NEEDS ANALYSIS RESEARCH OF ENGLISH TEACHING AND LEARNING IN CHINA: A LITERATURE REVIEW AND IMPLICATION

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ABSTRACT: Needs analysis, an old research topic in the west, however, has been a weak point in English teaching in China for many reasons. But with the fast pace of globalization and stronger demands for the talents with English proficiency, there is a growing research interest in the needs analysis among English teachers and scholars. By referring to the largest research database CNKI(China National Knowledge Internet) in China, the author analyses all the papers about the needs analysis of College English published in the key journals in China from 2000 to 2017, and tries to find out the achievements and limitations of the research on the needs analysis of college English in China. And some implications are made on how to carry out the research on the needs analysis and formulate the national English education policy more effectively.

KEYWORDS: Needs Analysis; College English Teaching In China; Literature Review; Implications

INTRODUCTION

In 1970s, a research team in the European Commission proposed the term of needs analysis. Subsequently, it has been widely used in ESP teaching and learning, and has gradually spread to other fields of language teaching and research. Although the research in China started relatively late, it has also made a relatively rich theoretical and empirical research results.

Chinese EFL learners are distributed in different regions, and there are great differences in their learning objectives and styles. In order to ensure the quality of English teaching, the introduction of English education policy, the formulation of curriculum standards, the choice of teaching content and the improvement of teaching methods, all these dimensions of English teaching must be based on learners’ needs analysis. Therefore, a review of the needs analysis of English teaching is highly needed, which is of great significance for China to carry out English teaching better. This paper reviews the theoretical research of needs analysis in China from three aspects: the introduction, definition and mode. After that, the author introduces the empirical research on needs analysis in China from five aspects: the subjects of the investigation, the region, the purpose, the content and scope.

Theoretical Research

In the theoretical research, scholars in China mainly introduce the connotation of foreign theoretical research and needs analysis in foreign language teaching, thus to construct a model of needs analysis under the background of Chinese foreign language teaching.

Theoretical introduction of needs analysis from abroad

summarizes the role of demand analysis in the field of foreign language teaching, and believes that the research on needs analysis can provide the basis and reference for the design and evaluation of the foreign language curriculum. Chen Bingbing (2009; 2010), an expert on EFL teaching, more comprehensively introduces the research of needs analysis abroad, including the theoretical foundations, definition and classification, the data source of the information, the tool for data collection and intervention time of needs analysis. His paper specially discusses four kinds of needs analysis models, which have great influence internationally. they are: target situation analysis; Present situation analysis; analysis model from Hutchinson & Water (a learning-centered approval) and means analysis model from Dudley-Ev & St John's.

Chen Bingbing & Wang Huan (2009), reviews and comments on the needs analysis of foreign languages in China, and believes that needs analysis research in China is at the initial stage, the content and process of needs analysis in Foreign language teaching needs to be improved greatly. Cheng Xiaotang & Sun Xiaohui (2011) introduce the latest theoretical development outside China from perspectives of the collected information sources, the classification and analysis framework. It is pointed out in their paper that the development of needs analysis should include teachers, teaching materials, other teaching conditions and environment as well as the needs of schools or educational administrative departments. In their paper, they specially introduce Masuhara’s needs analysis table.

Many researchers in China have done abundant research on needs analysis and situation investigation, but most of these research is lack of effective theoretical guidance. The theoretical introduction of the needs analysis abroad will be helpful to make up for this gap. But it is far too enough, because most of the theoretical introduction, with focuses on the classical results of the research abroad, pays little attention to the latest research trends and achievements. The theory and method of needs analysis should also be developed, because needs analysis itself is a dynamic process.

A study on the connotation of the needs analysis of FLT

Research on needs analysis is widely done in many domains. But Ni Chuanbin & Liu Zhi (2006) argue that there is a specific connotation in the field of foreign language teaching. They believe that there are six characteristics: core, hierarchy, separability, measurability, variability and multidimensionality. Needs analysis on foreign language is the core of the theoretical research and teaching process of foreign language teaching. It is also the guide for the foreign language education administrative departments to make policy; The construction of internal components of foreign language needs is hierarchical, there are personal and social needs, low level and higher level needs. Foreign language needs should be divided according to different perspectives and needs of researchers. Researchers must obtain the collected data through effective measurement tools. Foreign language needs have different connotations at different stages of foreign language learning, which will change along with the passage of time, the development of international relations and economic and trade exchanges. there will be individual differences in foreign language needs under the same conditions. The information providers of foreign language needs are multidimensional, with four sources: learner, teacher, administration organization and applied linguists.

