's urban residents and the wage effect of foreign language ability in China's labor market [5]. But on the whole, most researches are descriptive analysis and theoretical arguments, with insufficient empirical analysis. The research on the development of FLE in ethnic universities or ethnic regions is even more inadequate in terms of quantity and quality.

3. A COST-BENEFIT MODEL FOR AN ETHNIC UNIVERSITY

Guided by economics of language, based on the previous researches on FLE in China's universities, with a consideration of the characteristics of the ethnic university, the cost-benefit analysis model of FLE in an ethnic university can be constructed.

FLE in an ethnic university is divided into public FLE for non-foreign-language major students (FLEN) and professional FLE for foreign-language major students (FLEM). The former focuses on providing foreign language support for students whose majors are non-foreign-language, and the latter focuses on cultivating professional skills of a foreign language for those students majoring in a foreign language. For the former's education object, foreign language is an auxiliary skill, while for the latter's education object, foreign language is the core skill of their employment. Although their educational goals and results are different, both types consist of the same elements: the costs of FLE include the cost of managerial personnel and faculty as human resources, the cost of purchasing teaching equipment, funding teaching and research projects, and extra curricula activities relating to FLE, the cost of the time and money investment in foreign language learning of students. It should be noted that the various costs here refer to the additional costs of investing in FLE, not the total costs of training a student to obtain the university degree. The benefits of FLE should be considered from the contribution to the whole society, instead of using single performance indicators such as English proficiency tests, but taking as the benefit indicator the contribution of students' foreign language skills to their employment, further education, and income, excluding humanistic or social value and other indicators that are difficult to measure. The cost-benefit model of FLE in an ethnic university is shown in Table 1.

Table 1 Cost-benefit model of foreign language education in an ethnic university

| Undertaker | Item | Detail |
|------------|------|--------|
| Costs      |      |        |
| University | Human Resource (HR) Cost | Costs of Administration and Teachers |
| Students   | Assets & Funding Cost | Costs of teaching equipment, research projects, and extra-curricula activities |
| Students   | Money Input | Cost of learning materials |
|            | Time Input | Time for courses and after class activities |
| Benefits   |      |        |
| Students   | Contribution of foreign language skills to students' employment, further education and income |
| University | Development of foreign language discipline, Improvement of students cultivating capability, promotion of reputation |

4. COST-BENEFIT ANALYSIS OF FLE IN AN ETHNIC UNIVERSITY

In order to discover the specific cost-benefit features of ethnic universities, the researcher selected an ethnic university in a provincial capital city in southwestern China as a sample, and conducted an investigation on its undergraduate FLE, by means of interviews of teachers and students, questionnaire surveys, open data acquisition to obtain both qualitative and quantitative data for cost-benefit analysis. As certain data is not released to the public, estimation based on known data or qualitative data is applied alternatively.

4.1. Costs of the University

The cost of a university includes cost of human resource and cost of assets and funding.
4.1.1. Human resource costs of the university

In terms of human resource (HR) costs, as mentioned above, it falls into two categories: HR cost on public FLE or FLEN, and HR cost on professional FLE or FLEM. The input of HR for public FLE is mainly on the related managerial staff of the university's teaching affairs office, teachers of the public foreign languages, teaching secretaries, and executives. As for the case university, it involves 58 full-time teachers responsible for public foreign language teaching, one teaching secretary, one head of the teaching department, and one administrative member in the teaching affairs office. These human costs are responsible for the three semesters of college English classes of the university's first-year and second-year students totaling 20,000 each year, who have four College English classes per week. Due to the high student:teacher ratio, public English teachers on average give more hours of classes per week than most teachers in other majors. If they complete more than the required class hours for a year, they will receive over-time allowance. The above is the main human resource expenditure of the university on public FLE.

