

Creative Element Analysis of Machinery Creativity Contest Works

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Abstract : Current industry is facing the rapid development of new technology in the world and fierce changes of economic environment in the society so that the industry development trend gradually does not focus on labor, but leads the industry and the academic circle with innovation and creativity. The development trend in machinery industry presents the same situation. Based on the aim of Creativity White Paper, Ministry of Education in Taiwan promotes and develops various creativity contests to cope with the industry trend. Domestic students and enterprises have good performance on domestic and international creativity contests in recent years. There must be important creative elements in such creative works to win the award among so many works. Literature review and in-depth interview with five creativity contest awarded instructors are first proceeded to conclude 15 machinery creative elements, which are further compared with the creative elements of machinery awarded creative works in past five years to understand the relationship between awarded works and creative elements. The statistical analysis results show that IDEA (Industrial Design Excellence Award) contains the most creative elements among four major international creativity contests. That is, most creativity review focuses on creative elements that are comparatively stricter. Concerning the groups participating in creativity contests, enterprises consider more creative elements of the creative works than other two elements for contests. From such contest works, creative elements of “replacement or improvement”, “convenience”, and “modeling” present higher significance. It is expected that the above findings could provide domestic colleges and universities with reference for participating in creativity related contests in the future.

Keywords : machinery, creative elements, creativity contest, creativity works

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