These six characteristics listed above, which specify the contents, the methods and means in the research on needs analysis, have enriched the theoretical research of needs analysis and provided a clearer way of thinking and direction for further research on foreign language needs analysis.
A study on the needs Analysis Model of FLT

On the basis of theoretical learning, some researchers apply the needs analysis model abroad to the practice of needs analysis on English teaching in China, with an attempt to construct an needs analysis model of English Teaching in the context of China.

Xia Ji-mei & Kong Xianghui (1999) in their paper constructs a needs analysis model of foreign language teaching from three aspects: situation analysis, learning purpose analysis and employer or professional needs analysis (see Table 1). Shu Dingfang (2004) constructs a dual needs analysis model for foreign language teaching in China (see Table 2); Chen Bingbing (2010) constructs an overall model of college English needs analysis based on the models of researchers home and abroad (see Table 3); Wang Haixiao (2004) constructs a needs analysis model which includes the needs analysis of college English teaching and teaching conditions of college English (see Table 4).

Table 1 A Needs Analysis Model of Foreign language Teaching (Xia, 1999)

<table>
<thead>
<tr>
<th>categories</th>
<th>Items</th>
<th>content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation analysis</td>
<td>Students</td>
<td>Age, education background, motivation levels, purposes, personal expectation, language skills, learning method preference, etc</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>Basic Language skills; language proficiency; Teaching experience; strengths of language skills; Teaching preference of teaching method, etc.</td>
</tr>
<tr>
<td></td>
<td>Condition related</td>
<td>class size; Classroom learning hours; Teaching conditions and equipment; Foreign language or non-professional requirements, etc.</td>
</tr>
<tr>
<td>Analysis of learning purposes</td>
<td>purposes</td>
<td>Further education, overseas studies or work;</td>
</tr>
<tr>
<td></td>
<td>English variations</td>
<td>British English or American, Australian English, Any contact with other English?</td>
</tr>
<tr>
<td></td>
<td>registers</td>
<td>Technical foreign language or business medical or academic foreign language; Junior or intermediate, advanced or advanced;</td>
</tr>
<tr>
<td></td>
<td>discourse</td>
<td>Formal or informal or both;</td>
</tr>
<tr>
<td></td>
<td>Language skills</td>
<td>Listening and speaking, reading, writing, translation or comprehensive skills development;</td>
</tr>
<tr>
<td></td>
<td>Functions of language</td>
<td>A commitment, a declaration or indication and description class;</td>
</tr>
<tr>
<td></td>
<td>Language proficiency</td>
<td>preliminary or intermediate or advanced;</td>
</tr>
<tr>
<td>Employer or needs analysis of professions</td>
<td>In Which occupations are foreign language skills required? And what kinds of language skills? what levels are they required?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What do these professions need foreign language talents to do? Trade, technical cooperation or Foreign affairs?</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Two-dimensional Demand Analysis Model for Foreign Language Teaching (Shu, 2004)

<table>
<thead>
<tr>
<th>Categories</th>
<th>content</th>
<th>methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social needs</td>
<td>What kind of foreign language talents does the society need?</td>
<td>Policy Research</td>
</tr>
<tr>
<td></td>
<td>What are the social requirements for different people's foreign language proficiency?</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td>What is the current situation of foreign language talents and foreign language use?</td>
<td>Questionnaire prediction</td>
</tr>
<tr>
<td></td>
<td>Personal needs Learners objective situation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learners subjective needs interview questionnaire Personal file reading</td>
<td></td>
</tr>
<tr>
<td>Personal needs</td>
<td>Learners’ objective and subjective needs</td>
<td>Interview; questionnaire; Personal file reading;</td>
</tr>
</tbody>
</table>

Table 3: An Overall Model of College English Needs Analysis (Chen, 2010)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual needs analysis model of students</td>
<td>Learning ability gap</td>
</tr>
<tr>
<td></td>
<td>Individual desire of learners</td>
</tr>
<tr>
<td></td>
<td>Learning process requirements</td>
</tr>
<tr>
<td></td>
<td>Learning environment requirements</td>
</tr>
<tr>
<td>Social needs analysis model</td>
<td>Basic information</td>
</tr>
<tr>
<td></td>
<td>Use of English at work</td>
</tr>
<tr>
<td></td>
<td>Self-evaluation of English proficiency</td>
</tr>
<tr>
<td></td>
<td>The applicability of College English Teaching to Social needs</td>
</tr>
</tbody>
</table>
Some other researchers explain the importance of needs analysis based on the curriculum practice and introduce the contents and methods of needs analysis. By using the SSM (Soft System Methodology), Kong Fanxia (2012) puts forward a different needs analysis framework for the learners of academic English courses. Guan Chunlin (2005) designs the course of Business English based on the theory of needs analysis. Chen Suyan (2009) introduces the successful experience in academic English teaching with the guidance of needs analysis theory at Nottingham University in Ningbo, China.