The investment of human resources for professional FLE is mainly on teachers of foreign language departments, teaching secretaries, student affairs staff, and executives of the foreign language school. Since foreign languages are the students' specialties, all the investment in running an undergraduate program should be counted into the investment in the professional FLE, which must meet the various requirements of credit hours, training conditions, and student: teacher ratio from the education authority in charge. In addition to the needs of teaching courses, to cultivate university students also needs ideological and political education, student club organizations, and various profession-related or -unrelated activities and competitions. Therefore, in addition to foreign language teachers, teachers of other courses in the students training program are all included in the human resources investment of professional FLE. Besides, the cost also includes the salary and administrative expenses incurred by hiring foreign teachers. The managerial personnel includes only executives in charge of teaching and teaching secretaries, but also students' counselors and political work cadres. As far as the investigated university is concerned, the university has a foreign language school with four undergraduate programs for over 400 students each grade. The school has a deputy secretary of the CPC committee in charge of student affairs, a deputy dean in charge of undergraduate teaching, 6 counselors, and 2 teaching secretaries and 63 full-time teachers of professional foreign language teaching. In addition, there are 2 office staff serving all faculty and staff of the school. These are the main human expenditures of the university on professional FLE.

In addition to staff salaries and benefits, the cost of human resources spent by a university should include the expenses for introducing, developing faculty and staff, costs of using, managing, and maintaining human resources, as well as the retirement expenses in the future. (Most colleges and universities in China are financially supported by the government, who actually pay all the human resource expenditures of the colleges and universities. For the convenience of analysis, it is expressed as university expenditures.)

4.1.2. Assets & Funding costs of the university

On the part of universities, the cost of assets incurred largely comes from teaching facilities and the funding is mainly used to support teaching and researching projects by faculty members and various activities by students. English teaching, as is for any language teaching, is peculiar in the sense that it requires the use of additional facilities such as audio and video laboratories besides ordinary classrooms. By the same token, in the kit of teaching materials is included not only the beautifully printed textbooks and other supportive learning items but also the audio and video materials. In order to promote teaching and to advance the discipline of foreign languages, the university will provide financial aid to research projects on the teaching of foreign languages and will organize, or offer supports to other groups to organize, a variety of foreign language activities such as drama festivals, speech contests and vocabulary contests among others.

4.2. Costs of the Students

Because of the peculiarity of language learning, English learning in particular requires long-term practice. Students with weaker background have to spend more time memorizing vocabulary, practicing listening, and doing exercise questions. This is where the cost comes in. Borrowing books from the library is simply not enough. One must purchase tutorial books and audio and visual materials. Some students also choose to participate extracurricular training classes.

4.2.1. Monetary Costs of the students

Regardless of public or professional foreign languages, money spent on textbooks, supplementary materials and training courses makes cost of language learning much higher than for non-language courses. In addition, for students, their monetary cost also includes registration fees for various grade examinations and translation certificates. Of the surveyed students, those who don’t major in foreign languages will have to buy at least one vocabulary book, one English dictionary, and two problem sets (eg. sample exams) for CET-4 (College English Test Band 4) and CET-6 (College English Test Band 6), in addition to purchasing English textbooks, during their university time, and will have to take at least one CET-4 and one CET-6 exams which altogether cost about 500RMB. About 8% of students who don’t major in foreign languages have participated in various types of English training courses (including online courses) during their university time, and the average expense for that is about 400RMB. In contrast, students who
major in foreign languages spend dramatically more money on materials purchasing, training and exam registration, which totals about 7,000RMB.

4.2.2. Time costs of the students
As for time investment, students have to attend four compulsory English classes each week for three semesters. Some students will also take some optional foreign language courses. As is well known, language learning essentially is all but putting in time day after day, in memorizing vocabulary after class, doing exercises, attending tutoring classes, aside from half-recreational activities like listening to news in foreign language, participating contests and English corners, and watching foreign language films and TV dramas. According to feedback from surveyed students, students who don’t major in foreign languages spend five as much time in English as in their other public courses (e.g. Chinese, politics, mathematics) on average, and about the same or twice as much time as in their own professional courses. For students who major in foreign languages, 70% of their off-class time is devoted to language learning, 20% to entertainment and leisure, and 10% to other subjects. Compared with students of other majors, students majoring in foreign languages have a more packed schedule and they have to study harder throughout their campus life, which is a good thing though.

