

**Interdependence and Innovation –
2nd Cologne Conference on Translation, Interpreting and Technical Documentation
(CGN18)
Cologne, 29–30.11.2018**

Do New Technologies Improve Translation Pedagogy?

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Article in 2007: How New Technologies Improve Translation Pedagogy



2018: Advantages and limits of technology

Translation competence and translator training

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

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

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

Understand and implement quality control strategies

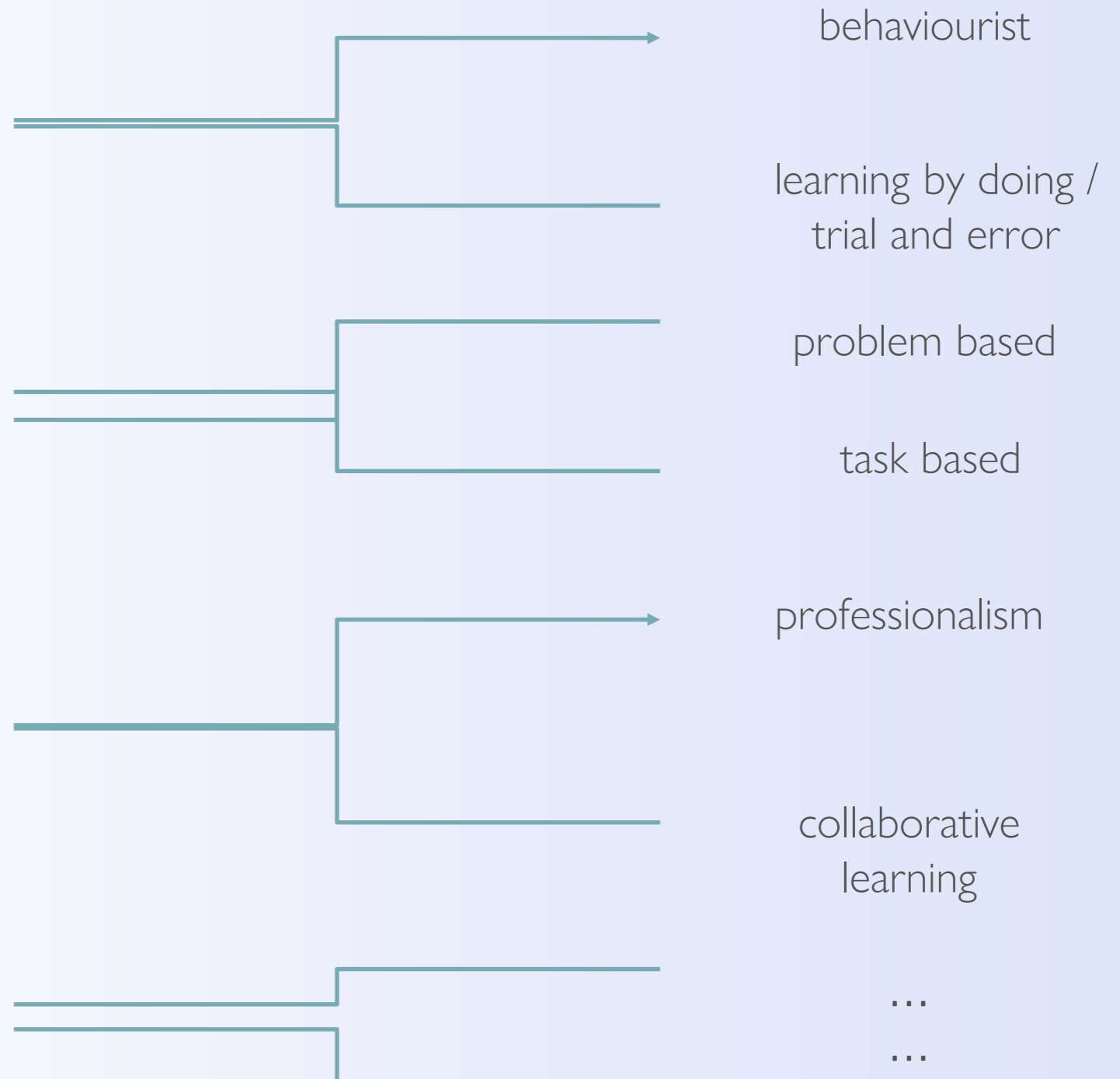
Translation competence and translator training

Soft skills are bold skills.

