

## Needs Analysis Model Construction for the Advanced Level of HSK\*

## Construcción del modelo de análisis de necesidades para el nivel avanzado de HSK

## 关于高等汉语水平考试需求分析模型构建的思考

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**Abstract:** The test users of Chinese Proficiency Test (Hanyu Shuiping Kaoshi, hereinafter referred to as HSK) have been becoming more and more diverse, and it is high time for the concerning authorities to investigate the test users' needs and launch a new advanced HSK test. Therefore, this paper first reviews the relevant studies of foreign language needs analysis models, and presents the significance to establish a needs analysis model for HSK. Based on Dudley-Evans & St John's needs analysis model and Knoch, U. & Macqueen, S.'s needs analysis model, the paper proposes a theoretical framework of the needs analysis model of HSK (advanced) that consists seven perspectives: personal information, language information and professional information, gap of Chinese language learners, satisfaction with the existing HSK, expectations for HSK (advanced), needs for test resources, and the impact of relevant policies on the test. It also introduces the information sources, information collection methods and possible questions, in order to provide reference for the development of HSK (advanced).

**Key Words:** Needs analysis; model construction; HSK (advanced), Chinese proficiency test.

**Resumen:** Los usuarios del Examen de Aptitud de Chino (Hanyu Shuiping Kaoshi, denominado HSK) son cada vez más diversos, y ya es hora de que las autoridades competentes investiguen las necesidades de los usuarios del examen y lancen un nuevo examen HSK avanzado. Por lo tanto, este artículo revisa en primer lugar los estudios relevantes de los modelos de análisis de necesidades de lenguas extranjeras, y presenta la importancia de establecer un modelo de análisis de necesidades para el HSK. Basándose en el modelo de análisis de necesidades de Dudley-Evans y St. John y en el modelo de análisis de necesidades de Knoch, U. y Macqueen, S., el artículo propone un marco teórico del modelo de análisis de necesidades del HSK (avanzado) que consta de siete perspectivas: información personal, información lingüística e información profesional, carencias de los estudiantes de chino, satisfacción con el HSK existente, expectativas para el HSK (avanzado), necesidades de recursos para el examen y el impacto de las políticas pertinentes en el examen. También presenta las fuentes de información, los métodos de recogida de información y las posibles preguntas, con el fin de proporcionar una referencia para el desarrollo del HSK (avanzado).

**Palabras clave:** Análisis de necesidades; modelo de construcción; HSK (avanzado); Prueba de competencia china.

**摘要:** 近年来,参加汉语水平考试(Hanyu Shuiping Kaoshi,简称HSK)的考生越来越多样化,有关部门应调查考生需求并推出新的高级HSK考试。本文首先回顾了外语需求分析模型的相关研究,并提出建立HSK需求分析模型的意义。在Dudley-Evans & St John的需求分析模型和Knoch, U. & Macqueen, S.的需求分析模型的基础上,本文提出了HSK(高级)需求分析模型的理论框架,包括七个方面:个人信息、语言信息和专业信息、汉语学习者的差距、对现有HSK的满意度、对HSK(高级)的期望、对考试资源的需求、相关政策对考试的影响。报告还介绍了信息来源、信息收集方法和可能出现的问题,为HSK(高级)的发展提供参考。

[关键词] 需求分析; 模型构建; 高级汉语水平考试; 汉语水平考试

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## 1. Introduction

In 2021, with the official release of Chinese Proficiency Standard for International Chinese Education, HSK (Hanyu Shuiping Kaoshi, hereafter

referred to as HSK) began to enter a systematic period (Liu Yinglin, 2021). According to this new standard, learners' Chinese language proficiency is divided into three levels from low to high, namely, elementary, intermediate and advanced. Each level has three bands, forming a standard of "three levels and nine bands". However, the current HSK covers from Band 1 to Band 6. On April 20, 2021, the seminar held by the Center for Language Education and Cooperation also made it clear that it is necessary to launch a test for advanced Chinese language learners, for instance, HSK (advanced). Therefore, a need analysis is to be conducted by the concerning authorities for this new test.

