Translation and technology in a project-based learning environment
http://webcast.in2p3.fr/videos-translation_and_technology_in_a_projectased_learning_environment
Rosemary E.H. Mitchell-Schuitevoerder

Abstract
Is it realistic to expect translator training in higher education to deliver translators, custom-made for the profession? Increasingly, the industry is being compartmentalized and the practitioner is required to carry out isolated tasks within the entire translation process. This paper discusses how project-based learning within a translation and technology module, covers translation jobs such as project management, 'workflow', 'revision', 'translation memory' PEMT (post-edit machine translation) with a special focus on revision. The objectives of the learner-centred methodology are not only to prepare students adequately for entry into the profession, but also to support changes in syllabus design in establishments of higher education.

Texte intégral
A ‘translation and technology’ project

In 'Computer-Assisted Translation: The State of the Art', Robert Clark (1994:308) states that it is the responsibility of education to provide students with the skills expected by their future employers. A year later Don Kiraly (1995:2) shifts focus from the employer to the student and argues that ‘to train student translators, we must first ask what skills professional translators have that our students do not yet have and, second, how we can effectively and efficiently create an appropriate learning environment for acquiring such skills and knowledge.’ Kiraly observes five years later that ‘there are only a handful of academic programmes worldwide that purport to train trainee translators themselves’ (2000:193). The project-based syllabus in this paper is the outcome of a methodology, which is in line with Kiraly's sociocentric constructivist theory that independent learning monitored by a competent teacher leads to the skills, competences and abilities required to meet professional challenges. The project-based translation and technology syllabus of a British postgraduate degree course involves one project with 80 contact hours over a period of six months, and requires significant independent study time to practise the use of technologies. The project is presented as follows:

The coordinator or main tutor will set the students a translation project to work on, which will be developed by the students under guidance of the tutor during the entire length of the course in line with the topics planned for each set of lectures. Using the English-language only Durham University website the students need to complete a translation project that is ready to become a multilingual website in all the taught languages of the course. Each individual will need to select appropriate sections (2500 words in total) for translation and although the final product should be faultless, it is the process and management of the translation that are crucial to the project. Collaboration with other students during the process on all kinds of different technological activities surrounding the translation is essential. All these activities need to be recorded personally during the module order to provide data for two essays and an oral presentation.

( Durham University Handbook MA Translation Studies 2010)

The sentence ‘...it is the process and management of the translation that is crucial to the project’ – infers that the translation of 2500 words in the final project is not graded. Summative assessment is based on two essays and an oral presentation during the course of the module in which the students give a critical assessment of tools used to achieve that translation. There are three reasons why the final translation in the project is not assessed: a) although collaboration deemed essential in this case, it would disqualify the translation from meeting the academic criteria for a summative translation, b) students translating the university website into their acquired language are at a disadvantage compared to students translating into their first language, and c) assessment of the process prevents the students from being prodod driven (cf. grade-driven) and helps them to concentrate on the translation process itself. Nevertheless, the translation needs to be made fit for purpose, i.e. (a) the translated university website pages must be adapted to their intended target audiences, which involves the application of translation theories, and (b) the translations need to be revised and pass through a translation quality assurance programme (TQA). The technology applied to the website translation is assessed in their essays. The first requirement for the essay on Internet-based tools is as follows:

In preparing your essay offer a reflection on two or more Internet resources you have used to solve the challenges raised by the translation project

And in the second essay, the requirement states that

In completing the project, you would have used a variety of softwares (from common word processing tools to specific translation software) consider the implications of their use in the organization of work for your project:
Assess the quality of the translation memory packages you have used in completing your project...
( Durham University Handbook MA Translation Studies 2010)

The translation project contains student-centred learning activities, which aim to replicate real life situations and even time. Don Kiraly (2000:131) describes how he uses his own translation experience to set up a simulated total experience with client constraints included. The main feature suggested by Kiraly is that students need to determine themselves what skills are needed to meet the specifications of the task. Learner independence is one of the main objectives of project-based approach as it will enable the students to meet their potential challenges as practitioners.

Learner-centredness

The students are generally not daunted by the prospect of having to submit a 2500 word translation and would prefer to do it at a computer and complete it in the shortest period of time. However, the translation and technology module does not allow it to be submitted until all the components of the project have been completed. Many students are accustomed to what Kiraly (2000) calls 'learner empowerment', meaning that their knowledge and understanding will
generated through their activities, and that the more time they spend solving problems and carrying out tasks independently, the more efficient they will become. From interviews with students, it appears that some students embri odate the learner-approach with greater ease than others. One student said in an interview with the teacher: ‘I was very confused but in week seven I realised this was process learning’, while another student interviewed claimed that it would be pr eferable to h a ve prescribed sample texts to pr actise on – ‘tailor-made for the purpose, e.g. including repetition for translat ion memory’ (TM). It was the student’s opinion that the Durham University website was not suitable for translation within constraints of the module. The professional world, however, would refute this claim by stating that source texts (ST) are of not ‘fit for purpose’. Moreover, file formats do not always suit the translator’s software, context or reference material is always available, and the translator needs to approach such challenges with an independent and problem-solving mind.

