Teaching Principles of Qualitative Analysis to Industrial Design Engineers

**Abstract**

Doing qualitative field research has become a standard part of academic human-centred design education. Part of the challenge is to bring design students a thorough understanding of research methods, and practical skills in performing small scale user research as part of design projects. This involves understanding and ability at interpreting data, categorizing information, and appreciating how theories are built. This paper reports on an exercise sequence in which students go through the analysis process of a transcript from a field study, and discusses how a relatively simple exercise can serve to equip students with both a practical know-how of carrying out analysis as well as instantiation and experience for discussing underlying concepts such as triangulation, abstraction levels, and the relations between data, information, and knowledge.

Keywords: Qualitative research, analysis, design research, method
It's based on principles of collaboration, unobstructed discovery, and, most importantly, scientific progression. As PhD students, we found it difficult to access the research we needed, so we decided to create a new Open Access publisher that levels the playing field for scientists across the world. How? Open access peer-reviewed chapter. Design Thinking in Conceptual Design Processes: A Comparison Between Industrial and Engineering Design Students. By Hao Jiang and Ching-Chiuan Yen. Submitted: March 29th 2012. Reviewed: August 17th 2012. Published: March 13th 2013.

4.2 Qualitative Analysis.

4.3 Stability.

An early engineering example of a feedback system is the centrifugal governor, in which the shaft of a steam engine is connected to a ball mechanism that is itself connected to the throttle of the steam engine, as illustrated in Figure 1.2. The system is designed so that as the speed of the engine increases (perhaps due to a lessening of the load on the engine), the balls spread apart and a linkage causes the throttle on the steam engine to be closed.

Control engineers can also contribute to the design of even better sensors, which are still needed, for example, in the microelectronics industry. As elsewhere, the challenge is making use of the.