Needs analysis refers to the technique of collecting and evaluating information related to curriculum design. It is a method to establish the learning methods and learning contents of a course (Hyland, 2006: 73). This definition can be extended to the field of language evaluation. The needs analysis for the purpose of evaluation and development should focus on providing sufficient detailed information about the target areas and collecting information about potential candidates, policy needs and stakeholder needs (Ute Knock & Susy Macqueen, 2020 :73).

The construction of needs analysis model for HSK (advanced) has the following functions: (1) It will help to promote the development of Chinese test needs analysis and research, deepen the theoretical research of Chinese needs analysis, expand the practical application field of needs analysis techniques, and further develop the Chinese language learning needs analysis system. (2) It is beneficial to improve the construction of the discipline—Teaching Chinese to Speakers of Other Languages (TCSOL). (3) It provides a clear guidance and scope for the test, and can considerably avoid mistakes. (4) It can provide a theoretical basis of needs analysis for the research and development of HSK (advanced), and further improve the Chinese proficiency test system.

The overall development of a foreign language test should be based on the test needs analysis at an early stage and the previous research on foreign language education and evaluation in China (Lv, 2015). The more detailed the needs analysis of the test, the better we could define the test objectives and its significance, and the more specific and genuine the test tasks and test contents will be. Only in this way could we ensure the quality of the test to some extent. Therefore, a needs analysis at an early stage is essential for the development of HSK (advanced).

However, there is only few researches on the needs analysis of HSK, and no relevant needs analysis model is available. How to develop HSK

(advanced) to meet the diversified needs remains to be further investigated and analyzed.

## **2.Related Research**

### **2.1 Definition of Needs Analysis**

At present, different researchers have different views on the meaning of the word “needs”. However, these researchers do share the following views in common: firstly, needs can refer to current learning requirements for students and expectations for their future work (Berwick, 1989: 57); Secondly, needs can be regarded as the necessary or best content that foreign language learners should master in the whole social environment and social mechanism (Mountford, 1981: 19); Thirdly, needs can be defined as what foreign language learners themselves want to gain from the foreign language class (Widdowson, 1981: 2); Finally, needs can also be regarded as learners’ deficiencies, that is, what learners do not know or do in the process of language learning and language using (Robinson, 1991: 8). Some scholars in China believe that needs are the reflection of the human body’s objective requirements for the internal and external environment. It is a “missing” state of the human body, manifested in the individual’s subjective state and personality tendency (Feng Huimin et al., 1994).

Specific to the field of testing and assessment, needs are reflected in testing requirements. From the perspective of test purpose, testing needs are to reflect the needs of society, including who is in charge, who is the tested person, and what goals to achieve through the test, etc. From the perspective of test content, the test needs are to help defining the scope of the content covered by the test, because the test content is closely related to the nature or attributes of the candidates. From the perspective of test methods, test needs are to decide what methods to use to organize the test, and it involves the design of the test. Test developers are rarely professionals who are proficient in the field tested, so they carefully analyze the field before test development and repeat the analysis to ensure that the tests appropriately reflect the characteristics of the field. In addition, test developers may predict the needs of stakeholders in different aspects of testing. If these needs are not thoroughly analyzed, the prediction may be incorrect, resources may be wasted, and risks cannot be avoided as expected.

### **2.2 Needs Analysis Models**

Since Richterich (1972) put forward the first needs analysis model for foreign language teaching, the development of needs analysis models

abroad has become mature, mainly including the following categories (Cited from Chen & Wang, 2009):

- (1) Munby's Target Situation Analysis (TSA) (Munby, 1978);
- (2) Allwright's Present Situation Analysis (PSA) (Allwright, 1982);
- (3) Hutchinson & Waters' Analytical Model (Hutchinson & Waters, 1987);
- (4) Dudley-Evans & St John's Analytical Model, etc. (Dudley-Evans & St John, 1998);
- (5) Long's Task-Based Needs Analysis Model (Long, 2015).