Problem-solving in the project

The project of translating a website is supported by a syllabus, which breaks down the project into problems, structured tasks. The syllabus design is modelled on real-life problems in the workplace, in which adults in apprenticeship in the have to connect their experiences and acquired knowledge with the actual context in which they are used. In line with Anthony Pym (1993:100-116) suggests in ‘Principles for the teaching of translation’ that we start from the process translation, rather than from a theory. We should analyse the problems and look for matching examples. Pym continu es that teaching itself should not be rule-bound, but based on possibly random choices. The project-based syllabus prese a choice of problems, thus familiarising the student with Internet-based tools for terminology, machine translation localization, cloud computing, (e.g. editing in Google Docs), the sourcing of information (browser and search engines), ε later in the course students are introduced to translation memory software. In order to be effective learning tools, proble e are given the structure of tasks, which allows problem-solving to become an integral part of the many activities in project-based syllabus. In this way the total learning experience moves the student as close to the work-place as possi bly.

Tasks in the project

Tasks for communicative language teaching were designed in the 1990s by theorists in English as a second / fore language [cf. Nunan, D. (2004), Richards, J.C. and Rogers, T.S. (2001), White, R.V. (1988)]. Skehan’s (1988) task mo del has been adopted for the project-based syllabus because of its clear structure in three stages: pre-task, main task a nd post-task. Kiraly’s (2000) socio-constructivism, concerning the importance of understanding culture and society, and building of competence on this knowledge and understanding, is mirrored in many features of the task, particularly in authenticity of materials. The project-based learning method tries to create a sense of authenticity by simulating authentic translator environment and translation process. Tasks allow the project to be broken down into bite-size components, which are problem-based, yet without being closed or product-focused. The students design their own tasks: within the given framework and the outcome is not predetermined. In the pre-task stage the student explores the nature of problem, gain appropriate insights into the bigger picture and establish a plan to deal with the problem, which subsequently dealt with in the main task. In other words translation or revision constitutes the main task after considera tion time has been spent on planning and researching with, for instance, Internet-based tools in the pre-task stage. If revision focuses on the main task, the pre-task might consist of translating the required text, or negotiating terms and conditions for the revision.

Task design

Task design in translator training is not new; it has been trialled and is discussed in detail by Chus Prieto and Franci Cenfere Linares (2010), who contrast the traditional teacher-centred approach with the preferred student-centre d-process-oriented approach. They consider collaborative and problem-based learning crucial to gaining professio nal competence. Mary Ann Kelly (2010) discusses the task specifically in the ICT classroom. In her paper ‘The impact of T Design on Small Group Interaction’, she focuses on group dynamics, and although group interaction is essential for problem-based learning, it receives less prominence in this paper because it is considered to be part of the support learning mechanism. Kelly’s discussion of peer evaluation includes Garrison et al.’s (2001) model of inquiry, which to so extent is complementary to the three task stages. The model, discussed in greater detail in the section ‘Reflection and critical thinking’, informs the final task stage in which assessment, critical thinking and reflection are fundamental to consolidation of any learning that has taken place. This line of thought compares with Prieto and Linares (2010), who observe how reflection and self-assessment in the final stage of the task are enhanced by collaborative learning. In t he paper, revision, a major component in the project, is discussed as a typical example of a task, involving a variety of computer-based and web-based tools.

The revision task in the project

Revision is an on-going task in conjunction with other tasks in the project. The project framework is such that the students are instructed that their website translation, consisting of various web pages, should not be submitted without revision by a third party, and that there should be no file sharing without TQA. The revision process should be recorded in blogs section ‘Reflection and critical thinking’) and is considered to be of prime importance to their assessment of technology tools used to accomplish the revision component. In the pre-task revision stage, students are expected to familiarise themselves with the topic by reading suggested background material and by preparing and attending oral presentant delivered by two students. The readings usually consist of articles in professional translator journals and acader sources. The presentations are planned by the students, based on the aims and objectives in the syllabus and suggested (additional) readings. Individual reading and preparation prior to seminars is encouraged to enable ci discussions, in which students generally recognize the added value of preparation. Resources for preparation need to include both linguistic and technological components of the translation process. The former refers to criteria which make the translation ‘fit-for-purpose’, while the technological component refers to TM functions, which alert the user inconsistencies within the target text (TT) and between ST and TT. Unfortunately, criteria for linguistic revision are transparent compared to those implemented by technological tools, which are discussed in more detail in the sect Revision and technology’.

