



## Analysis of Item Difficulty Orientation and Testees' Performance for the TVE Joint College Entrance Examination

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### ABSTRACT

To cope with the implementation of the Curriculum Guidelines of 12-year Basic Education (108 Syllabus for short), core competence was based for curriculum development. Credits of the required specialty and practice courses for technological vocational senior high schools were adjusted by the MOE. The learning goals of each group and the trend of item difficulty could be assessed through an understanding of the items in the TVE Joint College Entrance Examination. Test items for the Business and Administration Category and the Hospitality-major Category of 4-year and 2-year TVE Joint College Entrance Examinations from academic years 109 to 111 were studied via the item analysis data provided by the Testing Center for Technological and Vocational Education to inspect the item operation techniques and response of students from these two groups and to know item difficulty and students' performance.

Due to specialty practice orientation, diverse competencies, and increases of interdisciplinary subject integration and practice application directed items and item word counts, the item difficulty indexes of specialty subjects and students' performance of the Business and Administration Category and the Hospitality-major Category from academic years 109 to 111 were described as follows:

1. Because the vocational subject (1) of the Business and Administration Category was also taken by the students from the study area of Foreign Languages, items tended to become more difficult with a decrease in easy items.

2. For the vocational subject (2) of the Business and Administration Category, the unit themes required for senior high school students were divided specifically in the Curriculums and the contents that belonged to the college level in the old curriculums were excluded. Item difficulty tended to decrease slightly with an increase of easy items; however, a steady item difficulty was still maintained.

3. As far as the vocational subject (1) of the Hospitality-major Category was concerned, item counts on specialty English and integration increased and the reading comprehension of students varied. Therefore, items tended to become more difficult with a decrease in easy items.

4. As for the vocational subject (2) of the Hospitality-major Category, unit subjects were fewer, students became more proficient, item counts on specialty English decreased and important subject ideas and practical application were stressed. As a result, difficult items tended to decrease and items with an appropriate difficulty increased.

The results and suggestions provided by this research may help teachers and students of the technological and vocational senior high schools to enhance reading comprehension competence and diversified learning for students, to adapt to the current life and facing the challenges of core competence oriented exam items in the future and to serve as a reference for the following related researches by integrating the 108 Syllabus and the correlation between item difficulty and students' performance into teaching.

**Keywords:** Curriculum Guidelines of 12-year Basic Education, core competence, vocational senior high school, the 4-year TVE College Entrance Examination, item difficulty index.