Developing a 12-week e-learning course on software localisation at Imperial College London: design and insights from student feedback

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Abstract
As part of its Masters in Scientific, Technical and Medical Translation with Translation Technology (MScTrans), for the last six years Imperial College has been offering a six-week module component on practical software and website localisation. This module, however, has only been offered to one language group (German > English and English > German). In view of the rising level of interest amongst students and professional translators in localisation as well as the continued importance of localisation in the translation industry, a decision was made in 2007 to transform the current course unit on software and website localisation into a 12-week stand-alone e-learning course. The new e-course is to be made available to all of the MScTrans students (irrespective of their language combination) as an adjunct to the existing teaching. In addition, the course will also be made available to external delegates.

The aim of this paper is to describe our journey and to provide an analysis of the feedback received from the testers of this new e-course. During the creation and testing phase of the new e-course, it became clear that a simple transformation of the existing face-to-face course into an e-learning course was not possible and that a lot of work had to be put into adapting the content for an online course. An unexpected finding was that learners got through the online course content in half the time that it took to go through the same material in a classroom setting, even when the group in the class was quite small (2-5 students).
Introduction
It is now seven years since the Department of Humanities of Imperial College London received the first intake of students onto its groundbreaking MSc in Scientific, Technical and Medical Translation with Translation Technology (MScTrans) (http://www3.imperial.ac.uk/humanities/mscintranslation). Characterised by a clear focus on the use of technology in the translation workplace, this programme has seen its graduates gaining high-profile positions in the translation industry as translators, localisers, project managers, terminologists, computational linguists and subtitlers. Over the last few years we have also been active in continuing professional development (CPD), offering training courses to practising translators in TM (translation memory) tools, terminology management, computer skills for translators, searching the WWW and suchlike.

Our interest in e-learning dates back a number of years. It was in 2003 that we launched our initial exploratory market research exercise into the interest that existed within the translation industry in taking CPD courses - or even an entire Masters - by e-learning, and for the last year we have been preparing a 12-week standalone e-learning course in software localisation.

The course that we have been preparing is based on a module component of the MScTrans translation technology Masters which used to be taught annually to a small number of students in one language combination only who represented a small proportion of the total student cohort. As interest in this course unit grew amongst MScTrans students of other language combinations as well as amongst the freelance translator and in-house translation community, it was decided to transform it into a 12-week stand-alone e-learning course to be made available to all MScTrans students (irrespective of their language combination) as an adjunct to the existing teaching. In addition, we are also making the course available separately to external delegates, whom we foresee to be mainly freelance and in-house translators who are new to software localisation.

The aim of this paper is to describe our journey present an overview of the practical design, implementation and testing steps for this new e-learning course and an analysis of the feedback received from testers of this new e-course in order to provide the delegates at ASLIB with an understanding and some useful pointers on how to go about designing such a course and to show how both academia and the localisation industry may be able to draw benefits from this.

An interesting aspect of this new e-learning course is that it represents the culmination of many years of face-to-face experience of teaching software localisation both at Imperial College and also in professional settings and of over ten years' practical localisation experience with major software localisation companies such as Microsoft, Adobe, Nintendo and others by Daniela Ford, the lecturer of the original course component at Imperial College and author of this e-course.
This, combined with the extensive knowledge at Imperial College of theoretical and practical aspects of e-learning, has enabled us to design an e-learning course that we think could be a very important stepping stone to becoming a software localiser. We would like to present an overview of our journey and of best practices so that both academia and the localisation industry can hopefully learn and benefit from our experience.