4.2 Benefits of the University and Students
The benefits of FLE to students consists mainly of the English skills acquired by the students, which help to improve their comprehensive ability to give them an edge for employment and pave way for further studies. In terms of employment, the competition is fierce in the job market. Excellence at English for instance is widely accepted by employers as one of the essential requirements for a job. Most offers for civil servant positions or positions at a government-funded institution at the provincial level or above clearly requires a decent CET-4, or better, CET-6 score. Similarly, medium or large scaled enterprises also often require students to pass CET-4 or CET-6 or higher. Generally speaking, the higher level of English tests students passed, or the more valued English certificates they get, the more competitive they will be in job market. When it comes to postgraduate entrance examinations, foreign languages are compulsory subjects for any major. Therefore, students with high foreign language scores are more likely to be admitted by good institutions. What it means equivalently is that students with poor English scores may lose the opportunity to continue their postgraduate studies because they may likely fail to reach the minimally required score. In terms of career development, it is true that there are jobs that don’t need foreign languages at all, while there are other jobs that view proficiency in a foreign language as one prerequisite for a better career development, which affects employees’ chance to go overseas on duty, further their studies, and get promotion.

For students of foreign language major, their foreign language level is certainly more important for their job search. Students with high proficiency in foreign language are more likely to be admitted to positions or graduate schools featuring foreign languages. However, there are some students who are not interested in foreign-language-centred positions or MA programs. For these students, they only need to complete their studies and will rely on their other qualities and abilities to find opportunities for employment and further studies, and the pay and future development could be no less than jobs featuring foreign languages. This being said, regardless of the type of jobs they will have a lifelong advantage as a foreign language major.

For the students in the ethnic university, half of the students are ethnic minorities coming from ethnic minority areas. Some will return to ethnic minority areas for work after graduation. The fact of the matter is that English is still a rare requirement for employment in these areas. In other words, for these students, their English levels, high or low, would have no direct impact on their employment. Despite that, it would be better off for them if they continue to sharpen their skills in English or other foreign languages because foreign languages, especially English, are still required of various entrance examinations. The benefits of FLE from the perspective of the university lie largely in the boosting of its intangible assets. For example, a good performance by the university in FLE is likely to attract more students with higher potentials in foreign languages. It is more likely for these students to finish their university studies after four years with a brighter success, which would in turn add to the reputation of the university like a benign cycle.

5. EFFICIENCY PROBLEMS OF FLE IN THE ETHNIC UNIVERSITY
Through the above analysis of the costs and benefits of FLE in an ethnic university, and by comparing with nationwide big data, we can learn of some features of the efficiency of FLE in China’s ethnic university.

5.1. Cost-Benefit Problems for the University
At the university level, the university seems to have invested costs that are visible, while the benefits are more of the opposite, that is, invisible. Firstly, the public FLE is not to the expectation of the students and the education authority. The surveyed ethnic university are at an intermediate level in public foreign language expenditure compared with other colleges and universities, in that the student:teacher ratio, credit hours, teaching and research projects, and foreign language activities are all at a moderate level. The gap between this surveyed college and the universities that pay special
attention to public FLE manifests itself in the insufficient funding in the above-mentioned aspects, which in turn caused further problems: the curriculum is not rich enough, no distinctive public foreign language courses have been established, and the needs of students for multi-level and diverse foreign language learning are not met. Due to lack of overall planning for the public foreign language courses and for the fostering of teachers, the university's investment has not been in effect as expected, and the fostering of the teaching team is loose, which altogether led to an insignificant amount of benefits out of teaching. To be more precise: the overall level of the students in foreign language is not high, and little progress was made during their university time. Students whose major was not in foreign language rarely win any foreign language contests at levels above the provincial and ministerial ones. By looking at employment and future career development, we can say that English was not an advantage to the students, neither was it to students who apply for further study to universities home and abroad. On the contrary, poor English has become an obstacle that hinders many students, especially ethnic minority students, from furthering their study.