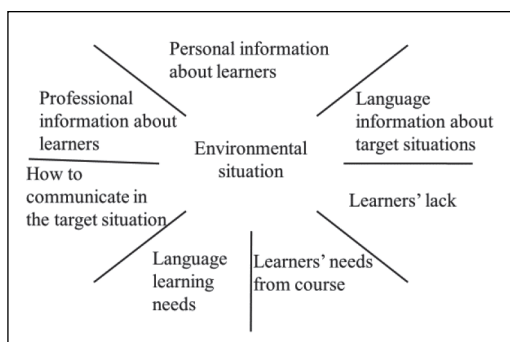
In 2020, Knoch, U. & Macqueen, S. (2020) proposed a new model – a Need for Language Assessment for Professional Purposes (Lapp).

Among the above-mentioned models, Munby's TSA is a local and initial tool for needs analysis, which only analyzes the learning needs of learners, with many limitations. Allwright's PSA model focuses on the distance between learners' current level and target needs. The disadvantage is that it "ignores the role of learners' individual culture as a learning subject" (Chen, 2009). The model proposed by Hutchinson & Waters (1987) is based on the analysis of target scenarios, which makes up for and improves that model's defects to some extent. However, it mainly focuses on the integration of target needs and learning process needs, and only one group of stakeholders is considered.

The model proposed by Dudley-Evans & St John's (1998: 125) from the perspective of students as natural persons, language users and language learners, analyzes the language and skill learning of a specific group of students from seven aspects involving the environmental situation (see Figure 1, and finally obtains the relevant information of the target situation and learning environment. Among them, professional information about learners refers to learners' tasks and activities using English in the future; personal information about learners refers to learners' learning experience, cultural information, learning objectives and expectations; language information refers to learners' current language knowledge and skills; learners' lack is the gap between students' language information and professional information, also known as gap of knowledge; language learning information refers to effective learning methods and skills for knowledge gap, also known as language learning needs. This model greatly reduces the randomness of curriculum design and implementation, and is the latest and most perfect model of foreign language needs analysis so far (Chen, 2009). Dudley-Evans & St John (1998) also believed that the main information sources of needs analysis should be learners, personnel engaged in work or research in this field, pre-service students, literature

related to this field, customers, colleagues, English for specific purposes (ESP) related research. Researchers can select data according to the needs of research.

Figure 1: Model by Dudley-Evans & St John (1998)

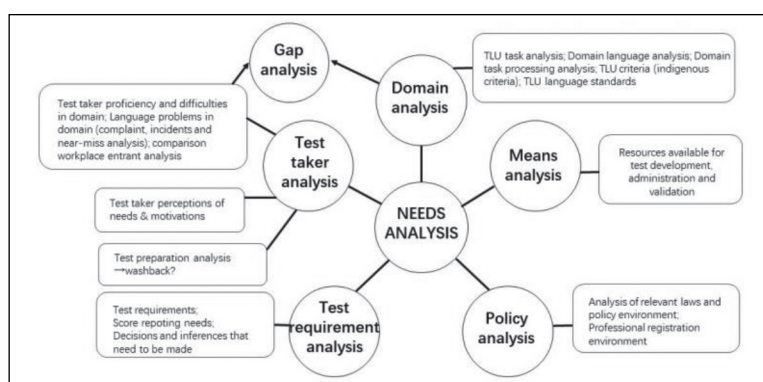


Long (2015) proposed task-based needs analysis on the basis of Dudley-Evans & St John. He believes that learners' inability to complete tasks at work is not due to lack of language ability, but because the knowledge needed to complete tasks is beyond their ability. If learners clearly know the knowledge needed to complete the task, it will help them better adapt to and cope with the future career requirements. Task-based needs analysis makes it easier for people to collect the tasks in the corresponding fields, form a task list, facilitate test designers to set test tasks according to the frequency and difficulty of the tasks, strengthen the connection between testing and actual needs, make testing more targeted, and facilitate meeting the needs of the professional field.

On the basis of Long's research, Ute Knoch and Susy Macqueen (2020: 73) proposed LAPP (a need for language assessment for professional purposes) needs analysis model for professional language testing. The needs analysis model mainly involves six parts: domain analysis, means analysis, policy analysis, test requirement analysis, test taker analysis, and gap analysis. Among them, gap analysis is in-between domain analysis and test taker analysis. In terms of domain analysis, compared with the views of test experts and teachers, they pay more attention to the views of domain experts, and think that it is easier for domain experts to identify problems in their daily tasks. At the same time, they proposed that needs analysts should carefully consider which sources need to be used during needs analysis. Different stakeholder groups can provide different opinions,

so they must include the views of as many stakeholder groups as possible. Researchers should make clear what the relative advantages of information sources are, and what types of information can be obtained from various information sources, and select appropriate information sources and data collection methods. Knoch, U. & Macqueen, S. (2020) 's work further improved the needs analysis theory.