Why e-learning?
E-learning can be defined simply as

Learning that is enabled by the use of digital tools and content. Usually involving interactivity between the learner and their teacher or peers and often via the web. (Stilton Studios 2008:online)

As such it is a modern form of distance learning, a concept that has its roots in the print-based correspondence learning that originated in the early part of the eighteenth century (Schrum 1999:11). As a twenty-first century educational methodology, e-learning takes its place alongside related technologies such as videoconferencing, podcasting and m-learning as a means of delivering learning programmes at a distance. What is distinctive about e-learning is its use of online collaboration and web-based learning, typically implemented via a VLE (virtual learning environment), to achieve its educational aims.
The principle uses of the VLE are twofold. Firstly, it is the main means for delivering the digital e-learning content, which may take the form of written materials, questionnaires, quizzes, articles, streamed audio or video content and so on. The interface used at Imperial College (Blackboard) is fairly intuitive and easy to navigate around, as shown in Figure 1.

As can be seen, the different sections of the material from the current unit (on localising WinHelp files) can be accessed via a Table of Contents, while the menu on the far left-hand side allows the user to move between different parts of the VLE.

The second main function of the VLE is to facilitate online discussion. As can be seen from Figure 2, this can involve either spontaneous participant-initiated conversations or scheduled, structured discussions of tasks or course material:

When a particular course is being followed by a group of participants who log in as and when they are able and perhaps even live in different time zones, discussion is by necessity asynchronous. However, it is a vital part of the learning process, enabling participants to get to grips and properly internalise the course content.
It is generally accepted that e-learning has a number of clear advantages over face-to-face study. It is possible to study at a time that is convenient to the user, from any geographical location, and the course material is accessible 24/7. Participants can access a huge diversity of course material wherever they are based, and are not restricted to what happens to be offered by the local university or college. This opens up the possibility of interacting with colleagues from all over the world and learning from each other’s different linguistic and cultural perspectives. The methodology facilitates team learning and student interaction via online forums and generally makes it easier for everyone to contribute to discussions. Instructors on an e-course tend to take on the role of moderator rather than teacher which can result in students feeling a lot more in control of their own learning. Finally, the use of e-learning provides participants with an ideal opportunity to learn skills by interacting with different technologies.

On the other hand, detractors of the approach draw attention to the feelings of isolation that some participants experience, and the fact that the teacher cannot always be on hand to answer urgent questions and offer instant assistance. Participants who do not feel comfortable with technology, do not understand instructions or tasks, or are slow learners, also often shy away from asking questions online as they are worried about embarrassing themselves in front of everyone. Group dynamics also plays an important role in online learning as there is a danger that more proactive or faster learners dominate the whole course, thereby leaving less proactive/slower learners behind. Participating in an e-course generally requires a very high level of motivation, and some people complain of becoming confused about course requirements and activities or frustrated at the complexities of working within the online environment.

The Imperial Course
Although conceived in the first instance as an adjunct to an existing face-to-face course - a component of MScTrans - it quickly became apparent that the Imperial College e-course had potential appeal to a much wider audience, consisting of people with a language degree or postgraduate qualification in translation - private individuals and company representatives - who want to embark on a career in the translation industry and/or are already working in the translation industry but do not have any formal education in software localisation. Designed by a practising localiser, the course is divided into twelve units that are intended to be followed over the same number of weeks. Each unit contains learning materials and practical tasks that require interaction with other course participants. The course has a very practical focus and covers the following topics:

- Introduction to the key concepts of localisation (GILT, localisation process, localisation tools, localised keyboards)
- Localisation of resource files (software)
- Localisation of help files (Windows- and Web-based)
- Screenshooting and localisation of text contained in graphics files
- Localisation of games

Although a basic introduction to the concept of translation memory is included in the course as part of the section on localisation tools, the course itself does not require the use of any specialised software apart from standard applications like Windows Notepad and Microsoft Office. This was a conscious decision taken in order to make the course available to as many delegates as possible and to reduce the need for technical support for downloading or purchasing specialised software and its installation as this can prove to be very difficult in an online scenario. The one exception to this is that participants MAY choose to download the free trial version of Adobe Photoshop to carry out the tasks in an optional course unit although this unit can also be followed without downloading and installing the software.

