

The Diary Study

Liam Betsworth

What is a Diary Study?

“Involves providing participants with the materials and structure to record daily events, tasks and perceptions around a given subject in order to gain insight into their behaviour and needs over time.”

[-ukupa.org.uk/resources/glossary-of-terms/](http://ukupa.org.uk/resources/glossary-of-terms/)



Where did it come from?

- First (Computer Science) instance found in a 1993 CHI paper [1]
- Drew its inspiration from [2], research investigating the expert behaviour of concert musicians.



[1] John Rieman. 1993. The diary study: a workplace-oriented research tool to guide laboratory efforts. In Proceedings of the INTERACT '93 and CHI '93 conference on Human factors in computing systems (CHI '93).

[2] Ericsson, K. Anders, Tesch-Römer, C., and Krampe, R.T. The role of practice and motivation in the acquisition of expert-level performance in real life: An empirical evaluation of a theoretical framework. In Encouraging the Development of Exceptional Skills and Talents, M.J.A. Howe, Ed., The British Psychological Society, Leicester, 1990, pp. 109-130.

How does it work?

1. Give the participant the equipment to record appropriate information (a diary/pre-structured forms)
2. Depending on the type of study: ask the participant to do something over a period of time, recording their actions, thoughts and whereabouts (in the diary)
e.g. Use a new mobile device for a week in your everyday life
3. Participant completes interview(s) with researcher during and/or after study
4. Participant completes diary and researcher analyses information

Data Provided

- **The Diary - Record of time spent in each activity**
(Quantitative)

More reliable than an overall report of time spent on each activity in a day

- **The Diary - Participant thoughts, opinions and feelings**
(Qualitative)

A more truthful and personal insight into the persons lifestyle and thoughts towards the system

- **Interview statements**
(Qualitative and Quantitative)

Can be used to back up or challenge the data collected from the diary

Categories: Fill in at End of Day

Day: Tues-9/15

I.D.: 7

Activity Log: Fill In Every Half Hour

Time	Activity	Talk, in Person	Talk, Phone	Meetings	File, Organize	Fill in Forms	Copying	E-Mail	Word Process	Spreadsheet	Other Compute	Breaks/Personal	Reading	Class
8-8:30	Got coffee Checked e-mail													
8:30-9	Phoned garage about car More e-mail													
9-9:30	Met with student													
9:30-10	AI class													

[1]

"Eureka" Report

For Computers, Phones, Copiers, Fax Machines, Staplers, Clocks, Thermostats, Window Locks, Cameras, Recorders, Adjustable Chairs, and other Strange Devices.

Name: 7 Date & Time: 9/15 11am

Describe the problem you solved, or the new feature you discovered, or what you figured out how to do:

Got copier to put staple in right corner!

How did you figure it out? (Check one or more, explain)

- Read the paper manual
- Used on-line "Help" or "Man"
- Tried different things until it worked
- Stumbled onto it by accident
- Asked someone (in person or by phone)
- Sent e-mail or posted news request for help
- Noticed someone else doing it
- Other

Explain: Can't read "international" copier symbols

Pros & Cons

Pros

- Provides both quantitative and qualitative information
- Very easy for researcher to collect the information
- Great for longitudinal studies
- Non intrusive method – No need to follow people around
- Can verify information through comparing interviews and the diary

Cons

- Takes a considerable amount of effort on the participants behalf
- Participants failing to record events or recording at the end of the day
- Participants tailoring logs to please researchers
- Takes time for participants to get used to the process
- Can take the researcher a long time to evaluate qualitative information

An Example

A Diary Study of Exploratory Learning [1]

“how users learn the functionality of computer systems during their daily work, outside a formal training situation.”

(1) A daily log

(2) ‘Eureka Reports’ of learning incidents

(3) Daily debriefing interviews

(4) A longer interview following the **one-week** diary period

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A Diary Study of Exploratory Learning [1]

The Results

10 Participants, 5 Diary Days (Working Week)

- Clear divide between **explorers** and **non-explorers**
- The three most common ways of learning were:
 - trying things until something worked (**42 times**)
 - reading the manual or using online help (**41 times**)
 - asking for help, either in person or occasionally by e-mail (**18 times**)

But most importantly to us...

- The diary technique required a considerable amount of effort on the participants behalf – **Personal interaction is key to success**

[1] John Rieman. 1993. The diary study: a workplace-oriented research tool to guide laboratory efforts. In Proceedings of the INTERACT '93 and CHI '93 conference on Human factors in computing systems (CHI '93).