Development of an English Communicative Competence Diagnostic Approach

Kullaporn Poolsawad a, Sirichai Kanjanawasee b*, Jirada Wudthayagorn c

a Ph.D. Student in the Department of Educational Research and Psychology, Chulalongkorn University, Bangkok 10330, Thailand
b Professor in the Department of Educational Research and Psychology, Chulalongkorn University, Bangkok 10330, Thailand
c Assistant Professor in the Chulalongkorn University Language Institute, Chulalongkorn University, Bangkok 10330, Thailand

Abstract

Providing feedback to students is an important issue in learning English. Teachers are required to identify strengths and weaknesses of students in order to develop English skills to the right direction. However, in Thailand, the diagnostic approach that can identify strengths and weaknesses of English communicative competence is rarely found. The objectives of this research were to study component of English communicative competence and diagnostic approach as well as to develop a new English communicative competence diagnostic approach for ninth grade students. This diagnostic approach consist of 6 steps; 1)design 6 tasks of speaking diagnostic test 2)define attributes and survey student’s speaking errors 3)develop descriptors and Q-matrix 4)diagnose English communicative competence of students 5) analyze data 6)provide feedback to teachers and students. Moreover, there are various methods involved in this diagnostic approach such as teacher questionnaire, student self-assessment, VDO recording, checklist and descriptors. They were used to define speaking errors that a student made while they were performing each speaking task. This approach also provided feedback to improve students’ communicative competence.

Keywords: Communicative competence, Cognitive diagnostic approach, English language, Ninth grade student;

1. Introduction

Communicative competence has become an essential skill in this 21th century, and English has been a central language for global communication. Therefore, students need to use English fluently to fit with international communication.

* Sirichai Kanjanawasee. Tel.: +662-218-2578; E-mail address: sirichai.k@chula.ac.th
In Thailand, many researchers found that Thai students usually make mistakes in pronunciation, grammar, vocabulary and sentence structure during speaking English (Suesattayawong, 2006; Wantanasut, 2008; Pongpanish, 2011). Giving feedback to students is an important aspect in learning English. Teachers should spend a substantial amount of time providing diagnostic feedback about students’ strengths and weaknesses in order to help students develop their communicative competence. Nevertheless, English teachers in Thailand usually use holistic scoring and rating scale to assess speaking skills in classroom. These methods cannot provide diagnostic feedback to students and teachers. The above-mentioned significance and background of English communicative competence diagnostic problem have drawn the researcher’s attention to develop an English communicative competence diagnostic approach for ninth grade students. The objectives of this research were to study component of English communicative competence and diagnostic approach as well as to develop a new English communicative competence diagnostic approach for ninth grade students.

2. Literature review

2.1 Communicative competence

The term “Communicative Competence” has been developed for many years. Hymes, (1972) stated that communicative communicate is the ability to use language or interpreted language correctly in the process of interaction with the social environment such as the use of language in the proper regulation of social practices. Moreover, Canale and Swain, (1980) and Celce-Murcia, (2007) also support Hymes’ idea that communicative competence is the ability to use language correctly, appropriate to situations and express suitable behavior in cultural context of communication. Therefore, communicative competence in this present study refer to the ability to use English language and interpreted language correctly and appropriate to situations and express suitable behavior in cultural context of communication. After reviewing many researches about component of communicative competence, it can conclude component of communicative competence as this following table.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Component of communicative competence in language use</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Linguistic Competence or Grammatical Competence</td>
<td>- Discourse Competence</td>
</tr>
<tr>
<td>- Linguistic Competence</td>
<td>- Discourse Competence</td>
</tr>
<tr>
<td>- Discourse Competence</td>
<td>- Sociocultural Competence</td>
</tr>
<tr>
<td>- Sociolinguistic Competence</td>
<td>- Pragmatic Knowledge</td>
</tr>
<tr>
<td>- Formulatic Competence</td>
<td>- Textual Knowledge</td>
</tr>
<tr>
<td>- Interactional Competence</td>
<td>- Functional Knowledge</td>
</tr>
</tbody>
</table>

2.2 Diagnostic Approach

The researcher had investigated diagnostic approaches for English communicative competency in overseas and found numerous approaches introduced by several researchers. Lee & Sawaki, (2009) proposed 4 steps for cognitive diagnosis of reading English: 1) identifying the required knowledge or skills for correctly answering the test; 2) developing Q-Matrix to identify required attributes for correctly answering the test; 3) analyzing data using psychological measurement models called cognitive diagnostic psychometric models (CDPMs); 4) reporting test results and providing diagnostic feedback. Kim, (2011) examined diagnostic approach to academic writing competence by using the Empirically-derived Descriptor-based Diagnostic (EDD) checklist. The diagnostic results
classify students into 3 groups: masters, non-masters, and unidentifiable, considering from the posterior probability of mastery (ppm). Both studies employed existing language tests for diagnosis without developing a new one, hence experiencing the problems of flat profile, i.e. skill profile of 1111 (master of all) or 0000 (master of none) since existing tests are not constructed for the purpose of diagnosis to measure particular skills.