The rationale behind the course is to provide participants with the fundamentals of software localisation; the course is NOT designed to teach participants how to use specialised tools like translation memory programs or other specialist software as tool providers and others already offer workshops and courses on this.

**Designing the course**

As already mentioned in the Introduction, the starting point for designing the e-course was the course material that had been created by Daniela Ford for the six-week face-to-face module component on software and website localisation and which had been tried and tested from 2001 to 2007 in the face-to-face module. Some of the material (resource and help files) was originally based on content from Esselink (2000) but was then supplemented with the practical experience of the lecturer of the module and updated and/or completely rewritten every year to reflect the changes in the localisation industry.

The face-to-face material originally consisted of six documents in Word (one for each week of teaching) which were a combination of new information (e.g. an explanation of what a portal is and what it entails) and tasks and questions in a worksheet, which students would carry out and provide answers to (see Figure 3 below).
As the intention was to create an online course for both MSc students and external delegates it was then decided to extend the course to twelve weeks to coincide with one university term which would also allow us to add to the existing content to provide a more comprehensive course. We therefore started to add content based on experience from a real localisation workflow process and began to rewrite and adapt the existing material to make it usable in an online scenario. The rewriting was helped by the fact that the author had taken part in a six-week online course on e-learning provided by Imperial College in 2006 to prepare MScTrans lecturers for creating and teaching e-learning courses, and had also gained very useful insights during a three-year Leonardo-funded EU project called MeLLANGE (http://mellange.eila.univ-paris-diderot.fr/) in which she had the opportunity to create e-learning content and to learn about various aspects of e-learning. One of the results of the MeLLANGE project was a formulation of best practices in the creation of e-learning content (MeLLANGE 2007) which can be downloaded at no charge from...
their website. In addition, the e-learning department of Imperial College provided valuable assistance and feedback specific to the course that we were writing.

As the individual units were completed, they were sent for proofreading to a lecturer of English in the Department of Humanities who had no previous knowledge of software localisation. This choice was made deliberately in order to a) ensure that the course material was linguistically correct and b) that it made sense to someone who was completely new to localisation and whose mother tongue may not be English (bearing in mind that participants would not easily be able to question the meaning of the course material which meant that the course material had to be extremely clear and spell out a lot more that what would normally have to be spelled out in a face-to-face scenario).

The proofread units were then transformed into SCORM units using a package called Course Genie (recently renamed Wimba Create) and uploaded into Blackboard, the VLE used at Imperial College.

As we did not want to run over a term, it was decided to change the duration of the course to eleven weeks by leaving the twelfth unit, which had already been written, in the course but making it optional. The optional unit is a practical unit focusing on editing graphics in a commercial software application and it was felt that it would be good to make this unit optional as not everyone might want to or be able to install the free trial software needed for this particular unit.

The final course map before testing started was as follows:

Unit 1: Introduction to the key concepts of software localisation
   An introduction to the key concepts of software localisation (Globalisation, Internationalisation, Localisation and Translation)

Unit 2: Localisation case study and localisation process

Unit 3: Brief overview of localisation tools and key names on keyboards
   A brief overview of tools that may be required when localising software and an exercise to learn about different keyboard layouts for different languages and/or countries

Unit 4 Localising resource files - Introduction

Unit 5 Localising resource files - Translation approach

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1 SCORM (Sharable Content Object Reference Model) is a standard for developing, packaging and delivering materials for online training courses. The SCORM standard, and more specifically SCORM-compliant tools and platforms, allow you to find, import, share, reuse and export learning contents through compliant web-based learning systems (Cyberlink Corp. 2002:online).
An introduction on HOW to localise resource files.

