INTRODUCTION

The level of literacy enables nearly everyone to write, but such writing is confined almost entirely to the expediential shorthand supplements to speech communication, such as e-mail, SMS and chatline messages. This level of writing accounts for a massive volume of communication but, because of its essentially conversational nature, marked by a dialogue-type interplay that is barely less extemporaneous and elliptical than that of actual speech, it is conspicuously devoid of the formal aspects which make writing a distinct communication medium from speaking. The problem reveals itself most directly in the learner’s inability to shift register and syntactical parameters when formal writing is called for. Even university-level students tend to make an appallingly spotty use of the basic elements of punctuation, capitalization and paragraph structure. This problem would be merely academic if formal writing occupied just a marginal place among the communication skills needed in the professional sphere, but the paradox is that we live in a world whose primary commodity is information, and that most of this information is transmitted in written form and according to very precise protocols.

The above findings resulted in informative research conducted at universities in the Czech Republic (Brno University of Technology), Slovenia (Ljubljana University), Germany (Chemnitz Technical University) and Slovakia (Comenius University) and gave rise to the project on technical/scientific writing in English developed under the EU Leonardo da Vinci programme.

METHODS AND OBJECTIVES

The chief objective of the project was to develop training materials to help scientific and technical professionals improve their writing skills in English, and thereby enhance their work effectiveness and career prospects. Although the number of partners participating actively in the project was necessarily limited, it was hoped that the outcomes of the project would be disseminated more widely so that they would benefit similar workers in other countries throughout Europe.

The project was conducted in two phases:

1. Phase 1 (1998 – 2001): this was a Pilot Project, which investigated the needs of the targeted end-users more closely and developed a set of
informative guidelines for generalised use by technical/scientific writers in the form of a Reference Handbook.

2 Phase 2 (2002 – 2005): this extended the work achieved in the previous project by producing a revised version of the Handbook, based on feedback from testing it with end-users, and by developing modified Reference Handbooks, tailored to the needs of a wider, but more specific, spectrum of end-users. These included chemistry, pharmacy, engineering, and informatics. On the basis of these Reference Handbooks, practical task-based exercises were developed. There were two sets of exercises, one for chemistry/pharmacy and one for engineering/informatics.

One of the most efficient methods used throughout the project development was testing of draft materials proposed by materials developers not only in their home institutions but also in the companies of industrial partners from the Czech Republic, Slovenia, Slovakia, Austria, and France. Final training materials are therefore based on the real feedback from the end-users; corrections were made in response to end-users’ opinions expressed through specifically designed questionnaires.

RESULTS

The final product of the project consists of a set of reference handbooks, exercises and a methodological guide for material developers.

An introductory chapter to reference handbooks deals with science/engineering types of writing such as scientific articles, research papers, proposals and technical reports, reviews/assessment of other authors’ pieces of writing, promotional materials and leaflets (product descriptions), and patent writing. In the following five chapters, the reference handbooks offer short explanatory notes on the identified problem areas (composition of a piece of writing, style, language functions, grammar, and vocabulary) that are followed by authentic examples of texts from chemistry, pharmacy, physical/materials engineering, electrical engineering, informatics, construction engineering, process engineering, and medical engineering. Reference handbooks are also provided with glossaries of the terms frequently used in science/engineering writing (English and equivalents in Czech, Icelandic, Italian, and Slovene) to make the materials more directly relevant to these nationals.

Interactive task-based exercises consolidate the referential information given in the handbooks; the terminology of the exercises is based on authentic texts so that the end-users may opt for either engineering/informatics or chemistry/pharmacy. This aspect is extremely important as it makes the material more user-friendly and convenient for a wide spectrum of engineering/science professionals. The end-users can also benefit from optional exercises targeted at relevant national audiences (Czech, Slovene, Italian and Icelandic) and
developed with the aim to highlight specific problems stemming from different mother tongues (e.g. confusing words).

The formats of the exercises involved are as follows:

1. Correcting mistakes (in words, or sentence)
2. Fill in blanks
3. Matching
4. Multiple choice (single or multiple correct)
5. Open questions (open-ended questions with possible commentary to the answer)
6. Ordering
7. Yes-No (True / False)

These exercises are equipped with correct answers (keys) and feedback links to reference handbooks.

Finally, the project material addresses material developers who wish to create similar materials for other groups of professionals or with different national backgrounds. It was assumed that any user of the Methodological Handbook would be thinking of making use of our project outcomes in one of two ways. They could either wish to use the core of our work as it stands, but adapt it to suit the needs of their own end-users, e.g. by cutting certain parts, adding new parts, changing the text in places, adding new examples, etc. Alternatively, they may intend to set about a similar project of their own from scratch, in which case the procedures we have followed will be of greatest relevance, while the actual materials we have developed will be of lesser importance. So the text of the Methodological Handbook has been prepared with these two purposes in mind.

Following the recent trends in language training, the project materials are accessible both on-line (internet) and off-line (CD/ROM). A printable version of reference handbooks/methodological handbook in PDF is also available for those who prefer working with printed materials.

CONCLUSION

The materials were primarily designed to be used for independent learning in the course of which the end-user can choose a material suited to his or her linguistic and professional needs, can select between a printed handbook or IT version and can decide whether to use a reference material only or to complete task-based exercises to consolidate his or her knowledge.

However, ongoing practical experience from the use of the material in taught courses has revealed its great potential for professional language training in both educational institutions and industry, and specifically for incorporation into the curriculum of life – long language courses of engineering/science professionals.
ACKNOWLEDGEMENT

This project has been carried out with the support of the European Community. The content of this project does not necessarily reflect the position of the European Community, nor does it involve any responsibility on the part of the European Community.

Literature: