

RESEARCH ON DEMAND ANALYSIS OF THE USERS OF THE SENIOR ENGLISH DIAGNOSTIC SYSTEM

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ABSTRACT

As the significance of learning English is becoming increasingly apparent, more and more English online practice systems are used by English learners. However, a thorough process of research and detailed analysis of user demand have not fully implemented before the design of these systems. As a result, these systems may suffer the defects of low availability and poor interactivity. In this paper, the author proposes the demand analysis description after discussion and communication with several English teachers and students in senior high school, which reflects the requirements of the two main user groups and lays a solid foundation for the design of the Senior English Diagnostic Practice System.

KEYWORDS

The English Diagnostic System, Demand analysis, Teachers and students in senior high school.

1. INTRODUCTION

Among various disciplines in senior high school, English is the subject which has the most remarkable level of network utilization. A growing number of Online Practice System of English Subject (OPSES) makes it convenient and efficient for students to improve their English level. And for most students in senior high school, they may confront different tests or exams in school. Therefore, designing a distinctive OPSES is in line with the needs of the time. However, if the demands in the process of English teaching and learning of teachers and students are not adequately analyzed before the design and implementation of the system, it is nearly impossible to create a successful OPSES which is strongly targeted and highly recognized. As a matter of fact, demand analysis is not only a vital aspect of making reliable and excellent products, but also a necessary prerequisite of manifesting the idea of ‘humanized design’.

2. OVERVIEW OF THE SYSTEM

2.1 Background of the System

In China, the operational flow of most OPSES goes through the stream-lined steps as ‘select a test->answer the test paper->submit the finished test->get the score->check the correct answers’. These OPSES would merely response to the users with information like the scores and the answers, yet would not give effective suggestions for improving their English. Besides, these systems fail to tell students the defects of English learning and are not conducive to help them construct complete English knowledge structure.

The English Diagnostic System (abbreviation for the Senior English Diagnostic Practice System) is a personalized and pertinent OPSES which aims at helping students get well prepared for the National College Entrance Examination (NCEE). This system offers the users with practical and stratified English practice tests. Most of these tests are consist of questions from previous NCEE or high quality practice exams of English, which shows the close relevance with the English syllabus of NCEE. Meanwhile, by using the practice system, students can acquire some valuable information, such as the types of questions and the knowledge points that may be covered in the future examinations and the weakness of their English learning. All these information will be beneficial for students to foster a goal-directed learning habit.

2.2 Purpose of the System

The English Diagnostic System can be used as a platform for doing homework or practice tests before the final examination of the school term. When instructing the test papers, the teachers can project the test papers in front of the classrooms.

2.3 Characteristics of the Users

Users of the English Diagnostic System are expected to be divided into three categories: English teachers, students in senior high school and the administrators.

English teachers are those who are teaching English in senior high school. By logging teacher end, they could gain rights to add or delete questions and tests or to check the transcripts of the students. Making teaching plans and paper-based tests according to students' weakness of English diagnosed by the system is also available. They are main users of the system.

The students in senior high school can take the online exercises and tests at the student end. At the same time, they can look up the transcripts of their own and the study advice in order to find their weakness of learning English and acquire the diagnostic information for future study. They are main users as well.

The school administrators or network managers may work as the administrators. When they log in the administrator end, they would have privileges to manage account distribution and information of teachers and students and the maintenance of the item pool.

3. DESCRIPTION OF DEMAND ANALYSIS

The definition of demand analysis is the process of understanding the requirements of language learners on language learning, and then setting learning plans according to the order of priorities. Developers had better understand the demands of users and then reflect their ideas in the system design. Demand analysis plays a key role in establishing the relationship between developers and users. Users of the English Diagnostic System are divided into three parts as mentioned. Due to limitation of length, the demands of the administrators will not be described in this paper. The descriptions below are analyzed and summarized after discussions and interviews with some English teachers and students in senior high school.

3.1 Demand Analysis of the Teacher End

The main functions of the teacher end include: editing and releasing test papers, building and managing the individual test paper library, checking the learning status and the transcripts of students, answering students' questions and assigning homework at the message board. As shown in Fig. 1 below.

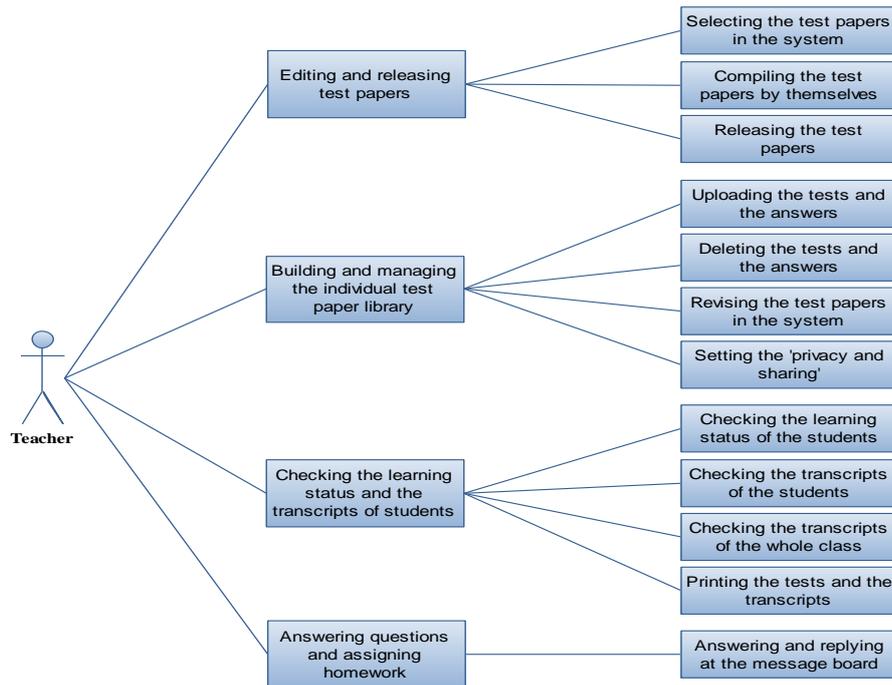


Figure 1. Demand analysis of the teacher end

3.1.1 Editing and Releasing Test Papers

The teachers can log in directly at the home page of the English Diagnostic System. Every teacher will be assigned one teacher account and one student account. The purpose of giving a student account to teachers is to make it convenient for them if they want to see the effects of the released papers at the student end. These test papers may contain questions from the system item pool or questions from other English materials collected by these teachers. After editing and selecting questions and tests, the teachers may release the online test papers to their students.