Unit 6  Localising resource files - Practice
A practical unit in which participants will localise a small section of a software application

Unit 7  Localising online help - WinHelp I
An introduction to WinHelp (Windows Help) files

Unit 8  Localising online help - WinHelp II
Practical guidelines to translating the cnt and rtf files of WinHelp (Windows Help) files and translation guidelines for translating WinHelp files

Unit 9  Localising online help - WebHelp
An overview of what a WebHelp is, what components a WebHelp is made up of and information on how to translate WebHelp files

Unit 10  Screenshooting and localising graphics
An overview of screenshooting and localising graphics as part of a localisation project. This unit will require additional software that can be downloaded free for 30 days; however, if participants do not want to download and install the additional software, this unit will still be useful as it will give participants an overview of what screenshooting and localising graphics involves.

Unit 10a  Tools and features in Photoshop III: Tutorial for Save for Web (optional)
An optional unit related to Unit 10 that contains further information on working with layers in Photoshop. Participants can read through this tutorial and try to follow it if they have Adobe Photoshop

Unit 11  Localising games
An introduction to localising games, focusing specifically on the meaning of localisation in the context of games, research methods and how to keep knowledge up-to-date, as well as some specific features of games such as characterisation, tolerance and laws. An overview of what it takes to be a games localiser.

Testing setup
The e-learning course in software localisation was test-driven by MScTrans students during the summer of 2008. We deliberately limited the number of students taking part to twelve as we wanted to split the students into four groups (three students per group) with each group testing three complete units because we did not have eleven full weeks available for testing. Each group therefore tested three pre-assigned units and provided feedback but was also allowed to complete any of the other units and several students did this. Testing was performed by a total of twelve students (with six students on the waiting list) both from home and from the university. In addition, six MScTrans tutors participated; some of them were to be moderators when the course was officially launched in January 2009. The student group consisted of native and non-native
English speakers. The languages covered were English, German, French, Italian, Spanish, Polish, Chinese and Greek.

Students were provided with a course induction document online in Blackboard explaining the testing procedure. All communication with students was via Blackboard; this was a deliberate decision in order to avoid too many emails going backwards and forward and to eliminate having to provide the same answers to the same questions twice.

As students and tutors completed their pre-assigned units and tasks they then filled in a feedback questionnaire containing questions about the presentation and content of each unit. The questionnaire was based on the one developed as part of the MeLLANGE project (MeLLANGE 2005). This questionnaire is not publicly available but can be requested via http://mellange.eila.univ-paris-diderot.fr/. The modified questionnaire used for testing this e-course on software localisation is provided in the appendix at the end of this paper.

Students who participated in the testing phase had reached the end of their one-year MSc and were therefore to an extent already familiar with software localisation, with some students being very knowledgeable and others less so.

Summary of feedback
Below is a summary of the most interesting feedback received based on the questionnaires that were filled in during the testing phase, as well as feedback received during a two-hour face-to-face feedback session at the end of the testing phase. No feedback was received for Unit 1 because the feedback questionnaire for unit 1 could not be accessed when testing started but we have since asked a few students to provide feedback to us for this unit. About 50% of the respondents had some experience with e-learning.

Presentation of units:
Overall, feedback regarding the presentation of the units was very positive. 95% of respondents liked the colours, 97% thought that the font size was appropriate and 94% commented that the design of the units was consistent.
Navigation of units:

Navigation in units also received overall good feedback. 13% of the respondents commented that they found navigation difficult; a reason for this could be that these respondents were not familiar enough with Blackboard. A solution would be to run induction sessions before the actual course starts and ask all participants to follow selected tutorials on using Blackboard.

Overall satisfaction:

Overall satisfaction levels of respondents were high, with 84% saying that they were satisfied with the units, 79% saying that they would like to complete other units and 95% of the respondents commenting that they were comfortable using the web-based environment. 87% found that the e-learning approach was a good way to learn this type of content.
Content of units:

72% of the respondents disagreed that there was too much written content in each unit, which could be interpreted to mean either that the amount of written content was right or that there was not enough written content. Looking at the answers from other parts of the questionnaire, in particular the question "How long did it take you to a) complete a unit and b) complete the assigned tasks to each unit?" revealed, though, that the author had overestimated the time it would take learners to complete a unit.
Interestingly, respondents needed on average half the allocated time to complete a unit and the associated tasks. Each unit had been originally designed to last 2 hours (1 hour to complete the unit and 1 hour to complete the associated task(s)) but respondents completed each unit in about 1 hour. This also tallies up with the 79% of respondents who disagreed with the statement that the units were too long.