Secondly, the professional FLE seems to have an efficient cost-benefit ratio, but there are latent problems. In accordance with the aims of foreign language majors in ethnic universities, the investment in professional FLE is to train high-level talents in foreign language who will after graduation serve the ethnic regions and ethnic minorities. However, employment data shows that the foreign language graduates of this university assume very few foreign language jobs related to ethnic regions and ethnic affairs, and there is no significant difference between foreign language majored graduates from the ethnic university and those from ordinary universities in terms of the regions as well as the industries of employment. In recent years, the university has been developing well in the discipline of foreign languages, which enjoys a rising ranking nationwide, but it was found that the discipline of foreign language has not received special support from the university regarding human resources and financial funding. There is no obvious relationship between university input and benefits.

5.2. Cost-Benefit Problems for the Students

From the perspective of students, compared with other majors, foreign language majors invest more money in professional learning. The amount of time consumed is also more than average. However, according to "Report on Employment of Chinese University Students in 2020" compiled by the third-party professional organization MyCOS Research Institute, undergraduates who graduated at 2019 majoring in foreign languages and literature ranks first in monthly income in the list for majors in humanities with 5336 yuan per month, in spite of this, it still did not make it to the top ten of the list, falling behind majors like computer science, electronic information, finance, etc.[6] The non-foreign-language majors of the surveyed university have invested no less time and money in the subject of foreign languages than in other subjects, which improved their foreign language ability, as it should, but still fall short of their expectations.

6. SUGGESTIONS FOR THE DEVELOPMENT DIRECTION OF FLE IN CHINA'S ETHNIC UNIVERSITIES

The sample university provides us with an epitome of China's ethnic universities. Their development direction could be suggested through economic analysis.

6.1. Enrich public FLE, meet the multi-level requirements of students, and highlight ethnic characteristics

According to the micro-data research based on the 2006 China Comprehensive Social Survey (CGSS) [5], foreign language proficiency has a significantly positive correlation with the wage of Chinese urban residents, though with differences among people with different foreign language proficiency, income, and of different genders. Before they become proficient in foreign language, the increase in foreign language ability can increase the wage of people of low-to-middle income, although the rate of increase drops upon the income level going up. And being proficient in foreign languages has a positive effect on people of high-level income, while no impact on people of the lowest income. Roughly speaking, proficiency in foreign languages favors people of high income while the medium level favors people of low income. This convinces us that if one wants to go from a low-or-middle to a middle-or-high income, he or she should work hard towards the medium level, meanwhile, high level in foreign languages will bring greater fortune to the middle-or-high income people. As for genders, the data dictates that proficiency in foreign languages is more rewarding to women than to men, and medium levelled foreign language skills play a big role in promoting men’s wages while no effect on women’s wages.

If the undergraduate students in the ethnic university expect to earn a low-or-medium wage after graduation, or they expect no high demand for foreign languages in their work in underdeveloped areas, some of them would lose motivation to further improve their foreign language skills and only seek to achieve medium level of skills. As is known to all, the degree of difficulty and amount of cost to improve foreign language ability rise more and more each step towards proficiency, which means that the marginal return on income drops along the way. In this atmosphere, neither the students nor the university have the desire to improve their foreign language to the level of proficiency, which in turn hinders them from becoming middle-or-high income earners.

To make public FLE more profitable, efforts should be made to enable students to improve and upgrade their foreign language proficiency during college. The university should
facilitate students to escalate from the weak level in foreign languages to the medium level, and from the medium level to the proficiency level. Only in this way can the hard earned foreign language skills make its due contribution in boosting students’ employment and furthering their study, and also manifest the effect of public FLE. At the same time, due to the geographic background of students and characteristics of ethnic universities, a large number of students of ethnic minorities will return to their hometowns as talents and play a role in international communication and economic and cultural exchanges. It would be useful if ethnic universities offer some courses about foreign language for ethnic culture, for Chinese traditional culture, and for foreign culture. The curriculum shall not only cultivate students’ language and cultural literacy, but also help students with their future development and, of course, manifest the distinctiveness of the university.

