



Towards European Language Learning for MEdical professionals

517937 - LLP-1-2011-1-UK-LEONARDO-LMP

<http://www.adam-europe.eu/adam/project/view.htm?prj=8242>

Project Information

Title: Towards European Language Learning for MEdical professionals
Project Number: 517937 - LLP-1-2011-1-UK-LEONARDO-LMP
Year: 2011
Project Type: Development of Innovation
Status: completed
Country: EU-Centralised Projects
Marketing Text: Academics from the University of Wolverhampton have joined forces with partners from the NHS West Midlands Workforce Deanery and universities and healthcare services in Spain and Germany for the TELL-ME project.

The initiative will provide self-study material for English, Spanish and German which uses vocabulary specifically aimed at medics.

The package involves a range of products including work-related language exercises, self-assessment tools and an interactive dictionary of key vocabulary and concepts. These will be tested out on trainees by the medical partners and disseminated to key national medical policy makers.

Summary: A key European Union (EU) priority is to create ways to aid citizens' mobility. Thus the EU allows and encourages citizens to move freely in the EU. The promotion of easy access to high quality healthcare and enhancing cross-border health care are priorities currently for discussion in the European Parliament. With all the benefits of this mobility, it is still vital to keep a high standard of medical treatment. Crucial in providing this level of treatment is high-quality doctor-patient communication. Studies show that if patients misunderstand health-related issues, serious implications can result as well as increased healthcare costs. The problem is greater when there is a language barrier. This must be removed to ensure more effective health services. We aim to do this in this project by teaching vocationally-specific languages to healthcare professionals and helping them to communicate at work.

The languages targeted by the project, English, Spanish and German, are among the 5 most spoken languages in Europe, so patients from one EU country seeking medical treatment in another will probably understand one of them. However, resources are lacking for teaching proper medical staff-to-patient communication. So our project provides self-study material for Medical English, Spanish and German aimed specifically for medics. The package involves a range of products including work-related language exercises, self-assessment tools and an interactive dictionary of key vocabulary and concepts. These will be tested out on trainees by the medical partners and disseminated to key national medical policy makers.

Our project can have an influence throughout the EU, helping both native speakers working in their own lands and also medical professionals from other EU countries who wish to work in another EU country.

Description: Our consortium is aware that a key priority of the European Union (EU) is to create conditions to aid its citizens' mobility [1]. This includes encouraging both medical professionals and patients to move freely to other EU states [1]. A further key priority under discussion in the EU parliament [2] is easy access to high quality healthcare and its enhancement across borders. To ensure more effective health services, the language barrier must be removed. We feel the best way to do this is to teach languages to medical professionals (i.e. doctors and nurses).

According to OECD statistics 33% of doctors in Britain and 12.6% of doctors in Germany are from other countries. In Germany particularly there is major high level political discussion about the shortage of doctors, with the gap being filled by medical staff from Eastern Europe. Along with the mobility of medical professionals, there is a high number of EU citizens seeking treatment in EU countries other than their own. EU mobility regulations allow patients free choice of country for medical treatment and many EU citizens are attracted by perceived lower costs or better

Project Information

healthcare standards in other countries. Trends show that movement for medical purposes has increased overall, and particularly from Eastern European towards Western European countries. Very importantly too, some EU citizens live long-term in other countries without speaking the host country's language (e.g. British or Germans living in Spain) and need to seek local medical help. The Spanish Institute of Statistics shows British and German citizens forming significant minorities in Spain (94.860 residents, 6%, and 78.017, 5% of total foreign residents respectively). In addition, around 40 million tourists visit Spain every year.

In light of the above it is vital to maintain a high standard of medical treatment. A crucial requirement for this is clear doctor-patient communication. Studies show that if patients fail to comprehend medical staff, serious implications, such as aggravated health problems and increased healthcare cost [3], can result. This problem is worsened when patients and doctors come from different language backgrounds. It is thus critically important to minimise the language barriers wherever possible and this is where our tri-lingual consortium can have most effect.

English, Spanish and German are amongst the most spoken languages in Europe [4]. Thus it is likely that patients from one EU member state seeking medical treatment in another will speak or understand one of these. However, there is a lack of resources to teach efficient communication between patients and medics. To combat this we will provide a fully targeted package. This includes learning materials for Medical English, Spanish and German aimed both at medical staff already in the other countries or undertaking cross-border mobility. The learning process will be supported by computer-aided tools based on innovative Natural Language Processing techniques which is a distinct novelty of the project proposed. The course will feature tools and resources which will in particular facilitate the language communication process of medical staff with colleagues and patients in real contexts.

