Do New Technologies Improve Translation Pedagogy?

Dr María-José Varela Salinas (University of Malaga)

2018: Advantages and limits of technology
Modern translation and interpreting industry cannot function properly, offering high quality services, without computers, the Internet and technology. [...] Therefore, the competent use of translation technologies has become a prerequisite for anyone wishing to join the translator’s profession. CAT tools literacy seems to increase translators’ chances to find employment, as more and more translation agencies outsource to translators or project managers under the condition that they are able to use a specific CAT tool. (Sikora and Walczynski, 2015: 130)
Translation competence and translator training


Students know how to...

15. Use the most relevant IT applications, including the full range of office software, and adapt rapidly to new tools and IT resources.

16. Make effective use of search engines, corpus-based tools, text analysis tools and CAT tools.

17. Pre-process, process and manage files and other media/sources as part of the translation, e.g. video and multimedia files, handle web technologies.

18. Master the basics of MT and its impact on the translation process.

19. Assess the relevance of MT systems in a translation workflow and implement the appropriate MT system where relevant.

20. Apply other tools in support of language and translation technology, such as workflow management software.
Translation competence
and translator training

Check, review and/or revise their own work and that of others according to standard or work-specific quality objectives

Apply PE to MT output using the appropriate post-editing levels and techniques according to the quality and productivity objectives

Pre-edit source material for the purpose of potentially improving MT output quality

Understand and implement quality control strategies
Translation competence and translator training

Soft skills are bold skills.

Valued theoretically, undervalued in teaching reality.
Learning theories

Achievements and limits

- behaviourist
- learning by doing / trial and error
- problem based
- task based
- professionalism
- collaborative learning
- ...
- ...
Translation competence and translator training

Attending different learning styles:
- visual
- verbal
- auditory
- kinaesthetic
Translation competence and translator training

Assessment

What?
- translation as a product
- translation as a process
- learning process of skills

How?
- formative assessment and self-assessment
  - criteria adapted to professional life
    - self-evaluation
1. Machine translation (MT) and post-editing (PE)

Potential and limits of MT and students` handling for post-editing:

- Identify errors
- Classify error tendencies

Didactic use:

- Knowledge about grammatical features to be emphasized
- Improve metacognitive competence
Post-editing:
Defined by ISO 18587:2017 as to “edit and correct machine translation output”.

Here:
“Light post-editing”: to correct only as far as “to obtain a merely comprehensible text without any attempt to produce a product comparable to a product obtained by human translation”.

Competences and CAT tools
### Competences and CAT tools

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<th>Subcompetences according to EMT (2017)</th>
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<tbody>
<tr>
<td>- Check, review and revise their own work</td>
<td>- Strategic, autonomous and continuous learning</td>
<td>DeepL</td>
<td>Teacher-directed, learner-directed, computer-assisted</td>
<td>Learning by doing</td>
<td>individual learning</td>
<td>Formative assessment, self-assessment. Rubric.</td>
<td>Low referring quality of postedited target text.</td>
<td>Knowledge about error tendencies of DeepL, and therefore better anticipation and compensation during post-editing.</td>
</tr>
<tr>
<td>- Apply post-editing to MT output</td>
<td>- Decision-making and problem-solving</td>
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<tr>
<td>- Recognize the importance of data ownership and data security issues</td>
<td>- Critical reasoning</td>
<td>Postedition of journalistic news related to basic economic concepts, translated by MT (ES-DE, into the foreign language)</td>
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<tr>
<td>- Adapt rapidly to new tools and IT resources</td>
<td>- Make effective use of CAT tools</td>
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<td>- Master the basics of MT and its impact on the translation process.</td>
<td>- Assess the relevance of MT systems in a translation workflow</td>
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</table>
Competences and CAT tools