The original Word files created for each unit each contained an average of 1500 words of text (about eight pages of text in Word) which means that a unit would need to consist around 3000 words of reading material and/or exercises to make it take approximately one hour to work through. It would be interesting to compare the retention rate of face-to-face students and online learners to see whether the face-to-face-students or the online learners remember more of what they have learned in a given unit as it may be that online learners simply go through the material a lot faster because they cannot discuss any specifics with anyone while reading and therefore do not actually learn as much as someone in a face-to-face session although he (the online learner) covers more course material.

Clarity of instructions and objectives and level of difficulty of content: There was positive feedback regarding the clarity of instructions (74%) and clarity of the objectives of each unit (95%). Feedback regarding the level of difficulty was a little mixed, with 37% of respondents saying that it was not appropriate. Feedback from open questions showed that some participants knew a fair bit already about software localisation and had therefore hoped to learn a bit more in this course which again ties in with the feedback that there was not quite enough content. Enriching the content and providing more detailed information will solve this problem and make the course more interesting to beginners and slightly more advanced users alike.

![The difficulty level was appropriate for me.](image)

Figure 9: Difficulty level of the units
Suggestions for improvement:

Suggestions for improvement clearly showed that activities (quizzes) and multimedia feature highly on the wish list of respondents. The majority of respondents (66%) said that they found the ratio of reading content to interactive activities good, and the same number of respondents (66%) said that quizzes helped them assess their level of knowledge, although 29% commented that they would like to have more activities. This maps on to current trends in e-learning (e.g. constructivist approaches and e-tivities) (Peter Wren, Education Quality Office, Imperial College, personal communication).

Figure 10: Suggestions for improvement

Figures 11 and 12: Assessment and ratio of reading content to interactive activities
Will I be able to reuse what I learned for my work or studies?
90% of the respondents felt that they would be able to reuse what they learned for their work or studies which indicates that the course content reflects the needs or at least the needs perceived by the learners of the localisation industry. The 10% who disagreed may have disagreed because they were not intending to work in the localisation industry. In fact, one respondent in an open question in the section “Any other comments or suggestions” commented: “Tasks were useful in that they are confirming to me that I do not want to concentrate on this area of translation professionally.”

![Figure 13: Usefulness of the course content](image)

Is face to face learning better than e-learning?
This was an open question where respondents were asked to comment on e-learning versus classroom or face-to-face teaching. Not surprisingly, quite a lot of respondents said that one of the drawbacks of e-learning was that the learner could not ask questions in real time unless the tutor was online at the same time. However, overall responses were very positive towards e-learning, comments ranging from it being convenient to study when and where you want to the advantages of being able to study at your own pace. On the other hand, though, some respondents felt that e-learning worked well for basic learning but that it was difficult to go into detailed and complex subject matter. Another point raised was that very practical units like the one on editing screenshots might work better in a classroom scenario.

What did respondents enjoy most and least about the e-learning?
Exercises, practice, assessment (quizzes) and reading came out top when asked what participants enjoyed most about the course. Only one respondent said that he/she enjoyed the online discussions with the other students. When asked what respondents liked least, one respondent mentioned taking part in discussions and one respondent commented that there were not enough quizzes in one unit.