References

- [1] Health-EU. The Public Health Portal of the European Union. Mobility in Europe.[Accessed 29th October 2010]. Available at: http://ec.europa.eu/health-eu/care_for_me/mobility_in_europe/index_en.htm
- [2] European Parliament. Cross-border health care - Françoise Grossetête MEP explains ahead of vote. [online]. [Accessed 29th October 2010]. Available at: http://www.europarl.europa.eu/news/public/story_page/066-89972-298-10-44-911-20101025STO89929-2010-25-10-2010/default_en.htm
- [3] Gondy Leroy, Stephen Helmreich, James R. Cowie, "The Effects of Linguistic Features and Evaluation Perspective on Perceived Difficulty of Medical Text," Hawaii International Conference on System Sciences, pp. 1-10, 2010 43rd Hawaii International Conference on System Sciences, 2010
- [4] No Author (2006) Europeans and Their Languages [online]. [Accessed 29th October 2010]. Available at: http://ec.europa.eu/public_opinion/archives/ebs/ebs_243_en.pdf.

Themes: *** ICT
 *** Lifelong learning
 *** Vocational guidance
 *** Language training
 ** Labor market
 ** Access for disadvantaged
 ** Continuous training
 * Intercultural learning

Sectors: *** Human Health and Social Work Activities
 ** Professional, Scientific and Technical Activities

Product Types: website
 material for open learning
 open and distance learning
 teaching material

Project Information

Product information: We aim to devise a complete set of learning materials and support tools for teaching vocationally relevant English, Spanish or German to health professionals, helping their communication. TELL ME will be the first project to incorporate new language learning methodology into a coherent environment. It provides users with access to personalised learning material in various forms including video, audio, corpora, and a dictionary, thanks to the interactive exercises that highlight gaps in learner knowledge. The exercises are, in turn, efficiently semi-automatically generated using pioneering exercise generation engines incorporating progressive NLP technology.

Projecthomepage: <http://tellme-project.eu/>

Project Contractor

Name: University of Wolverhampton
City: Wolverhampton
Country/Region: West Midlands
Country: UK-United Kingdom
Organization Type: university/Fachhochschule/academy
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Partner

Partner 1

Name: Universität des Saarlandes
City: Saarbrücken
Country/Region: Saarland
Country: DE-Germany
Organization Type: university/Fachhochschule/academy
Homepage: <http://www.uni-saarland.de/en/>

Partner 2

Name: Hospital Pascual
City: Málaga
Country/Region: Andalucia
Country: ES-Spain
Organization Type: others
Homepage: <http://www.josemanuelpascualpascual.com/>

Partner 3

Name: NHS West Midlands Workforce Deanery
City: Birmingham
Country/Region: West Midlands
Country: UK-United Kingdom
Organization Type: public institution
Homepage: <http://www.westmidlandsdeanery.nhs.uk/>

Partner 4

Name: Universidad de Málaga
City: Málaga
Country/Region: Andalucia
Country: ES-Spain
Organization Type: National Agency
Homepage: <http://www.uma.es/hum106/>

Partner

Partner 5

Name: Universitätsmedizin Mannheim
City: Mannheim
Country/Region: Stuttgart
Country: DE-Germany
Organization Type: university/Fachhochschule/academy
Homepage: <http://www.umm.uni-heidelberg.de/master/>

Project Files

10) D6.2 EN English promotional materials.pdf

<http://www.adam-europe.eu/prj/8242/prj/10%29%20D6.2%20EN%20English%20promotional%20materials.pdf>

11) D6.2 ES Spanish promotional materials.pdf

<http://www.adam-europe.eu/prj/8242/prj/11%29%20D6.2%20ES%20Spanish%20promotional%20materials.pdf>

12) D6.2 Logo.pdf

<http://www.adam-europe.eu/prj/8242/prj/12%29%20D6.2%20Logo.pdf>

13) D6.7 Blog.pdf

<http://www.adam-europe.eu/prj/8242/prj/13%29%20D6.7%20Blog.pdf>

19) D6.3 EMarketing Example.pdf

<http://www.adam-europe.eu/prj/8242/prj/19%29%20D6.3%20EMarketing%20Example.pdf>

1) D2.1 Questionnaire.pdf

<http://www.adam-europe.eu/prj/8242/prj/1%29%20D2.1%20Questionnaire.pdf>

20) D6.4 Press Release ES 2 Screenshot.pdf

<http://www.adam-europe.eu/prj/8242/prj/20%29%20D6.4%20Press%20Release%20ES%202%20Screenshot.pdf>

