Abstract

The purpose of the study was to develop a sample of English language materials within the Content-Based Instruction Approach for Information Technology students at the Diploma level in Vocational Education. The study was carried out in two major phases: materials construction and materials evaluation.

To construct the materials, it entailed the researcher to collect different types of information: language syllabus for IT programme, students’ needs and interests, their language ability and course content for IT students. At this stage, the instruments used for data collection consisted of a questionnaire for needs and interests assessment, language proficiency test and an interview with IT students to gain a deep understanding about their background knowledge and some ideas for topic selection. The results of data analysis were used as a basis for materials construction. Subsequently, three units of thirteen CBI tasks lasting twenty hours were constructed. They consisted of both 60- and 120-minute tasks.

To seek the effectiveness of the constructed materials, they were evaluated by external evaluators. It was found that the materials were very effective in terms of objectives, content authenticity, content as a source of language learning, task sequencing, coherence of tasks and effectiveness in terms of their methodology. To validate their effectiveness in the actual classroom, a process-oriented approach was adopted for materials evaluation. The pilot study took place in the second semester of 2009. It involved trialling two main tasks of Units 1 and 2: ‘Network topology’ and ‘Surfing the Net’ to obtain information regarding how well the materials worked in class, how the students felt about the tasks in terms of their difficulty and interest and what modifications they needed.

Some modifications were made according to information suggested by the pilot study. The main study took place in the following year, the second semester of 2010 with a new batch of 33 first-year IT students at the Diploma level, Chiangmai Technical College. It was also found that the allotted time for task trialling was the first half of the semester (9 weeks or 18 hours). It was thus possible to implement only two units (Units 1 and 2) containing ten tasks (15 hours). However, only two tasks, (1) ‘Network topology’ and (2) ‘Surfing the Net’ were critically analyzed.
This was because they were considered the main inputs of the respective units while the remaining tasks were regarded as warm-up or follow-up activities. It was expected that the insights/experience gained from the trialling of the two tasks would illuminate other tasks. At this stage, the instruments used for data collection comprised video recording, classroom observation, teacher’s notes, teacher-observer conference and students’ reflection. The data were analyzed quantitatively and qualitatively to address some aspects of the constructed materials: the abilities to foster students’ higher order thinking skills, to enhance content language learning and the students’ perception of the materials in terms of difficulty and interest.

The results of materials evaluation were as follows:

A) The results of task trialling showed that the use of questions and learning activities in Task 1 provided strong evidence to support that the task could facilitate the students to cognitively engage at the higher order thinking skills. For Task 2, it appeared that the focus of the task is to practise specific skills: giving and following IT instructions. The task thus involved the students at lower order thinking skills, namely, ‘Understanding’ and ‘Applying’ levels, also needed in a language course.

B) There was concrete evidence to show that the trialling tasks could improve the opportunities for content knowledge and language learning. The study, given its limited timeframe, could only demonstrate some indicators of on-the-way achievement, rather than evidence of actual learning. A long-term study is required to establish how these indictors can be claimed to be evidence of learning. This is beyond the scope of the study. Trialling tasks could only draw evidence of how students were on track.

C) The majority of the students agreed that the trialling tasks were not too difficult to deal with and unanimously indicated that they were interesting.

In conclusion, the way students perceive learning content and learning conditions potentially affects the degree of learning investment they make. This subsequently results in their learning achievement. Drawing thematic topics from students’ field of study raised the issue of interest while integrating those academic topics made the language tasks quite challenging to the students. The present study made every attempt to capture students’ interest in the learning tasks and yet, keep the task difficulty appropriate to students’ content and language abilities.
The present study yields important implications for CBI materials development as described below:

i) As discussed in Chapter 2, the CBI approach consists of three teaching prototypes: adjunct, theme-based and sheltered models. It is essential to clearly specify the approach adopted for materials development. This will immensely affect the primary focus of the developed materials.

ii) CBI language materials do not aim to replicate course content in the language class. Language teachers would have to work on the introductory part of the thematic concepts introduced in the content class. Doing this helps to prepare students to cope with linguistic demands when engaged in the understanding of deeper concepts. Alternatively, some self-study concepts assigned by content teachers can also be incorporated into the language materials.

iii) For EFL students, there tends to be a wide gap between their cognitive level and language abilities. Their ability to conceptualize what they are exposed to is far advanced compared to what they can express in a foreign/second language. Using their second language to understand and master new information will at the same time help students increase their proficiency in the second language.

iv) For assessment, course content is an essential component for the development of second language proficiency. Content knowledge and language competence thus cannot be ignored in the assessment process.

v) It is important that the language teacher develops an effective working relationship with the content teacher. Ongoing communication between language and content teachers will provide valuable information for materials adjustment when instruction proceeds.

vi) The language teacher is to provide instruction that will promote English language development through the medium of the content materials. This entails language teachers to be familiar with the materials; to the least extent, they should have some basic terminology of the course content.