6.2. Increase investment in the discipline of foreign languages; Single out the features to be focused on; Enhance professional FLE

According to the laws of economics, the cost-benefit ratio is an important indicator to measure the health of an economic unit. When its general value is higher than that of the average economic unit of same type, it indicates that this economic unit is more efficient in organizing resources and has institutional advantages or other competitiveness. Dually, when the cost-benefit ratio of an economic unit is lower than the average value of units of same type, it indicates that its efficiency in organizing economic resources is low, and there are problems in its system and management. The fact is that usually the current cost-benefit ratio, whether high or low, appears to be periodic and exhibits hysteresis, but will eventually tend to the average value of the economic units of same type. When the ratio value for a certain period of time is high, its institutional advantages may soon be imitated, case-studied, chased from behind, and eventually surpassed by other economic units, or even worse, it may occur that its low-cost resources (such as human capital) may be destroyed or poached away by its competitors, thereby causing the organization to lose advantage, and consequently its cost-benefit ratio would be reduced to the average. When on the other hand the ratio value for a certain period of time is low, this economic unit would adjust and reform to catch up. If it succeeds, it will reach the average of economic units of same type; if it fails to make necessary changes, it will downgrade and be switched down to a lower category of economic units with a lower cost-benefit ratio, or even worse, it might get acquired, reorganized or bankrupted, and no longer retain its status as an independent organization. It should be noted however that a current high ratio value may be the result of the accumulation of previous advantages. To take "Demographic Dividend" as an example, the cost-benefit ratio during cultivating labor period is low while it drastically increases when labor is mature. Once this advantage cannot be sustained, the later cost-benefit ratio will drop rapidly. What could be more vigilant is that the advantage of an economic unit may turn out to be purely accidental, the so-called "try with luck", such as accidentally obtaining talents that would bring huge benefits, yet it does not have the necessary institution to train and accommodate those talents. In this situation, the consequences are at least three possibilities: firstly, talents are taken away by competitors with better institutional environment; secondly, talents no longer work hard to contribute high returns; and thirdly, there is no follow-up talent reserve. The three possible outcomes would cause the economic unit to lose its advantage at a later stage and to fail to maintain its high cost-benefit ratio.

From the surveyed ethnic university, the discipline of foreign languages has been developing rapidly in recent years, while it has not received substantial financial support and adequate care from the university. Thus there seems to be no conspicuous relations between the costs and the benefits of the university. The rapid development seems more likely to be the dividend of previous investments, or the outcome of some accidental advantage in cost that the university gets. If the university cannot sustain these advantages along, or the input growth in foreign language discipline cannot meet the requirements of its benefits growth by means of, for instance, raising salary, creating more amicable developing space, and strengthening the distinctiveness of an ethnic university in planning the discipline development, it is very likely that the benefits would decline, to be manifested by a decline in national rankings and in appeal to new students, and consequently a decline in support from the government and social groups.

7. CONCLUSION

In order to improve the efficiency of FLE in ethnic universities, it is feasible to find problems through cost-benefit analysis and to discover a development direction from the perspective of economics of language. By inspecting the undergraduate public as well as professional FLE of the sample university, it was found that although the human resources and capital investments in FLE in the ethnic university have reached the level of peers, the benefits of public FLE are however not evident and the professional FLE has potential crisis despite it current high returns. There is still a distance between students’ investment in both capital and time and the expected cost investment for proficiency in foreign languages, so the benefits are not ideal. Universities should increase investment in FLE to make a more comprehensive planning in discipline development and curriculum which highlights its ethnic characteristics while offers multi-level courses to facilitate students of different levels in improving their foreign language ability, so as to ultimately increase the benefits for both the students and the university.
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