Figure 2: LAPP Needs Analysis Model by Knoch, U. & Macqueen, S. (2020: 73)



China's research on needs analysis model is relatively few. At present, relevant researches mainly include Xia and Kong (1999), Wang (2004), Chen (2010), Kong (2012), and Peng (2020).

In order to explore the scientificity of the curriculum, Xia and Kong (1999) conduct a foreign language needs analysis mainly from three aspects—the situation, the purpose of learning and the needs of employers or occupations based on the principle of “language communication function”. The model is relatively comprehensive and operable, but it weakens the needs of students in the learning process, such as the needs of classroom instruction.

Based on the College English syllabus, Wang (2004) analyzes the teaching needs of College English from the perspective of society, students, teachers and administrators. The model takes comprehensive perspectives, includes different theories, and puts forward many constructive suggestions, which is of great guiding significance to foreign language teaching. However, the model is very complex, some items are not so clear, and its application or operation is relatively difficult.

Chen (2010) constructs a college English needs analysis model based on the models proposed by Dudley-Evans & St John (1998), Hutchinson &

Waters (1987), Xia and Kong (1999) as well as Wang (2004). Her college English needs analysis model includes two parts: Students' individual needs analysis model and social needs analysis model. Each part includes 4 dimensions, and each dimension also lists the survey items in detail. Chen's College English needs analysis model has a clear framework, broad coverage, clear items and high feasibility, but lacks analysis of teaching environment and conditions.

Kong (2012) applies the soft system methodology (SSM) developed by Lancaster University to the design of the course, namely, English for Academic Purpose (EAP). From the needs of three groups of people, including students, domain teachers and academic English teachers, she discusses in detail how to apply the seven-stage model of SSM to EAP Curriculum design, and establishes an EAP curriculum design model. According to the specific needs analysis of the EAP courses, the six factors in SSM method, namely CATWOE analysis, is designed respectively as (1) C (customers) - needs of course stakeholders; (2) A (actors) - actions of course participants; (3) T (transformation process) - input / output conversion; (4) W (worldview or value system) - course concept; (5) O (owners) - (self) course evaluation and supervision; (6) E (environmental constraints) - environmental controls. This research provides a new solution for the needs analysis of complex problems. However, since the conceptual model works as a whole, the tasks at the later stage should be designed based on the previous stage. Therefore, comparatively speaking, the task setting is complex and the implementation is difficult.

Peng (2020) pays more attention to students' subjective and dynamic needs, and she constructs a student-centered foreign language needs analysis model framework. It includes three sub-models: students' personal needs, course instruction analysis and teaching environment analysis. The sub-model of student's personal needs analysis includes two parts: target scenario analysis and learning scenario analysis. However, this model only provides rough dimensions for needs analysis. It advocates the development of more specific issues, and it lacks specific guidance.

With the development of in-depth research, the needs analysis models are also gradually developing. Originally, the models only focus on one aspect of needs, now they have transferred to the needs from different views and levels; the analysis framework has gradually developed from complex, imperfect, unclear items and low feasibility to concise, wider coverage, clear items and strong operability. However, the current needs analysis models proposed are comparatively weak in terms of operability, which needs further research and improvement. In addition, most of the



relevant studies focus on the curriculum and English testing, and there is not a needs analysis model for HSK yet. Therefore, it is high time for us to build a model for HSK to ensure its better development.

### **3. Construction of Needs Analysis Model for HSK (advanced)**

#### **3.1 Purpose of needs analysis**

Needs analysis of testing refers to the forward-looking collection of information prior to the development of tests. In the past, language testing research and development (R&D) personnel often neglected the testing needs of employers, students and teachers. Needs analysis is rarely conducted before test development, or the developers only referred to the suggestions of experts in a certain field. This may lead to a lot of unsatisfying aspects in the tests that took a lot of hard work, and the tests may not meet people's diversified needs. Therefore, the reform and development of HSK (advanced) take the needs of all parties into account, so as to better meet people's diversified needs. The purpose of this study is to propose a theoretical guidance for the needs analysis, build a needs analysis model for HSK (advanced), and provide specific direction for it.