2. Compiling a corpus

DASHBOARD

<table>
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<tr>
<th>DISCAP</th>
<th>MANAGE CORPUS</th>
<th>CORPUS RECIENTES</th>
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<tbody>
<tr>
<td>Word Sketch</td>
<td></td>
<td>Discap</td>
</tr>
<tr>
<td>Colocaciones y combinaciones de palabras</td>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Behind</td>
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<tr>
<td>Tesauro</td>
<td></td>
<td>Spanish Web 2011 (esTenTen11, Eu + Am)</td>
</tr>
<tr>
<td>Sinónimos y palabras paradas</td>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td>Concordancia paralela</td>
<td></td>
<td>Energiestoffen (German)</td>
</tr>
<tr>
<td>Búsqueda de traducción</td>
<td></td>
<td>Energiestoffen (German)</td>
</tr>
<tr>
<td>N-gramas</td>
<td></td>
<td>eficiencia_energética (Spanish)</td>
</tr>
<tr>
<td>Expresiones multipalabra (NMWs)</td>
<td></td>
<td>English Web 2015 (enTenTen15)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>oleo</td>
</tr>
<tr>
<td>Palabras clave</td>
<td></td>
<td>Afasia</td>
</tr>
<tr>
<td>Extracción de terminología</td>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACL Anthology Reference Corpus (ARC)</td>
</tr>
<tr>
<td>OneClick Dictionary</td>
<td></td>
<td>English</td>
</tr>
</tbody>
</table>

Screenshot Sketch Engine
Compilation of a comparable bilingual corpus ES-DE with SketchEngine (WebBootCat) on eye anatomy and diseases, meeting certain selection criteria:

- original texts,
- available online
- average degree of specialisation
- reliable sources.
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<td>- Use and adapt to new tools and IT resources</td>
<td>- decision-making</td>
<td>Text analysis tool Sketch Engine</td>
<td>Teacher-directed, learner-directed, computer-assisted</td>
<td>Learning by doing</td>
<td>individual learning</td>
<td>Formative assessment, self-assessment, Rubric.</td>
<td>High referring the prompt handling of the tool after watching the video tutorials.</td>
<td>Students strengthened critical thinking and research competence.</td>
</tr>
<tr>
<td>- Make effective use of search engines and corpus-based tools</td>
<td>- critical thinking</td>
<td>Retrieval of digitalized texts of the same type (instructional, but divulagative) in Spanish and German on eye anatomy/eye diseases in order to compile a bilingual, comparable corpus. Test the main features of the tool, following the online guides.</td>
<td>Learning by doing</td>
<td>Trial and error Cognitive Learning</td>
<td>visual, verbal, logical</td>
<td>Medium referring the research competence (although not longer listed by the EMT as independent partial competence, it is included within the framework of technological competence).</td>
<td>Medium referring the research competence (although not longer listed by the EMT as independent partial competence, it is included within the framework of technological competence).</td>
<td>They learned not only to compile corpora, but to do text analysis and text mining, using the features of the program. The linguistic analysis helped to discover collocations and other aspects helpful for translation.</td>
</tr>
<tr>
<td>- Apply other tools in support of language and translation technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Critical thinking still lacks often so the selected sources are not always reliable or suitable.</td>
<td></td>
</tr>
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3. Terminology management creating a database

Create a glossary with Termbase.eu, extracting the terminology from the compiled corpora.
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<tr>
<td>- Use relevant IT applications and adapt rapidly to new tools and IT resources. - Make effective use of CAT tools - Apply other tools in support of language and translation technology</td>
<td>- decision-making - problem solving</td>
<td>termbases.eu</td>
<td>Teacher-directed, learner-directed, computer-assisted</td>
<td>Learning by doing</td>
<td>Individual learning</td>
<td>Formative assessment, self-assessment. Rubric.</td>
<td>Low referring terminology management and completeness of the information demanded for the terminology card.</td>
<td>Students learnt to follow instructions of a video tutorial and improved autonomous learning. Students disposed of a basic glossary for translating texts from a specific area.</td>
</tr>
</tbody>
</table>
4. Enhancing use of translation memory: Wordfast Anywhere

Translation ES-DE of 5 infomational texts on glaucoma (110 – 571 words). Previous alignment of ST and TT corrected in class. Use of glossary feature. Export and delivering of files.
### Competences and CAT tools

A screenshot of a software interface showing a translation task. The task involves translating medical terms, focusing on terms related to glaucoma.

