The Effect of Educational Camps on “Fundamental Competencies for Working Persons”
— A longitudinal approach focusing on Contenued participation —

Masahiko Tokuda (Hokusho University), Yoshinori Fukuda (Osaka University of Health and Sport Sciences)

Keywords: Fundamental competencies for working persons, Educational camp, Contenued participation

Introduction
Changes occurring in the environments surrounding businesses and young people as they grow require today’s working people to have basic abilities that are commonly required in all types of jobs, such as the “ability to find problems for the creation of new value,” “ability to effectively work toward solutions to problems,” and “ability to use teamwork to unite different cultures.” The Ministry of Economy, Trade and Industry (METI) defines such abilities as “fundamental competencies for working persons” and aims to develop and propagate these abilities. Three fundamental competencies for working persons have been identified: 1) Ability to step forward (Action), with “action” meaning the ability to step forward and act persistently even if it involves failure; 2) Ability to think through (Thinking), with “thinking” meaning the ability to question and think through a situation or problem; and 3) Ability to work on a team (Teamwork), with “teamwork” meaning the ability to collaborate with various people to achieve goals.

Purpose
The purpose of this study was to investigate the effect of educational camps on the fundamental competencies for working persons outlined above.

Methodology
Study participants were 61 students in 2011, 62 students in 2012, and 70 students in 2013—all enrolled in a three-night/four-day educational camp. Participants spent the nights in tents and cooked their own meals. The evaluation scale used was the “Fundamental Competencies for Working Persons Questionnaire” developed by METI (2006). There were three scales: Ability to step forward (Action), Ability to think through (Thinking), and Ability to work on a team (Teamwork). Evaluations using the scales were performed before and after participation in the educational camp. We received a report of free-form scenes and impressions of changes from camp participants. We also investigated the factors underlying the transformation in
participants’ levels of fundamental competencies for working persons.

For data gathered for participants of the educational camps, the following statistical analyses were conducted. First, data of 22 people continued to be obtained for three years (continuous data) and were subjected to a two-way ANOVA (grade $\times$ camp period). Second, data collected over time were used to integrate the score for each grade (integrated data), with data from the one-year group (n = 69), two-year group (n = 70), and three-year group (n = 54). Statistical analyses were performed on data with a two-way ANOVA (grade $\times$ camp period).

**Results**

Regarding continuous data, the analysis indicated the main effect of the camp period according to the value of probability (Action: $F[1, 21] = 19.66, p < .001$; Thinking: $F[1, 21] = 13.11, p < .01$; Teamwork: $F[1, 21] = 12.64, p < .01$). It can be concluded that the educational camp had a significant impact on participants in terms of the fundamental competencies for working persons.

Regarding integrated data, analysis of the data indicated the primary effect of teamwork, a grade $\times$ camp period interaction (Teamwork: $F[2, 190] = 5.31, p < .01$). Furthermore, the Action and Thinking scales showed the main effects of grade and camp period by the value of probability (Grade—Action: $F[2, 190] = 3.23, p < .05$; Thinking: $F[2, 190] = 6.16, p < .01$; Camp period—Action: $F[2,190] = 88.38, p < .001$; Thinking: $F[2, 190] = 74.63, p < .001$).

A free-form report showed different descriptions by grade. First-year participants often wrote of their anxieties and expectations associated with the first camp experience. Second-year participants wrote about the role of camp. Third-year participants often wrote to help to other participants.

**Conclusions**

The main findings were as follows:

1. Participants showed significant development in all aspects of fundamental competencies for working persons (i.e., action, thinking, and teamwork).
2. After repeated participation, teamwork improved noticeably for senior participants.
3. Factors such as the camp experience and the role of camp influenced the transformation in the fundamental competencies for working persons in different ways depending on their grade.