Metacognition in Creativity: Process Awareness Used to Facilitate the Creative Process - DTU Orbit (03/11/2019)

The purpose of this study was to investigate the influence of 'process awareness' on the creative process of a design team. Process awareness is a cognitive creativity skill which entails actions derived from instances where individuals in the design team express knowledge of underlying cognitive processes and -aspects and utilize it to facilitate their own- and their team's creative process. Transcripts from sessions where the design team was working creatively were analyzed both top-down and bottom-up, through quantitative coding, using a coding scheme, and qualitative coding. This was done to ensure capture of all instances of process awareness. Through this iterative process it was revealed that process awareness was predominantly observed in creativity related tasks. Moreover three distinct facets to process awareness emerged; planning, monitoring and reflecting, which were employed respectively before, during and after initiating a process and/or a workshop. We conclude that process awareness is an important creativity skill, being a crucial mechanism to enhance all stages of the creative process. If a designer becomes able to plan, monitor and reflect on his or her own cognitive processes, as well as other team members, he or she will be able to understand what works and what does not for advancing the creative process. In turn, that enables the designer to become more strategic about which actions are appropriate and at what time they are most usefully deployed; making the use of strategies, methods and tools not just an automatic procedure but a highly conscious and purposeful one.

General information
Publication status: Published
Organisations: Department of Management Engineering, Technology and Innovation Management
Contributors: Valgeirsdóttir, D., Onarheim, B.
Number of pages: 14
Publication date: 2017

Host publication information
Title of host publication: Analysing Design Thinking: Studies of Cross Cultural Co-Creation
Publisher: CRC Press
ISBN (Print): 9781138748446
Source: PublicationPreSubmission
Source ID: 134709108
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review