21) D6.4 Press Release ES Article.pdf

<http://www.adam-europe.eu/prj/8242/prj/21%29%20D6.4%20Press%20Release%20ES%20Article.pdf>

22) D6.4 Press Release ES Screenshot.pdf

<http://www.adam-europe.eu/prj/8242/prj/22%29%20D6.4%20Press%20Release%20ES%20Screenshot.pdf>

23) D6.4 Press Release Telegraph Newspaper Article.pdf

<http://www.adam-europe.eu/prj/8242/prj/23%29%20D6.4%20Press%20Release%20Telegraph%20Newspaper%20Article.pdf>

24) D6.4 Press Release Telegraph Newspaper Screenshot.pdf

<http://www.adam-europe.eu/prj/8242/prj/24%29%20D6.4%20Press%20Release%20Telegraph%20Newspaper%20Screenshot.pdf>

Project Files

25) D6.4 Press Release WLV.pdf

<http://www.adam-europe.eu/prj/8242/prj/25%29%20D6.4%20Press%20Release%20WLV.pdf>

26) D6.5 Newsletter November 2013.pdf

<http://www.adam-europe.eu/prj/8242/prj/26%29%20D6.5%20Newsletter%20November%202013.pdf>

27) D6.5 Newsletter December 2013.pdf

<http://www.adam-europe.eu/prj/8242/prj/27%29%20D6.5%20Newsletter%20December%202013.pdf>

28) D6.8 31.10.13 TELL-ME Dissemination Event (Brussels, BE) Delegate List.pdf

<http://www.adam-europe.eu/prj/8242/prj/28%29%20D6.8%2031.10.13%20TELL-ME%20Dissemination%20Event%20%28Brussels%2C%20BE%29%20Delegate%20List.pdf>

29) D6.8 31.10.13 TELL-ME Dissemination Event (Brussels, BE) Photos.pdf

<http://www.adam-europe.eu/prj/8242/prj/29%29%20D6.8%2031.10.13%20TELL-ME%20Dissemination%20Event%20%28Brussels%2C%20BE%29%20Photos.pdf>

2) D2.3 User requirements report.pdf

<http://www.adam-europe.eu/prj/8242/prj/2%29%20D2.3%20User%20requirements%20report.pdf>

30) D6.8 31.10.13 TELL-ME Dissemination Event (Brussels, BE) Presentation.pdf

<http://www.adam-europe.eu/prj/8242/prj/30%29%20D6.8%2031.10.13%20TELL-ME%20Dissemination%20Event%20%28Brussels%2C%20BE%29%20Presentation.pdf>

31) D6.8 31.10.13 TELL-ME Dissemination Event (Brussels, BE) Invites.pdf

<http://www.adam-europe.eu/prj/8242/prj/31%29%20D6.8%2031.10.13%20TELL-ME%20Dissemination%20Event%20%28Brussels%2C%20BE%29%20Invites.pdf>

3) D3.1 Development plan.pdf

<http://www.adam-europe.eu/prj/8242/prj/3%29%20D3.1%20Development%20plan.pdf>

4) D3.2 Interactive Video Training.pdf

<http://www.adam-europe.eu/prj/8242/prj/4%29%20D3.2%20Interactive%20Video%20Training.pdf>

5) D4.1 Quality Plan.pdf

<http://www.adam-europe.eu/prj/8242/prj/5%29%20D4.1%20Quality%20Plan.pdf>

Project Files

6) D5.1 Exploitation Plan.pdf

<http://www.adam-europe.eu/prj/8242/prj/6%29%20D5.1%20Exploitation%20Plan.pdf>

7) D6.1 TELL-ME Website screenshot.pdf

<http://www.adam-europe.eu/prj/8242/prj/7%29%20D6.1%20TELL-ME%20Website%20screenshot.pdf>

8) D6.1 University of Wolverhampton Website screenshot.pdf

<http://www.adam-europe.eu/prj/8242/prj/8%29%20D6.1%20University%20of%20Wolverhampton%20Website%20screenshot.pdf>

9) D6.2 DE German promotional materials.pdf

<http://www.adam-europe.eu/prj/8242/prj/9%29%20D6.2%20DE%20German%20promotional%20materials.pdf>

Products

- 1 Interactive video training materials
- 2 Self-assessment tool
- 3 Corpus
- 4 Medical dictionary
- 5 Intelligent dictionary assistant
- 6 Medical translation tool
- 7 Project Website
- 8 Progress report
- 9 Final Report