To sum up, researchers in China have made a lot of exploration on the construction of needs analysis model of foreign language teaching, trying to build a needs analysis model from levels of macro teaching and micro curriculum. What is worth paying attention to is the model of English learning needs analysis constructed by Kong Fanxia with the help of SSM, which reflects the Chinese researchers' attempt to construct a framework of needs analysis from a new perspective. But pitifully, none of these studies has broken through the classical framework of needs analysis theory outside China, and has remained at the level of reference to foreign research results, and has failed to open up a new research path.

**Empirical study on needs analysis**

In recent years, researchers in China have applied the foreign needs analysis theory to the exploration of English teaching reform. A large number of empirical studies have been conducted on 17 core foreign language journals published since 2000. 58 papers related to the research have been published. The authority of the journals in China and the quality of the papers to some extent can reflect the general situation of empirical research on the needs analysis of English language teaching in China. All the research is done from the following five aspects: the subjects, the region, the content, the purpose and scope of the investigation.
Analysis on the Investigation subjects

Six major categories of the subjects in the research are investigated, they are: teachers (including teaching administrators), graduates (including employees), employers, social residents and other non-human elements (such as teaching materials).

Statistical findings suggest: 9 articles set teachers as the research subjects; 39 investigation articles, ranking the first, set the students of all levels as the subjects; 5 articles for graduates; 7 for employers; only 2 for social residents and 2 for other types of teaching materials. It is obvious that researchers pay more attention to the needs of learners at schools or universities. Comparatively speaking, there is very little concern about the needs of English learners outside school. There are only two survey articles on the needs of social residents. Similarly, there are few articles on the needs of graduates and employers. The analysis of teachers' needs is also very limited. In fact, the sources of information for needs analysis should be multidimensional, one should not only investigate and analyze the needs of learners, but also understand the needs of teachers and society, especially Policy-oriented needs analysis must take into account a wide range of needs with regard to national language development.

Analysis of survey area

China is classified by NDRC (the National Development and Reform Commission) as four major economic regions, they are: the eastern region, the central region, the western region and the northeastern region. The author in the research finds that there are 41 empirical research on needs analysis in the eastern region; 13 in the central region; 12 papers in the western region and 8 in the northeast region. It is known that the eastern region is the economically developed region in China. Therefore, more attention has been paid to the analysis of English learners' needs and social needs in this area. The number of research articles on English needs analysis in the central and western regions is almost the equal, and the Northeast is at the bottom of the list.

Generally speaking, The analysis of English needs in the economically developed areas is more active, but the research in the less developed western regions is insufficient. Therefore, while formulating the national English educational policy, it is quite necessary for the authority to strengthen the research on English needs analysis in the less developed regions, especially in Western China.

In this paper, the author divides the survey contents into four aspects: learners’ needs and current situations; social needs and real situations; teachers’ needs and real situations; needs of teaching facilities and the real situations.

Statistics suggest that: 10 surveys on social needs and current situation; 38 surveys on learners' needs and current situation; 6 articles on teachers' needs and current situation; 8 articles on the needs of teaching conditions and current situation. Most studies have focused on learners' interests, hobbies, learning styles, learning strategies and language abilities.

Gao Yongchen (2006) investigates and analyzes the present situation of intercultural communicative competence of non-English majors. Wang Xuemei (2010) investigates the academic ability needs of English postgraduates in China. In her paper, she analyzes the existing problems and puts forward some improved strategies.
As for the social learning needs, researchers carry out their study mainly through interviews and questionnaires to the employees as well as through the recruitment websites to understand the talent needs of employers. Wang Chuanying (2012) investigates skill needs and needs characteristics of the language service talents among 65 enterprises in China, which is worthy of attention.

But most of these studies have limitations on industry, and the sample size is not large enough. The investigation area is also too localized. It can not be fully explained that real social needs of English skills for English learners in various fields of Chinese society.

