

Cultural Practices and Cognition in Debriefing: The Case of Aviation

Abstract This study was designed to investigate the cultural and cognitive dimensions of

Keywords debriefing; practices; culture; cognition; embodiment; narrative; gestures

INTRODUCTION

Debriefing is a cultural practice used to reflect on and review, after some action has occurred

This study was designed to investigate . . . The following two research questions were...:

1. How are debriefing meetings organized with respect to duration, amount of talk, amount
2. How do the organization of debriefing meetings and the tools used mediate the pilots'

RESEARCH METHODS

Design

Observations, formal and informal interviews, recorded debriefing sessions, observed and ...

Model of Assessment of Pilot Performance. The first factor was use or non-use of the Model

Debriefing tool. The second factor was use or non-use of the debriefing tool. The debriefing

Participating Airlines, Pilots, and Flight Examiners

Airlines. In this study a total of 29 debriefing sessions were videotaped involving five airlines

Participants. The distribution of participating pilots and examiners across airlines is provided

Ethics protocols. The studies were approved by the university ethics committee, the

Contexts and Tasks

Besides the general fieldwork within the participating airlines, involving many informal

Debriefing sessions following simulator exercises. Each training/examination day started

Interviews associated with the debriefing sessions. All participants in the debriefing sessions

Flight examiner stimulated recall sessions. For these sessions, the flight examiners were

Data Collection

General observations. General observations were recorded in field notebooks and by means

Debriefing sessions. The debriefing sessions were videotaped generally using three cameras.

Interviews associated with debriefing sessions. The three interviews per pilot and flight

Flight examiner stimulated recall sessions. The stimulated recall sessions were videotaped

Transcription. All recordings were transcribed verbatim in their entirety by a professional

Data Analyses

Videotapes were analyzed in sessions with colleagues based on the precepts of *interaction*

FINDINGS

In the following two sections, answers are provided to the research questions by means of

Broad Descriptors of the Cultural Practices of Debriefing

Research Question 1. How are debriefing meetings organized with respect to duration,

Assertion. (a) Debriefing meetings differ in terms of the duration of sessions across airlines;

Duration. Previous research suggests that the line-oriented flight training (LOFT) debriefing

Amount of talk. Time alone is not inherently the best quality indicator of debriefing sessions.

Participation. In educational research, lecturing and other instructor-centered teaching

Production of flight-related hand/arm and body movements. Important aspects of cognition,

Timing of assessment announcement. The timing of the announcement of the overall

Organization- and Tool-Mediated Nature of Pilots' Learning Opportunities

Research Question 2. How do the organization of debriefing meetings and the tools used

Assertion. Pilots, having experienced the simulator sessions as events so packed that they

Background. Past research on the practices of debriefing noted that simulator sessions

Duration and intensity of the simulator sessions mediates cognitive events in the debriefing

The tools mediate the cognitive organization of debriefing sessions: episodic and

DISCUSSION

This study was designed to investigate the cultures and cognition of debriefing in the aviation

IMPLICATIONS

This study already has led to changes in three of the participating airlines, where the second

ACKNOWLEDGMENTS

This study was supported by various grants from the Griffith University and Industry

REFERENCES

Adler, A.B., Bliese, P.D., McGurk, D., Hoge, C.W., & Castro, C.A. (2009). Battlemind