**Conclusion**

Creating an e-learning course, even when it can be based on existing proven course material from a face-to-face course, is not a task to be undertaken lightly. Many aspects need to be considered, most of all that learners will not learn synchronously, and that the tutor will not be on hand all the time to answer questions. The course material for an e-learning course therefore needs to be a lot more detailed, a lot more explicit and at the same time motivational enough for the learner to stay on board and remain interested. A high level of motivation can be maintained by providing as much interactivity as possible, by having a very clear and logical course structure and by letting the learner know that he or she is not alone and can ask for help if needed.

A very important lesson learnt from this testing was also that technical aspects need to be taken into account (for example, the VLE used at Imperial does not work well with Firefox, logging onto and out of the VLE was challenging for some participants, and downloading the course material in a user-friendly file format was difficult) and that the course material needs to be comprehensive enough as learners seem to get through more course material online compared to a face-to-face session (the original course material was used in a two-hour face-to-face session and it took students half the time to get through the same amount of material online). Final changes in time for the official launch of the course in January 2009 are currently being implemented.

**Appendix: Feedback questionnaire**

For each item, please click on the response which best represents your judgement:

1 = Non Applicable
2 = Strongly disagree
3 = Disagree
4 = Agree
5 = Strongly agree
### 1. PRESENTATION

| I liked the colours used. | 1 | 2 | 3 | 4 | 5 |
|--------------------------|---|---|---|---|---|
| There was too much written content. | 1 | 2 | 3 | 4 | 5 |
| The font size was appropriate. | 1 | 2 | 3 | 4 | 5 |
| The design was consistent throughout the unit. | 1 | 2 | 3 | 4 | 5 |

### 2. NAVIGATION

| I found navigation within the unit easy. | 1 | 2 | 3 | 4 | 5 |
|------------------------------------------|---|---|---|---|---|
| It was easy to find the content overview from within the unit | 1 | 2 | 3 | 4 | 5 |
| I always knew my progress within the unit. | 1 | 2 | 3 | 4 | 5 |
| I could easily find references and additional materials | 1 | 2 | 3 | 4 | 5 |
| The various parts of the unit were well linked and easy to reach | 1 | 2 | 3 | 4 | 5 |

### 3. CONTENT

| The writing style was easy to | 1 | 2 | 3 | 4 | 5 |
|-----------------------------|---|---|---|---|---|
|                            | 1 | 2 | 3 | 4 | 5 |
understand. The text was grammatically correct and free of errors. The instructions were clear and sufficient. The objectives of the unit were clear to me. The activities were well chosen to fulfil the objectives. The content was relevant. The sequence of activities made sense to me. The difficulty level was appropriate for me. I found that the unit was too long. I found the ratio of reading content to interactive activities good. Quizzes helped me assess my level of knowledge.
4. **OVERALL SATISFACTION**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| I was comfortable using this web-based learning environment. | | | | | |
| I will be able to reuse what I learned for my work or studies. | | | | | |
| The approach adopted in this unit is a good way for me to learn this type of content. | | | | | |
| Overall, I am satisfied with this unit. | | | | | |
| I would like to complete other units like this. | | | | | |

5. *Is this your first experience learning in this method?*

Is this your first experience learning in this method?

- [ ] Yes
- [ ] No

6. **Comment on this learning method compared to classroom/face to face learning.**

7. *Please help us to improve this unit by checking the suggestions below that apply:*

- [ ] Clarify the unit objectives
- [ ] Reduce the amount of content
Update the content
Increase the amount of instructions
Add more multimedia
Improve unit organisation
Add more summaries
Add more activities

Please specify

Next

Survey Powered by:
SurveyMonkey.com
"Surveys Made Simple."

8. QUESTIONS FOR TUTORS ONLY

What changes (if any) do you think should be made to the content of this unit to be useful for your teaching purposes?

9. CONCLUSION FOR ALL

Do you have other suggestions as to how to use the content of this unit?
10. What was the most enjoyable part of the unit for you?

11. How long did it take for you to complete a) one unit b) the tasks associated with the unit
   a) 
   b) 

12. Which part did you like least?

13. Any other suggestions or comments:

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