#### **3.2 Data Collection**

The data collection of needs analysis mainly involves data sources and data collection means. According to Long (2005), there are five main sources of information for needs analysis: published and unpublished literature, learners, teachers and applied linguists, experts and comprehensive sources. Among them, the information from comprehensive sources is the most reliable (Long, 2005). Because the results derived from triangular analysis using multiple data sources can increase the reliability of the conclusions based on the needs analysis.

Information from comprehensive sources is mainly obtained through triangulation. Triangulation refers to the use of several methods to collect data through multiple channels in empirical studies. Three main principles are involved—one is “triangulation by sources”, that is, collecting data from different participants; the second is “triangulation by methods”, that is, different methods are used to collect data from the same group of participants; the third is “triangulation by sources and methods”, that is, different methods are used to collect data from different participants.

Data collection methods for needs analysis can be grouped into two categories: inductive procedures and deductive procedures. The former uses expert intuition, open interview, participatory observation and

non-participatory observation to extract various needs' categories; the latter mainly uses structured interviews, questionnaires and standard tests to verify the pre-set needs categories (Long, 2005). In terms of data collection methods, the most commonly used data collection methods for needs analysis are interviews and questionnaires, which are also the most commonly used methods in the concerning literature. Although both have their own advantages and disadvantages, they can complement each other when used together. Compared with interview and questionnaire, the main advantage of participatory observation and non-participatory observation is that they can make in-depth and direct observation on the participants' activities in specific scenes. In addition, there are methods of introspection, ethnography, diaries, records, databases, etc.

It is worth mentioning that the needs of test takers are often easily neglected in the needs analysis. Because the needs expressed by test takers are often regarded as their subjective "wishes" or "desires". At the same time, the traditional needs analysis requires the collection of "scientific" and "objective" needs' information. The test takers who lack work experience are often regarded as "unreliable information sources" in needs analysis. However, the test needs analysis of the test takers is a valuable source of information. The results of their needs analysis can be used to check the weak points of existing tests and provide reference for the improvement or development of new tests. The test takers' previous test preparation and test experience are helpful to explore the problems in the existing tests. On the other hand, since tests are used to serve the test takers, and their expectations and needs should be paid more attention to. Only by fully considering the needs of test takers, can we better improve their enthusiasm and initiative to take the tests, improve the validity, and attract more test takers.

Other data sources are considered when collecting the concerning information of Chinese language use at work. The current studies on the test needs analysis of employees are few, mainly focusing on Business Chinese. At the same time, there are still some limitations in these studies, such as sampling difficulties, small research sample size, lack of sufficient research perspectives, and very small number of employers who are willing to be investigated or interviewed. We believe another valuable resource is recruitment advertisements, which can truly reflect the needs of employers for employees and applicants, help people directly understand and analyze the needs of employers for HSK, and help break through the limitations above mentioned.

To sum up, in order to ensure the reliability, scientificity and effectiveness of the data, researchers can select information sources according to specific circumstances, and adopt different data collection methods with considering the relative advantages of the sources, that is, “triangulation of sources and methods”. For example, compared with students, teachers have a deeper understanding in the parts concerning test scope, test contents, test tasks and item types, and they should have more to say in these parts. Therefore, researchers could use interview to conduct more in-depth research on this part when conducting needs analysis. For the information sources and data collection methods for the needs analysis of HSK (Advanced), we refer to the following information sources and data collection methods as shown in Table 1.