Linguistic criteria for revision

Tim Martin (2007) agrees that revision is not especially well understood, either as a concept or as an activity. He adds t
the new European standard EN15038 on translation services has helped to clarify matters but that it understandably avo
d being prescriptive. The fit-for-purpose principle, however, offers enough scope for most revision policies. The industr
main concern tends to be cost, and therefore it will primarily look for quality-assurance measures closer to the source
other words - the translator. Once the product has arrived downstream, time and money come into the equation, often
the expense of quality. Another issue [Gouadec (2010:118)] is that the job descriptions of editor, reviser and proofreader
often used indiscriminately in the post-translation quality control process. Students, in a surveyed sample, were not cl
about the three functions either, nor were they confident about drawing up suitable criteria. They associated revision "in
human resources, software, documentation, etc., negotiates between client and translator, recruits translators for spec
works on the project, and the required amount of PEMT (post-editing of machine translation). PEMT is popular with global companies w
visualise a great output potential in machine translation (MT). However, they cannot deny their reliance on hurr
post-editing and on translators who need to be able to do so efficiently and quickly to be cost-effective. Ideally, trans
editor/reviser should understand the MT systems so that they can advise the writers how to make their texts m
suitable for MT. Ideally, edited output should also be fed back into the translation memory (TM) of the MT, which may tr
produce better translations with less PEMT needed. Therefore, it is important to include MT in translator training and no
disregard it as a failed attempt to replace human translation. The syllabus also requires students to hyperlink tr
translations to translations in other target languages. Before a matching translation is accepted, it needs to have be
given TQA, after revision by a third party. This multilingual activity and the transfer of files is organised by a student t
model, which has set up a wiki as a simulated server. In the sense that has followed the course, the revision focus changes
revision with technological tools, such as TM software. The students need to be familiar with the functions Autocheck +
Quality Assurance in TM, but also explore the ways in which revisions / changes can be imported back into the var
TM. The outcome of their activities should be error-free translations, as well as a critical analysis of the different s
software programmes. The final aim and objective of this task is for students to study the workflow process from ST to
The project management (PM) team brings the components of the project together, and assists in peer-review. Th
project management plays a crucial role in the learning process of all students by managing the process from creation
revision to delivery.

Revision and collaborative learning

Third party revision by an anonymous colleague in the industry has become standard since the European EN 151
standard was introduced. The project-based syllabus aims to achieve anonymous third party revision in class, managed
the PM team. The team consists of a number of students, representing all the target languages of the multilingual web
translation project. In a work environment [cf. Gouadec D. (2007)] a translation manager supervises work flow, man
human resources, software, documentation, etc., negotiates between client and translator, recruits translators for spec
jobs, plans the job and draws up specifications, prepares source materials, informs and monitors translators, checks ±
controls TQA interim and final version. The PM team members are expected to design their task according to a workfl
model, organising and supervising the revision process over a period of several weeks. Critical assessment of tr
experience is expected to constitute a significant section of their summative essay. The team organises web-bas
communication by means of a wiki, which they manage, and which is used as a data resource and forum by all students c
revision task requires the PM team to draw up an agreement on criteria and to manage and supervise revision of html files within three different TM software programmes, as well as in word processing software. The te
members are expected to check all translations after revision, including languages unfamiliar to them. Part of their dut
must manage file transfers and the appropriate exchange of memory and terminology databases. Management of the F
page often results in interesting discussion threads between students. Web-based communication skills are test
because when a particular query remains unanswered, the team suggests appropriate forums to be contacted. At t
moment the professional world enters the classroom: when students contact support services with questions ab
compatibility, or when posting questions on translator group lists. Incoming information is then posted on wiki. The post
on wiki can be classified as cognitive and non-cognitive postings [Kenny, M. A. (2010:102)]. Cognitive postings ±
evidence of student learning via discussion, negotiation and debate, while non-cognitive postings refer to administra
issues, or after-class arrangements. Non-cognitive postings are less prominent on the wiki than they are in the blogs. 1
blogs are designed for personal reflection and are less inhibitive than the wiki, which strikes some students as professio
and formal. The learning value of blogs is discussed in the following section. Wiki and PM team assist in creating coll
ative atmosphere in the class. Kenny (ibid :99) describes the collaborative group as a structure in which a group
learners is engaged in the creation of a group product and where all members work in parallel on all aspect of the ta
Therefore, the project team is the collaborative group engaged in the provision of a revision service for the class membe
while the class itself compares with Kenny's first group-learning structure, i.e. that of a discussion group in which m
members offer each other emotional and cognitive support via the wiki, but working on their individual products, wi
engaged in the same task.