3. Methodology

The researcher studied relevant researches on cognitive diagnostic approaches conducted in Thailand and other countries. Moreover, the researcher reviewed Thailand 2008 core curriculum in the areas of indicators and core learning substances of foreign language learning substance group for ninth grade students and the level of English communicative competence in reference of ACTFL Proficiency guidelines 2012.

4. Result

After the reviewing researches and documents, the researcher developed an English communicative diagnostic approach for ninth grade students including 6 stages.
- Stage 1 Development of speaking test

Based on the above input, the researcher developed a diagnostic test for English communicative competence including 6 tasks.
- Stage 2 Identifying required attributes for diagnosis and exploring English communicative errors

The researcher’s investigation of relevant research on English communicative errors conducted by Suesattayawong (2006), Wantanasut (2008), and Pongpanish (2011) revealed that most of students’ errors fall in the aspects of grammatical knowledge and sociolinguistic knowledge as explained in sub-components in the table below.

<table>
<thead>
<tr>
<th>English Communicative Competence</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Grammatical Knowledge</td>
<td></td>
</tr>
<tr>
<td>1.1 Vocabulary</td>
<td>The speaker is capable to use correct vocabulary according to the principles of linguistic.</td>
</tr>
<tr>
<td>1.2 Syntax</td>
<td>The speaker is capable to arrange words and their relations in phrase or sentence or sentence structure.</td>
</tr>
<tr>
<td>2. Sociolinguistic Knowledge</td>
<td></td>
</tr>
<tr>
<td>2.1 Use of proper language to social contextual factors</td>
<td>The speaker is capable to use proper language for age, sex, status, and speaker-listener relationship.</td>
</tr>
<tr>
<td>2.2 Use of language by stylistic appropriateness</td>
<td>The speaker is capable to use language style with politeness in communication.</td>
</tr>
</tbody>
</table>

Once the researcher obtained required attributes for diagnosis, the above speaking test was then administered to students to explore their errors in English communicative competence by each aspect.
- Stage 3 Development a checklist of behaviours (Descriptors) and constructing Q-Matrix

Students’ response information was for teachers of English to proceed the think-aloud and the obtained data was used to develop a checklist of behaviours (descriptors) with comprehensive required attributes for diagnosis. Then, the descriptors were submitted to the 3 experts on linguistic for revision, examination and validation. With comprehensive descriptors, the Q-matrix was then constructed and employed in this research in the process of identifying the relationship between required attributes for diagnosis and descriptors.
- **Stage 4 Diagnosis of English communicative competence**

  English teachers conducted speaking assessment by using a checklist. If any test taker’s speaking performance corresponds to particular descriptor, the √ will be marked in box “yes”, and if not the √ will be marked in box “no” (1 and 0 scoring with √). Diagnosing oral responses by teachers, each of the descriptors was marked with yes and no for individual test taker, and it reveals which aspect of speaking skill the test taker is a master and a non-master for. For any observed errors, they are recorded in English letters to symbolize errors in various aspects of communicative English.

- **Stage 5 Analyze data**

  Once the diagnostic data was ready, further analysis was undertaken using the Reduced Reparameterized Unified Model (Reduced RUM) with Arpeggio suite which was created and developed by DiBello & Stout.

- **Stage 6 Providing diagnostic feedback to students**

  Following data diagnosis, students were classified into 3 categories: master, non-mastery, and unidentifiable, considering from the posterior probability of mastery (ppm). For any oral response skill, ppm > 0.6 suggests that the student is a master for the skill, ppm < 0.4 suggests that the student is a non-master, and ppm ranged between 0.4-0.6 suggests that the mastery is unidentifiable. These values can also be observed from the proportion of skill masters \( p_k \). The posterior probability of mastery (ppm) and the proportion of skill masters \( p_k \) are used to prepare a skill mastery profile of individual test taker, and transformed as diagnostic feedback.

5. **Conclusion**

This new diagnostic approach consist of 6 stages which are 1) design 6 tasks of speaking diagnostic test 2) define attributes and survey student’s speaking errors 3) develop descriptors and Q-matrix 4) diagnose English communicative competence of students 5) analyze data 6) provide feedback to teachers and students. This approach generated 6 tasks of speaking test that constructed for the purpose of diagnosis to measure English communicative competence. As a result, it can reduce problems of flat skill profile. In addition, the developed checklist of behaviours (Descriptors) will provide deep information of students’ weaknesses in speaking English. Therefore, Teachers will have useful information to provide feedback to students and help them improve English communicative competence in the future.

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