Product 'Interactive video training materials'

Title: Interactive video training materials

Product Type: material for open learning

Marketing Text: Computer-based patient-doctor interaction simulation. A series of 5-10-minute videos portraying true-to-life interactions between doctors and patients. Materials will be provided by medical partners where available and filmed by academic partners where not. The videos will allow users to check their listening comprehension and apply their knowledge. Subtitles and transcripts will be generated semi-automatically and used to produce interactive exercises focussing on frequently occurring patient-doctor communication scenarios. These will help to prepare medical staff to use vocationally relevant language in the workplace, giving them essential skills from which patients will benefit. Learner error analysis will be performed via annotation, helping users to improve fluency by avoiding common errors. Exercises will be semi-automatically produced with the help of the software tools developed as listed below. Use of automatic tools will significantly speed up the creation process.

Description: Computer-based patient-doctor interaction simulation. A series of 5-10-minute videos portraying true-to-life interactions between doctors and patients. Materials will be provided by medical partners where available and filmed by academic partners where not. The videos will allow users to check their listening comprehension and apply their knowledge. Subtitles and transcripts will be generated semi-automatically and used to produce interactive exercises focussing on frequently occurring patient-doctor communication scenarios. These will help to prepare medical staff to use vocationally relevant language in the workplace, giving them essential skills from which patients will benefit. Learner error analysis will be performed via annotation, helping users to improve fluency by avoiding common errors. Exercises will be semi-automatically produced with the help of the software tools developed as listed below. Use of automatic tools will significantly speed up the creation process.

Target group:

Result:

Area of application:

Homepage:

Product Languages: Spanish
German
English

product files

Interactive Video Training Materials.pdf

<http://www.adam-europe.eu/prj/8242/prd/1/1/Interactive%20Video%20Training%20Materials.pdf>

Product 'Self-assessment tool'

Title: Self-assessment tool

Product Type: material for open learning

Marketing Text: A self-assessment tool for summative assessment using semi-automatically generated fill-in-the-blanks, MCQs, matching pictures to vocabulary, click-and-drag exercises (e.g. dragging words to make correct phrases, matching terms in the target and learner languages). This tool will be personalised to users' needs, allowing them to identify strengths/weaknesses and revisit sections of the course if needed. The main task is modification of the available English MCQ engine (pioneered by WLV and based on NLP technology, see Mitkov et al. 2006) and development of engines for German and Spanish, to produce the exercises listed above. These exercise generation engines will automatically identify important topics in the transcripts and other written learning materials, efficiently generating a large number of exercises (and plausible distractors (alternative answers) for MCQs) around them. The engines can also score short free text answers, so can automatically mark fill-in-the-blank answers.

Description: A self-assessment tool for summative assessment using semi-automatically generated fill-in-the-blanks, MCQs, matching pictures to vocabulary, click-and-drag exercises (e.g. dragging words to make correct phrases, matching terms in the target and learner languages). This tool will be personalised to users' needs, allowing them to identify strengths/weaknesses and revisit sections of the course if needed. The main task is modification of the available English MCQ engine (pioneered by WLV and based on NLP technology, see Mitkov et al. 2006) and development of engines for German and Spanish, to produce the exercises listed above. These exercise generation engines will automatically identify important topics in the transcripts and other written learning materials, efficiently generating a large number of exercises (and plausible distractors (alternative answers) for MCQs) around them. The engines can also score short free text answers, so can automatically mark fill-in-the-blank answers.

Target group:

Result:

Area of application:

Homepage:

Product Languages: English
German
Spanish

product files

Self Assessment Tool.pdf

<http://www.adam-europe.eu/prj/8242/prd/2/1/Self%20Assessment%20Tool.pdf>

Product 'Corpus'

Title: Corpus

Product Type: others

Marketing Text: A corpus of medical texts in English, Spanish and German will be compiled.

Description: A corpus of medical texts in English, Spanish and German will be compiled: the corpus will be used to support some of the other deliverables, such as generation of self-assessment exercises, medical dictionary and the intelligent dictionary assistant. It will be compiled from medical resources created in Spain, UK and Germany and available online. 'Corpus'.

Target group:

- medical professionals (MPs) wishing to learn a language in order to work abroad.
- MPs wishing to learn a language in order to treat foreign patients in their home country.
- patients whose native language is not the language of country in which they are seeking treatment.

