

An Experiment on the Effects of Native Language Communication on Work Result Quality

Summary

Global software development poses its challenges: Different time-zones, different languages, different cultural backgrounds, different education, etc. all come together to make things harder than in the simple traditional co-located software project in which all people are from the same culture and ethnicity. This Master Thesis investigates the effects of being able to communicate in one's native language on the quality of the software developed. It is based on an experiment run as part of the AMOS lab course at FAU. In this experiment, different teams are formed and the quality of the resulting work is evaluated. The main research question is what the effects of being able to use one's native language are on the quality of work results, i.e. requirements and the resulting software.

Expected Work Results

- Formulation of research question, generation of more specific hypotheses
 - Research question (given): What are the effects of being able to communicate in one's native language on the quality of work in software development processes?
 - Example hypothesis 1: Being able to communicate in one's native language correlates positively with the quality of the work outcome.
 - Example hypothesis 2: Being able to communicate in one's native language improves personal satisfaction on the job and in the project.
- Generation of an early theory using literature review and introspection
- Set-up, execution, and evaluation of experiment wrt research question
- Validation or invalidation of some of the specific chosen hypotheses

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