**Table 1: Information sources and data collection methods in needs analysis of HSK (advanced)**

Information sources	Specific requirements	Data collection methods
Chinese Learners	Chinese learners of different majors from universities, and their Chinese has reached HSK Band 4 to HSK Band 6.	Interview, questionnaire and HSK test database
Teachers	Experienced International Chinese language teachers from different educational institutions (local Chinese language teachers included)	Teacher interview, questionnaire and logbook
Staff	Employees and management personnel of foreign enterprises and joint ventures, and recruitment advertisements as well	Observation, interview, questionnaire and content analysis
Experts	Experts in language policy, Chinese Language communication, language teaching, acquisition and language testing	Interview

### 3.3 Construction of needs analysis model for HSK (Advanced)

Based on the needs analysis models by Dudley-Evans & St John (1998) and Ute Knoch & Susy Macqueen (2020), as well as the previous researches, the authors propose “ the Needs Analysis Model for HSK (Advanced) ” (see Table 2). The model analyzes the test needs from seven dimensions: personal information, language information and professional information, gap of Chinese language learners, satisfaction with the existing HSK, expectations for HSK, needs for test resources, and the impact of relevant policies on the test.

Table 2: Needs Analysis Model of HSK (Advanced)

	Dimension	Specific information	
1	Basic information	Nationality, age, occupation, etc.	
2	Language information and professional information	Chinese language in learning	The importance of learning Chinese language, the use of Chinese, and Chinese ability in the process of learning Chinese (current ability and target ability)
		Chinese language at work	The importance of Chinese at work, the use of Chinese, and Chinese ability at work (current ability and target ability)
3	Gap analysis	Listening, speaking, reading, writing, mediating (interpreting or translating) and cross-culture ability	
4	Satisfaction with the existing HSK	Overall satisfaction, test quality, test administration, score report	
5	Expectations for HSK (Advanced)	Test scope, test skills, test topics, test questions, test tasks	
6	Needs for Test Resources	Access to test information, test preparation methods, test preparation duration, and desired support	
7	Policy analysis	Impact of relevant policies on language tests	

The specific explanations to the above model are as follows.

(1) “Basic information” focuses on the basic demographic information of test stakeholders, including nationality, age, occupation, Chinese proficiency level and other information, etc. It is worth mentioning that the stakeholders of language tests involve countries, ethnic groups, schools, parents, individual learners, and employers, etc. (Xing & Liu, 2019). Therefore, we should set different questions for different stakeholders. For example, when inquiring Chinese language teachers, researchers should pay more attention to their teaching situation, such as professional title, teaching years, students, main courses taught, etc., so as to judge the effectiveness and reliability of the information they provide; when asking employers, questions should focus on whether they employ foreigners, whether they have requirements for employees’ Chinese proficiency, and whether they require employees to show Chinese proficiency certificates, etc.

(2) “Language information and professional information” consist of two parts. The “language information” is the part of the current situation needs analysis, focusing on the analysis of learners’ current language knowledge and skills; the “professional information” is the part of target situation needs analysis, focusing on understanding the language and

cultural abilities that learners need to have in the field of learning and work. According to the different professional identities of the stakeholders, they are divided into “Chinese in learning” and “Chinese at work”. For the students in school, the survey should focus on their Chinese ability in learning, including the importance of learning Chinese language, the use of Chinese, and Chinese ability in the process of learning Chinese. Chinese ability also involves the current Chinese ability and the target Chinese ability. For example, the following question and statements could be listed in a questionnaire for Chinese language learners:

**Table 3: When you learn Chinese, which activities are more frequently used?**

	Statements	Never happened				Most frequent
1	Listen to a course or a lecture instructed in Chinese	1	2	3	4	5
2	Communicate and discuss in Chinese	1	2	3	4	5
3	Read Chinese books or materials	1	2	3	4	5
4	Write articles or papers in Chinese	1	2	3	4	5
5	Translate or interpret in Chinese	1	2	3	4	5

+For on-the-job Chinese learners, the use of Chinese at work is of greater concern. The following question and statements could be listed in a questionnaire for employees using Chinese at work:

**Table 4: According to your observation, what often happens in the workplace?**

	Statements	Never happened				Most frequent
1	Listen to the Chinese version of the work arrangement or report	1	2	3	4	5
2	Communicate and discuss in Chinese	1	2	3	4	5
3	Read Chinese books or materials in Chinese	1	2	3	4	5
4	Write articles or reports in Chinese	1	2	3	4	5
5	Translate or interpret in Chinese	1	2	3	4	5

In different versions of the questionnaire, the corresponding questions should be as close as possible to maintain the uniformity and comparability of the survey and analysis standards.