#### Translation Task:

<table>
<thead>
<tr>
<th>Number</th>
<th>Spanish Term</th>
<th>German Term</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>El glaucoma (7)</td>
<td>Das Glaukom (1)</td>
<td>98</td>
</tr>
<tr>
<td>2</td>
<td>Diagnóstico (8)</td>
<td>Diagnose</td>
<td>99</td>
</tr>
<tr>
<td>3</td>
<td>A través de la medición de la presión intracocular (tonometría), una prueba indolora que se realiza en pocos minutos, se puede sospechar de la existencia de la patología.</td>
<td>Durch Messung des Augeninnendrucks (Tonometrie), ein schmerzloser Test der in wenigen Minuten durchgeführt wird, kann das Vorliegen der Krankheit vermutet werden.</td>
<td>99</td>
</tr>
<tr>
<td>4</td>
<td>Las personas con glaucoma presentan una elevación de la presión intracocular.</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sin embargo, no todas las personas con tensión intracocular elevada tienen glaucoma, se trata sólo de un factor de riesgo de la patología.</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>En estos casos se requieren dos pruebas adicionales para corroborar el diagnóstico: la perimetría y la oftalmoscopia.</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

#### Translation Notes:

- **Principio de Fichero**: This refers to the principle of file configuration in the software.
- **El glaucoma**: Glaucoma in Spanish.
- **Diagnóstico**: Diagnosis in Spanish.
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| - Check, review and revise their own work | - Strategic, autonomous and continuous learning  
- Decision-making and problem-solving  
- Critical reasoning  
- Team working | Wordfast Anywhere  
Translate with the help of TM informational texts on the disease of glaucoma, translated by MT (ES-DE, into the foreign language) | Teacher- directed, learner-directed, computer-assisted | Learning by doing  
Trial and error  
Cognitive Learning  
Collaborative Learning | individual learning  
collaborative learning  
visual, verbal, logical | Formative assessment,  
P2P assessment  
Final exam | The grades improved an average of 1 point (grade scale from 0 to 10), mostly among the weakest students as they learned to combine the practical knowledge of how to use the translation memory, the content of the glossary and the linguistic and thematic knowledge conferred on them by having previously worked on several translations in the same subject area and aligned them.  
There was no student who failed the final exam. | The students learnt to use Wordfast Anywhere. In fact, a part of them continued to use the TM for new assignments when it was not required any more.  
Critical reasoning and justification of decisions improved by way of P2P assessment.  
Motivation and self-esteem among the weaker students grew. |
Achievements and limits

Does it make sense to use MT + PE?

Students learn about the pros and cons of MT.

Students get aware of their own limitations.
Achievements and limits

Does it make sense to build corpora and glossaries?

It makes sense referring soft skills: critical thinking and research competences are practiced.
Achievements and limits

Does it make sense to use TM?

The student’s translation improve, at least if they begin with aligning previously translated and corrected texts.

Students rethink their translation decisions.
Achievements and limits

Is it possible to compensate poor linguistic knowledge by the use of CAT tools?

MT + PE:
Only to a certain extent.
Only those who master to a minimum level SL and TL.

TM:
Seems to improve translator performance and soft skills as critical thinking. It seems commendable to complement training in TM with PE, corpus compilation and glossary creation in order to intertwine skills that makes fruitful the use of TM.
Conclusions

• CAT tools should be used in translator training because they are already a part of the present translator’s working environment.

• CAT tools do not fulfil their goal if language and cultural knowledge are lacking and. They need to be strengthen during translator training, even if it is not a (main) topic of the syllabus.
Conclusions

- The present translator profile is going to disappear because of technology. But even so, technology is no enemy, but offers new chances.

- A proper use of technological tools improves translation pedagogy. They can be used as a means in translator training and trainers should integrate their underlying learning principles into teaching practice. =>teachnology.
References


References


References


- Plaza Lara, C. 2016. Integración de la competencia instrumental-profesional en el aula de traducción (vol. 84). Berlin: Frank & Timme GmbH.


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The paper presented was elaborated within the framework of:
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