As for the survey on the teachers’ needs and current situations, the researchers mainly focus on the English teachers' present situation of educational concept, knowledge ability and scientific research at university levels. Zhang Yi (2003) conducted a one-year survey of 758 college English teachers in 26 colleges and universities in Liaoning Province. The researcher finds that College English Teachers generally have lower overall academic qualifications, lack the ability of innovation and application of modern teaching methods and have poor ability of scientific research, etc. Xia Jimei (2002) addresses nearly 500 teachers in more than 600 colleges and universities across China (800 questionnaires were distributed. Recovery of valid questionnaires were 476). The survey finds that college English teachers in China generally have weak motivation for self-development, weak teaching and research ability, and so on.

As for the research on the needs of teaching facilities and present situation, most of the survey focuses on foreign language audio-visual teaching equipment, multimedia teaching, electronic products of foreign language learning and textbooks, etc. These studies indicate that researchers are increasingly aware of the roles of teaching conditions and environment in language teaching and have carried out the needs analysis and investigation around learning conditions and environments. But none of the research samples and regions are representative, except the research done by Cai Jianping(2001). In his research, he investigates and analyses the application of audio-visual equipment among 21 agricultural colleges and universities in China. It is difficult to explain the needs and present situation of Foreign language teaching in the whole country. Another researcher, Gao Sixia (2011) put forward the needs of the teachers' efficacy under the environment of college English teaching reform.

Analysis on Investigation Purpose

This paper classifies the purpose of the survey into 5 aspects: foreign language policy-making, the Reform of College English Teaching, major development and talent cultivation, the construction of foreign language teachers and the construction of foreign language teaching conditions. Among them, 32 studies have been carried out on the reform of college English teaching;13 studies on foreign language majors and talent cultivation, 8 studies on foreign language teaching conditions, 3 studies on foreign language teachers and 2 studies on foreign language policies.

Respectively, in the field of needs analysis for the formulation of foreign language policy, Wei Rining, Su Jinzhi (2011) analyze the conversational ability and frequency of foreign language reading ability in Beijing, Shanghai, Tianjin, Guangzhou, Shenzhen, Chongqing and Dalian.

Based on the degree of opening-up to the outside world, in his paper 2010 Survey of China's Foreign language proficiency requirements, Zhang Ronggan (2012) conducts a large scale of
questionnaire survey on urban residents' foreign language learning experience, application needs, skills needs, and ability needs in three areas in China.

As for the investigation and research on foreign language specialty and talent cultivation, the studies mainly focus on the major layout, talent training, course construction, student learning and so on. Wang Xiaoli, Hu Kaibao (2011) makes an investigation and analysis on the language structure of foreign language in higher education in six provinces of central China.

The research on college English teaching reform is mainly focused on students' learning goal and motivation, Methods and strategies, teaching methods, curriculum, teaching model reform and English for special purposes. Cai Jigang (2012a); (2012b) studies the needs analysis on the teaching mode of academic English and College English ESP course. Zhao Qinghong et al. (2009) investigates and analyzes the teacher's roles, the present situation and needs of college English teaching in terms of attitudes and viewpoints among the students of 12 universities and colleges in Wuhan, Beijing, Xi'an and Changsha. There are few researches on the construction of foreign language teachers and the construction of foreign language teaching conditions. The investigation and analysis of teachers mainly focus on the group of college English teachers and some primary and secondary school teachers who participate in all kinds of training at all levels. The investigation and analysis on the teachers of English Major are insufficient. The research on the construction of foreign language teaching conditions mainly focuses on the electronic teaching equipment for foreign language learning, electronic products and foreign language teaching materials.

It can be seen from the analysis above that there are few empirical studies at the macro level, most of which focus on the microcosmic research on the specific curriculum teaching. There are more empirical studies on the needs analysis of college English, which is related to the number of people and regions involved in the reform and development of college English. The teaching of English in China not only includes college English and English major teaching, as well as basic and advanced stage teaching. All of them should be brought into the scope of empirical research on needs analysis, so that one can fully understand English teaching in China, thus to provide the basis for better teaching reform and language policy formulation.

Analysis on the scope of investigation

According to the hierarchical structure of education in China, this paper divides the survey scope of needs analysis into three categories: basic education, adult and vocational education, higher education. Statistics indicate that 93% of the needs analysis focuses on the teaching of English in higher education in China, mainly at the level of college English learners in the middle and northeast of the east, west and northeast of China or in some colleges and universities. A small number of research focuses on the foreign language talent quality (social needs and current situation), learners' needs and current Teachers' needs and current Teaching conditions.

5% of the survey is aimed at adult and vocational education (Wei Jining Su Jinzhi). 2011; Lu Zi asked Zhang Ronggan; Wang Chuanying 2012). 2% of the survey analyzes the situation of foreign language education in basic education, but mainly reflects the current situation and countermeasures of English teacher training in primary and secondary schools.
DISCUSSION AND IMPLICATIONS

This paper reviews the research literature on the needs analysis theory through the recent 20 years. As for the theoretical research on the needs analysis, it mainly stays in the stage of introduction and reference to the foreign theory. Although many scholars have explored the model of needs analysis of foreign language teaching in the context of China, the model framework with Chinese characteristics has not yet been formed. Research on the connotation of needs analysis in the field of foreign language teaching and the framework of needs Analysis Model in Chinese context needs to be further studied and explored.

The empirical research of needs analysis is abundant enough, but there are some limitations and imbalanced limitations: macroscopic research and large-scale research are insufficient; The research content tends to be similar, is not so diversified; The attention to learners' needs is high. However, other aspects of teaching (such as teachers, administrative decision makers, teaching conditions and environment) are not balanced. The main manifestation of the imbalance is the difference of the investigation area. The research of needs analysis pays more attention to the eastern developed regions, but not to the underdeveloped areas and the underdeveloped regions. The scope of the survey also reflects the imbalance. The needs for foreign language teaching in higher education is more concerned, but the needs for foreign language teaching in basic education and adult education is less concerned.

According to the present situation of the needs analysis of English teaching in China, this study puts forward the following suggestions for the reform of English teaching in China:

First of all, one must attach great importance to the core role of needs analysis in the top-level design of English education. Most Chinese scholars pay less attention to the central role of needs analysis. Any policy formulation needs to carry out in-depth and comprehensive needs analysis to establish the core position, which will help more scholars to carry out relevant research and provide more scientific reference for decision-makers.

Secondly, researchers should continue to construct the needs of foreign language learning adapted to China's national conditions. The construction of theoretical research is helpful to carry out the educational practice. It is hoped that more researchers can surpass the existing theoretical research abroad to explore the theoretical needs analysis framework of foreign language learning adapted to China's national conditions. Special attention should be paid to the localization and adaptability of contents and methods of needs analysis.

Thirdly, actively carry out the empirical study on the dynamic needs analysis at various levels with multidimensional respects. People’s needs that are affected by multiple factors and constraints are multidimensional. Therefore, the needs analysis on our national language learning should be diversified at all levels. Such as the dynamic database "national foreign language talent resources" set up by China’s Foreign Language Education Research Center of Beijing Foreign Studies University and “China's Development Report of Language Service Industry” issued by China Translation Association will be very helpful for decision-makers to understand the state of all kinds of foreign language talents, facilitate the government to effectively manage and use the foreign language talents, thus to promote China’s foreign language ability. Meanwhile, more authoritative research institutions should carry out national empirical study on the needs analysis of English teaching at a macro level.
Finally, it is extremely important to make the timely adjustment of English language education policy based on the survey of the needs analysis. In order to promote the reform of English teaching and the improvement of the quality of talent training, China has put forward a series of reforms, such as: the curriculum standards of the syllabus in the basic education, the core literacy, the quality of college English talent training national standards to be issued, etc. However, only if an extensive and in-depth needs analysis and research on the current social situation and the needs of the people are conducted beforehand that all those reforms can make wonders. Therefore, under the guidance of the theory of needs analysis, we can formulate a teaching policy of English education in accordance with the social development and educational laws. An analysis of the needs of higher Education in basic Education and Adult and Social Education in China should be carried out more extensively.

CONCLUSION

An effective and practical needs analysis is essential not only for the policy designers of the foreign language education but also for the implementer of foreign language curriculum system. at present, more and more people are questioning the English teaching in China. The academic circles are also carrying out reflection and research to explore the future direction and reform of English teaching. The national language ability has become an important part of the national strength, and the Chinese language service ability is the important embodiment of China's "soft power". An empirical study on the needs analysis with the focus on College English Teaching Reform is consistent with the national strategic needs, social development needs and learners' individual needs. However, foreign language learning in China involves a large number of teachers and students from primary school to graduate school, with a long time span. In addition, there are great differences in the learning environment and conditions in China, The needs analysis of foreign language learning should be aimed at multidimensional and diverse objects. This paper comprehensively reviews the theoretical and empirical research on needs analysis carried out by Chinese researchers in the field of English education and teaching. It is hoped that the academic circles will pay more attention to this field so as to carry out more productive research, and to reflect on the development of English teaching in China from the perspective of needs analysis, thus to formulate the national English education policy.

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