(3) “Gap analysis” refers to the gap between learners’ current Chinese level and the goal they want to achieve. The information is mainly obtained

from the part of “language information and professional information”, and the gap of learners is analyzed. The purpose is to find out whether Chinese learners’ current Chinese language ability can meet their learning or working needs, and to understand whether there is a gap between their current Chinese language ability and the ability required for learning or working. The gap can be analyzed from six aspects: listening, speaking, reading, writing, translating and cross-cultural abilities. Take the questions from the questionnaire (teachers’ edition) as an example:

**Table 5: Are you satisfied with the following abilities of the students who have passed HSK Band 5 or Band 6?**

	Statements	Strongly Dissatisfied				Strongly Satisfied
1	Listening	1	2	3	4	5
2	Speaking	1	2	3	4	5
3	Reading	1	2	3	4	5
4	Writing	1	2	3	4	5
5	Translating or interpreting	1	2	3	4	5
6	Cross-cultural ability	1	2	3	4	5

**Table 6: What Chinese skills do the students who have passed HSK (level 5-6) need?**

	Statements	Strongly disagree				Strongly agree
1	Can understand Chinese courses and professional lectures.	1	2	3	4	5
2	Can understand various topics even with disturbance from environment or accent.	1	2	3	4	5
3	Can present papers in Chinese at academic conferences.	1	2	3	4	5
4	Can make speeches, impromptu speeches or debates.	1	2	3	4	5
5	Can read professional course materials and complete course assignments.	1	2	3	4	5
6	Can independently search and read the required information in Chinese.	1	2	3	4	5
7	Can write professional papers and academic reports in Chinese.	1	2	3	4	5
8	Can translate or interpret various types of articles.	1	2	3	4	5

	Statements	Strongly disagree				Strongly agree
9	Can accurately understand Chinese texts and their cultural contents.	1	2	3	4	5
10	Know the main differences in customs, values, beliefs, etc. in different countries.	1	2	3	4	5

The first part (in Table 5) focuses on students' current language ability, and the second part (in Table 6) focuses on teachers' expectations for students' higher ability. The gap between students' current Chinese level and the goal to be achieved, i.e., "Chinese learners' need" will be discussed.

(4) "Satisfaction with the existing HSK" is a survey of satisfaction with the test. This part mainly focuses on the overall satisfaction, test question quality, test administration and score report, in order to find out the deficiencies in the existing test. The questions of this part are listed as follows:

**Table 7: What do you think of the current HSK (Band 1- Band 6)?**

	Statements	Strongly disagree				Strongly agree
1	I am satisfied with HSK.	1	2	3	4	5
2	The difficulty of questions in different test forms of the same band is relatively stable.	1	2	3	4	5
3	The difficulty of the test questions is reasonable.	1	2	3	4	5
4	The tests cover different skills.	1	2	3	4	5
5	The tests administration is organized very well.	1	2	3	4	5
6	The tests cover wide topics.	1	2	3	4	5
7	The tests examine practical Chinese language use ability effectively.	1	2	3	4	5
8	The tests can help improving students' language use ability.	1	2	3	4	5
9	The test content shows authentic Chinese learning scenarios.	1	2	3	4	5
10	The test content shows authentic Chinese language use scenarios at work.	1	2	3	4	5
11	The test content is basically in consistent with the teaching contents.	1	2	3	4	5

	Statements	Strongly disagree				Strongly agree
12	The test questions do not favor a certain socio-economic group.	1	2	3	4	5
13	The topic of the composition is practical and test takers have things to write.	1	2	3	4	5
14	The test Scores have been widely accepted by schools, universities and employers.	1	2	3	4	5
15	The score report is detailed and informative.	1	2	3	4	5
16	The test scores show students' real language proficiency.	1	2	3	4	5

(5) The part of “Expectations for HSK” will explore people’s expectations for HSK (advanced) from five aspects: test scope, skills, topics, question types and tasks. For example:

**Table 8: What types of questions do you think HSK (Advanced) should have? (Multiple choice questions)**

	Statements	Choice
1	Multiple choice	
2	Cloze	
3	Connecting words	
4	Translation	
5	Essay writing	
6	Sorting questions	
7	Questions & Answers	
8	Summary	
9	Picture writing	
10	Read-to-write task	
11	Idiom explanation	
12	Gap filling: Banked choice	
13	other	

(6) Access to test resources. This problem is often overlooked, but it is often crucial for test takers preparing for the test. This part intends to analyze the relevant information in advance from four aspects: access to the test information, the way to prepare for the exam, the duration of test preparation and the resources desired. For example:



**Table 9: What help would you prefer to have when preparing for the test?**

	Statements	Choice
1	Explanation of test questions in native language	
2	Pre-test training	
3	Teacher's guidance	
4	Mock tests	
5	Others	

(7) Policy analysis is one of the important parts of needs analysis. No test can exist in isolation from the social environment, especially the high-stake tests. Test developers should be familiar with the relevant legal provisions. "Policy analysis" mainly analyzes the existing policies that may affect HSK (advanced), and the researchers should pay attention to the relevant policy factors that will affect the test in the current environment, such as the newly released Chinese proficiency Grading standards for International Chinese Language Education (the Center for Language Education and Cooperation, 2021), Chinese language level for entry or graduation. If a new HSK (advanced) test is developed, it is necessary to refer to the new standard. At the same time, the language competence requirements for the admittance of international students in China might be raised, since some teachers think that the current HSK Band 5 is not enough for postgraduate studies. In this way, there will be more candidates who will take HSK (advanced) test. All of these will have impacts on the test. As the language policy is not familiar to everyone, especially students, the interview method is more recommended, to obtain more information from specific stakeholders.

### 3.4 Applicability of the model

Theoretically, the model constructed in this study is applicable to the needs analysis of HSK (advanced), but the needs for HSK (advanced) may vary greatly between schools and corporate organizations. In addition, the needs for Chinese language may also vary from school to school, from profession to profession, from industry to industry, and from job to job. Therefore, in practice, it is important for researchers to make creative use of this model or to develop it twice. The specific content of the survey should take into account the characteristics of different groups, the objectives of different schools, different majors, different industries, different jobs and the needs of social and economic development for high-level Chinese

language talents, so as to make the survey results as scientific and valid as possible.

In addition, needs analysis is a long-term ongoing study, because people's needs are dynamic and changing. A stable set of requirements is what the researcher hopes to achieve, so the critical step is to narrow the scope of the survey, which should be representative and universal. Although extensive data collection can provide more comprehensive information, it is too expensive and time-consuming, and it is also hard to conduct needs analysis quickly and consistently. Therefore, before carrying out the survey, the researchers need to clarify the research questions and target subjects in advance, and design reasonable survey questions, avoiding problems such as small sample size, narrow sampling scope, and lack of representativeness.

#### 4. Conclusions

A high-quality needs analysis cannot be achieved without a reliable needs analysis model. The quality of the needs analysis model will affect the reliability and validity of the needs analysis, because the needs analysis should not be based on experience alone, but guided by a theory. This study proposes a tentative needs analysis model for HSK (advanced). This model will analyze the subjects' needs for HSK (advanced) in terms of personal information, language information and professional information, gap analysis, satisfaction with the existing HSK, expectations for HSK (advanced), needs for test resources, and policy analysis. It can provide a clear guidance for the implementation of needs analysis, which can regulate the direction and scope of needs analysis and greatly reduce the blindness and arbitrariness in test development. In this way, HSK could better serve the test takers and the society, therefore a broader market could be developed.

From the perspective of needs analysis, this paper proposes that the needs of all parties should be fully considered before HSK (advanced) test development. Therefore, besides students and teachers, the opinions from employees, administrators, and relevant experts should also be taken into account. In addition to the commonly used questionnaire and interview methods, researchers can also try observation, logbook, and database to collect data.

Finally, this paper is limited in the domain analysis section. The typical steps in the task development, the competence required to complete the tasks, the difficulties in task performance, the assessment of the tasks and the evaluating criteria are not addressed, which is an area that needs to

be further explored in later studies. The research and development of the new test – HSK (advanced) is a complex project. Hopefully the model will be examined and improved in the future practice, so as to further facilitate the reform of HSK.

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