Abstract

The thesis compares first year university students' compulsory English achievement tests written in two modes of administration, i.e. pencil and paper and computer-based tests (PPT and CBT), over three successive years in an English department in the Czech Republic (2014-2016). The analysis of the three stages of the project, Pilot, Study 1 and Study 2, forms the focus of the study. The central research question investigated is whether the usage of computer-based language testing is justified in such a context.

The dissertation first maps the theoretical discourse and comments on selected fundamental aspects of language testing practices, significant for the comparison itself. A convergent parallel mixed methods design is employed, where quantitative test data is used to measure the equivalency of the two modes and qualitative self-report feedback form data explores the main advantages and disadvantages of these, as viewed by the students examined.

The results demonstrate the following conclusions: The differences in the scores gained from the CBT and PPT modes in all three stages of the research are statistically insignificant, though overall the students perform slightly better in the PPT modes. No striking differences were found concerning gender either, though the prediction put male students' scores in the CBT modes above the female students' ones. Significant differences as regards the question type were then observed. In both modes students perform better with multiple choice questions, while with short answer items students are more successful in the PPT mode. In the students' feedback forms, Manipulation appears to be the most prominent in all the three stages among the advantages of the PPT mode, covering the possibility of making notes. Other factors changed over the time given; Orientation, for example, which in Pilot and Study 1 was among the most frequently cited advantages of the PPT, ceased to be considered as advantageous in Study 2. The main advantage of the CBT mode as identified by the students over the three years is indisputably the immediacy of results. While in Study 1 the preferences concerning the two modes are almost equally divided, in Study 2, the CBT is preferred to the PPT, however, the category of 'No preference' almost doubled. The statistical model is employed to ascertain whether there are statistically significant differences between the mean subtest scores in connection to student preferences, however, none were found. As concluded, the researcher believes that sufficient evidence has been provided to consider the usage of computer-based achievement tests in the context given to be justified.

Key words: English achievement test, pencil and paper-based test (PPT), computer-based test (CBT), modes of administration, comparison, convergent parallel mixed methods design, quantitative and qualitative data, equivalency, self-report feedback, gender, question type, manipulation, orientation, immediacy of results, preference.