Result:

Area of application: Medical field

Homepage:

Product Languages: German
English
Spanish

product files

Corpus.pdf

<http://www.adam-europe.eu/prj/8242/prd/3/1/Corpus.pdf>

Product 'Medical dictionary'

Title: Medical dictionary

Product Type: open and distance learning

Marketing Text: A multilingual medical dictionary with terms and phrases.

Description: A multilingual medical dictionary with terms and phrases. It will also include alternative terms which will be easy to comprehend for non-medical staff, as well as functionality linking it to the learning materials to help users hear and see vocabulary used in context (where available). The aim is to develop a dictionary similar to traditional multilingual dictionaries but integrated by an open and modular structure. This new structure, based on multilingual corpora, allows functions to be customised and new resources to be uploaded to enrich the tool according to users' needs. All academic partners have experience in compiling multilingual dictionaries.

Target group:

Result:

Area of application:

Homepage:

Product Languages: English
Spanish
German

product files

Medical Dictionary.pdf

<http://www.adam-europe.eu/prj/8242/prd/4/1/Medical%20Dictionary.pdf>

Product 'Intelligent dictionary assistant'

Title: Intelligent dictionary assistant

Product Type: open and distance learning

Marketing Text: The intelligent dictionary assistant will be able to display the vocationally relevant meaning of words with more than one interpretation depending on the context in which they appear.

Description: The intelligent dictionary assistant will be able to display the vocationally relevant meaning of words with more than one interpretation depending on the context in which they appear. By doing so it will save users both time and frustration when they attempt to find the meaning of an ambiguous word in traditional (paper or electronic) dictionaries. Using Natural Language Processing (NLP) techniques such as part-of-speech tagging and word-sense disambiguation, the tool will automatically disambiguate selected words. It will cover not only words but also multiword units such as collocations and idioms, based on our original work and extended to Spanish and German.

Target group:

Result:

Area of application:

Homepage:

Product Languages: German
Spanish
English

product files

Intelligent Dictionary Assistant & Medical Translation Tool.pdf

<http://www.adam-europe.eu/prj/8242/prd/5/1/Intelligent%20Dictionary%20Assistant%20%26%20Medical%20Translation%20Tool.pdf>

Product 'Medical translation tool'

Title: Medical translation tool

Product Type: others

Marketing Text: A tool for computer-assisted translation in the medical domain, based on available technology and adapted to project needs. USAAR has access to different translation memory technology as well as to tools that were/are developed in EU-funded machine translation projects. USAAR has considerable experience in fully automatic translation and other translation technology and multilingual applications in the medical domain, e.g. cross language information retrieval. WLV has also worked on Machine Translation

Description: A tool for computer-assisted translation in the medical domain, based on available technology and adapted to project needs. USAAR has access to different translation memory technology as well as to tools that were/are developed in EU-funded machine translation projects. USAAR has considerable experience in fully automatic translation and other translation technology and multilingual applications in the medical domain, e.g. cross language information retrieval. WLV has also worked on Machine Translation

Target group:

Result:

Area of application:

Homepage:

Product Languages: English
Spanish
German

product files

Intelligent Dictionary Assistant & Medical Translation Tool.pdf

<http://www.adam-europe.eu/prj/8242/prd/6/1/Intelligent%20Dictionary%20Assistant%20%26%20Medical%20Translation%20Tool.pdf>

Product 'Project Website'

Title: Project Website

Product Type: website

Marketing Text: A promotional web site with links to and from other relevant sites.
<http://tellme-project.eu/>

Description: A promotional web site with links to and from other relevant sites. Each partner will have a password to be able to input onto the site in its own language, so that the site will be tri-lingual. The site will also contain a secure area for partners to place internal update material.

<http://tellme-project.eu/>

Target group:

Result:

Area of application:

Homepage:

Product Languages: English
Spanish
German

Product 'Progress report'

Title: Progress report

Product Type:

Marketing Text:

Description:

Target group:

Result:

Area of application:

Homepage:

Product Languages:

product files

2012_3638_PR_TELL-ME_pub Periodic Report.pdf

http://www.adam-europe.eu/prj/8242/prd/8/1/2012_3638_PR_TELL-ME_pub%20Periodic%20Report.pdf

Product 'Final Report'

Title: Final Report

Product Type:

Marketing Text:

Description:

Target group:

Result:

Area of application:

Homepage:

Product Languages:

product files

2012_3638_PR_TELL-ME_pub Final Report.pdf

http://www.adam-europe.eu/prj/8242/prd/9/1/2012_3638_PR_TELL-ME_pub%20Final%20Report.pdf