

## **Report on COST Action IS0703 STSM**

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**Reference code: COST-STSM-IS0703-04252**

### **Date and location of Visit:**

3 - 8 May 2009; University of Poitiers, France

### **Purpose of Visit:**

The aim of the visit, as stated in my application, was to familiarise myself with the research tool, *Eye and Pen*, developed at the University of Poitiers, in terms of its features, practical use in experimentation and potential application to a future project comparing handwriting and keyboard writing. The visit was conceived as the first of two visits to Poitiers. This first visit was to assist in the design of a pilot project by defining the scope of the project, clarifying issues of methodology, and preparing an outline design and set of procedures.

### **Description of work carried out during visit:**

Following arrival and orientation (3 May), I spent two days (4-5 May) with the *Eye and Pen* team in data collection at the *Institut national des jeunes sourds* at Bordeaux. This observation phase enabled me to consider the functionality of the tool in practice and to observe the practicalities of data collection, especially concerning the use of the eye tracker. On our return to Poitiers I benefited from a further opportunity to observe data collection in a local school (6 May), this time making use in addition of the graphics tablet without eye tracker. I also spent some time receiving explanations of the procedure in manipulating the data. The following two days (7-8 May) allowed me to clarify the scope and design of my study through discussion with colleagues at the CeRCA, and enabled me to produce a preliminary outline of research design and research questions, a summary report on the visit and an application for funds from my home institution.

### **Description of main results obtained:**

The purpose of the visit was to arrive at a position where I could apply for support at my home institution for the purchase of the *Eye and Pen* software and piloting of the project on my return. This has been achieved.

I have been able to clarify the design of the study which will compare handwriting and keyboard writing from textual and cognitive perspectives. The variables will be: rate of production, location and duration of pauses, span of production, frequency of revisions and relation with pause behaviour, in addition to measures of text quality. *Eye and Pen* will be employed in order to collect data under the handwriting condition, and *Inputlog* will be employed to collect data under the keyboard condition. There will be two stages to the data collection in order to introduce a longitudinal perspective to the research. This will enable a comparison of Time 1 and

Time 2 changes over a period of 6-8 months. It is possible that this design will be replicated elsewhere with colleagues in Sweden (Lindgren); this is currently under discussion. The time frame for the piloting of the data collection will be July-August 2009, with the possibility of a major data collection at the beginning of the next academic year in October 2009. Funds have been applied for at the University of Winchester to cover the cost of purchase of the software and hardware.

**Future collaboration with host institution:**

As mentioned above, the intention in setting up this STSM was to arrange a further visit after pilot data collection to consider the data achieved. This will be applied for via COST (ERN-LWE) for the academic year 2009-10. It is an aim of the host institution to extend the reach of *Eye and Pen* in studies in different contexts, and the University of Winchester is keen to encourage research in this area.

**Projected publications**

I intend to submit a paper for presentation at the EARLI SIG Writing 2010, and in advance of that to prepare work in progress papers for presentation at the University of Winchester (e.g., Psychology and Faculty of Arts research seminar programme).

Signed:



**Confirmation by host institution of successful execution**

As host of this STSM, I am happy to confirm that Dr Spelman Miller participated in the work of the mission for the period 3-8 May, 2009, inclusive. This mission involved participation in data collection in Bordeaux and Poitiers, discussions with team members on the presentation and manipulation of data, and on potential designs of the future study in the UK using *Eye and Pen*. In the spirit of future development of our research, we anticipate further collaboration with Dr Spelman Miller, through an application to COST for a further visit to Poitiers in 2009-10. The purpose of that mission will be to consider the post-pilot manipulation and interpretation of data.

Signed  
08.05.09