3.1.2 Building and Managing the Individual Test Paper Library

Operations as uploading, deleting and revising tests and answers in the individual test paper library can be processed by the English teachers, but these tests and answers should not be input in the item pool of the system. The teachers must ensure a high consistency about the interface of editing, the output format of the test papers and the standard answers and the total score of each test paper. Besides, the teachers have right to set the 'privacy and sharing' to decide whether to share or reserve the questions and the tests in the library.

3.1.3 Checking the Learning Status and the Transcripts of Students

At the teacher end, the teachers can query the learning status of their students, detailed transcripts of a single student and that of the whole class. The contents of the learning status include: online learning time, names of all completed test papers, time of finishing and submitting some test paper and so on. Names of three latest submitted test papers, scores of all finished papers, score and rank of a single test, scores of every question type and knowledge point and the constructive study advice for learning English are things in the transcript of a single student. The contents of the transcript of the whole class are: names of all listed test papers, total scores, average scores and the ranks of the students in a single test, the detailed information about the scores on every question type and knowledge point and so forth. The system will list the scoring rate of each question type and knowledge point from high to low, and the numbers and percentages of students who have or have not reached the standard mastering level can be presented. In addition, the printing function of the test papers and transcripts is provided.

3.1.4 Writing Notices and Answering Questions

The teachers are able to write notices, answer questions proposed by their students, and communicate with them upon English learning at the message board. Noting that teachers and students in senior high school do not require complicated operations on computer, so there is no need to add an online BBS forum or instant messaging software in the system.

3.2 Demand Analysis of the Student End

The main functions of the student end include: completing the tests and exercises assigned by the teachers, checking the learning status and detailed transcripts, Reading notifications and proposing questions at the message board. As seen in Fig 2 below.

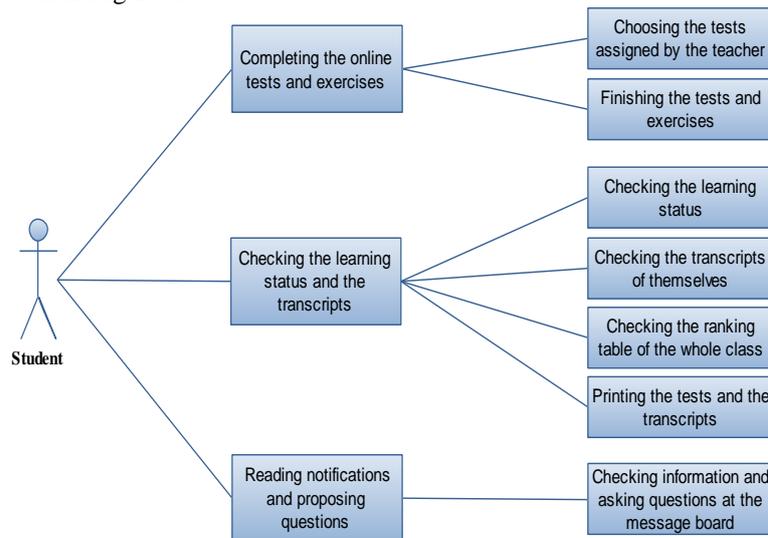


Figure 2. Demand analysis of the student end

3.2.1 Completing the Online Tests and Exercises

Each student can be assigned a student account. By logging in the student end, they can do tests and exercises in the online learning system. To most high school students, due to intense study pressure and limited time, they just need to finish the tests set by their English teachers. Certainly, the questions and the tests of previous NCEE and high quality practice exams in the item pool of the system are also available for extra practice. Besides, an innovative function which is called 'parental control' will be added in the system. The purpose of setting this function is to prompt students the time of doing the test. When the practice time is up, the system will send a message to remind the parents so that students would not waste their time in playing computer games or other forms of recreation.

3.2.2 Checking the learning Status and the Transcripts

The students can query their learning status and the transcripts of themselves. The details of the transcripts are similar with the contents can be checked at the teacher end as discussed above. To those who are good at learning English, they have already handled the homework well and have strong eagerness to do more practice. They could follow the study advice adhered in the transcripts and go to buy some paper-based tests or search other English learning materials through the internet.

3.2.3 Reading Notices and Proposing Questions

The message board is a good platform for maintaining positive interaction between the teachers and the students. At the message board, notices or explanations left by the teachers and questions proposed by the students could both be seen. Communication between the two groups is undoubtedly an indispensable activity.

4. CONCLUSION

Understanding of the demands of main users of a system and analyzing their expectations on the functions that a system can provide is an essential work for the design and implementation of OPSES. In this paper, the author introduces the English Diagnostic System in general at the beginning, and then combines the requirements of some English teachers and students in senior high school with his experience in system design and development. Finally, the description of demand analysis which can truly reflect the requests of the two main user groups is conducted, which lays a solid theoretic foundation for the design and implementation of an effective and popular OPSES for senior high school users.

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