Reflection and critical thinking

Blogs are set up in the Virtual Learning Environment of the university. They provide a possible solution to Garrison's [e
(2000:2)] query how the medium of computer-mediated communication (CMC) in higher education may be best used
promote higher-order (cognitive) learning. CMC, in this case the translation and technology classroom, should lead t
critical community of inquiry consisting of four stages, i.e. trigger, exploration, integration and resolution. The first t
stages of trigger and exploration refine the activity indicated as the pre-task stage, while integration of design and p takes place in the main-task stage, and resolution of the problem could be considered as complementary to the post-ti stage. In the latter stage [ibid:5] the students should have a clear idea of what has been accomplished and achieved, well as demonstrate expectations (a new trigger) for the next task in which acquired knowledge can be applied. The bls are private and not open to other members in the class, apart from the teacher, unlike the wiki, which is accessible to class members. The students are encouraged to keep their blogs open, so that they can record new discover instantaneously and add thoughts and reflections. The teacher can post comments on individual blogs, which are of questions to encourage critical thinking, thus moving the student towards a critical assessment of the technological tos. Most students are familiar with blogs (cf. Facebook) and are very likely to continue using blogs (cf. LinkedIn) and port within the translator community, which provide information and resources on anything related to being a transl [Gouadec D. (2007)]. Familiarity with blogs and portals is yet another step on the way to becoming an independent practitioner.

**Project-based teaching in the curriculum**

PB teaching is obviously more effective if the methodology is supported across the curriculum and employed in ot modules. A translation and technology module provides many opportunities for cross-linking to other modules within a degree programme, for instance, in the students' specialised translation modules when they apply online terminology searches and particularly when they use TM in their specialised translations. One of the requirements for the submission the extended translation project is that the students include associated terminology lists and translation memories in their submission. Cross-pollination also occurs from translation theory by discussing its application when using TM software, particularly concerning revision in TM programmes. The students also need to investigate whether revision of their own translations is performed adequately when using all the TM functions for QA, and whether QA in the TM program actually reduces the reviser's task. Other questions for investigation could be Juliane House's (1981:56) classification of covert and overt errors, including textual, situational and cultural aspects [Schäffner (1998),] and their relevance to the translation of the university website into multiple languages, as well as any Internet-based or technological tools used. And, if functionality has become the benchmark [Hönig (1998:60)] for translation evaluation and QA, then how should students classify their machine translations of web pages: are they functional or functioning translations? And if European standard is applied to MT, could 'fitness for purpose' possibly claim linguistic correctness? For PB learning to be effective, it should ideally be part of other syllabuses in the TS department. A different example of PB teaching is given Federici (2010:173) in describing how a translation module proceeds through different modalities, all requiring self-reflection and self-assessment. In line with the project-based syllabus in the translation technology module, the evaluation (cq. revision) of the module includes a portfolio consisting of formative translations which the students revise their own translations in agreement with feedback and set assessment criteria, after which their translations are resubmitted for summative assessment (50% component). When students work according to such a model in different modules, they become more process-oriented and increase their professional competence by rais self-awareness, and improving the revision of their own translations. Finally, it should be mentioned that revision tasks place on macro as well as micro level [Englund Dimitrova (1995)]. TM programmes work on micro level by alerting the students to inconsistencies, and it is the responsibility of the student / translator to take account of the entire process of revision, activity which is supported and encouraged by the project.

**Conclusion**

Translation and technology have almost become synonymous, and the industry is taking advantage. Manufacturers of I hardware and Computer Assisted Tools try to obtain a greater slice of the market and force translators to dig deeper into their pockets to maintain compatibility and keep up with the latest versions. Meanwhile, LSPs greedily snatch their slice of the market often at the expense of the translators who have invested in CAT tools and now find they must charge less because of the efficiency of their tool, which apparently facilitates their output. Students need to be aware of market forces, what industry offers them, as well as what it requires. One of the main objectives of the project-based methodology is to ensure that students classify their machine translations of web pages: are they functional or functioning translations? And if European standard is applied to MT, could 'fitness for purpose' possibly claim linguistic correctness? For PB learning to be effective, it should ideally be part of other syllabuses in the TS department. A different example of PB teaching is given Federici (2010:173) in describing how a translation module proceeds through different modalities, all requiring self-reflection and self-assessment. In line with the project-based syllabus in the translation technology module, the evaluation (cq. revision) of the module includes a portfolio consisting of formative translations which the students revise their own translations in agreement with feedback and set assessment criteria, after which their translations are resubmitted for summative assessment (50% component). When students work according to such a model in different modules, they become more process-oriented and increase their professional competence by rais self-awareness, and improving the revision of their own translations. Finally, it should be mentioned that revision tasks place on macro as well as micro level [Englund Dimitrova (1995)]. TM programmes work on micro level by alerting the students to inconsistencies, and it is the responsibility of the student / translator to take account of the entire process of revision, activity which is supported and encouraged by the project.

**Bibliography**


Translation and technology in a project-based learning environment

Pour citer ce document