Valued theoretically, undervalued in teaching
reality.

Achievements and limits

Learning theories



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

Competences and CAT tools

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

Competences and CAT tools

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

Subcompetences according to EMT (2017)	Soft skills	CAT-tools and task	Teaching strategy	Learning theory	Learning style / channel	Assessment type, tool and criteria	Average improvement in assessment	Learning outcome
<ul style="list-style-type: none"> - Check, review and revise their own work - Apply post-editing to MT output - Recognize the importance of data ownership and data security issues - Adapt rapidly to new tools and IT resources - Make effective use of CAT tools - Master the basics of MT and its impact on the translation process. - Assess the relevance of MT systems in a translation workflow 	<ul style="list-style-type: none"> - Strategic, autonomous and continuous learning - Decision-making and problem-solving - Critical reasoning 	<p>DeepL</p> <p>Postedition of journalistic news related to basic economic concepts, translated by MT (ES-DE, into the foreign language)</p>	<p>Teacher- directed, learner-directed, computer-assisted</p>	<p>Learning by doing</p> <p>Trial and error</p> <p>Cognitive Learning</p>	<p>individual learning</p> <p>visual, verbal, logical</p>	<p>Formative assessment, self-assessment.</p> <p>Rubric.</p>	<p>Low referring quality of postedited target text.</p> <p>Medium referring subcompetences related to managing the basics of MT and the PE process.</p>	<p>Knowledge about error tendencies of DeepL, and therefore better anticipation and compensation during post-editing.</p>

Competences and CAT tools

2. Compiling a corpus

The screenshot displays the Sketch Engine dashboard. At the top left, there is a 'DASHBOARD' header with a search bar containing 'Discap' and a 'MANAGE CORPUS' button. The main area is divided into two columns. The left column, titled 'DISCAP', contains several tool cards: 'Word Sketch' (Colocaciones y combinaciones de palabras), 'Tesauro' (Sinónimos y palabras parcidas), 'Concordancia paralela' (Búsqueda de traducción), 'N-gramas' (Expresiones multipalabra (MWEs)), and 'Tendencias' (Análisis de tendencias). The right column, titled 'CORPUS RECIENTES', contains a 'NEW CORPUS' button and a table of recent corpora.

Corpus Name	Language	Count
Discap	Spanish	20.583
Behind	German	9.010
Spanish Web 2011 (esTenTen11, Eu + Am)	Spanish	9.497.213.009
Energieeffizienz	German	148.046
eficiencia_energética	Spanish	149.191
English Web 2015 (enTenTen15)	English	15.703.895.409
oleo	Spanish	111.138
Afasia	Spanish	578.211
ACL Anthology Reference Corpus (ARC)	English	62.196.334

Screenshot Sketch Engine

Competences and CAT tools

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.**

Competences and CAT tools

Subcompetences according to EMT (2017)	Soft skills	CAT-tools and task	Teaching strategy	Learning theory	Learning style / channel	Assessment type, tool and criteria	Average improvement in assessment	Learning outcome
<ul style="list-style-type: none"> - Use and adapt to new tools and IT resources - Make effective use of search engines and corpus-based tools - Apply other tools in support of language and translation technology 	<ul style="list-style-type: none"> - decision-making - critical thinking 	<p>Text analysis tool Sketch Engine</p> <p>Retrieval of digitalized texts of the same type (instructional, but divulgative) 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.</p>	Teacher- directed, learner-directed, computer-assisted	<p>Learning by doing</p> <p>Trial and error</p> <p>Cognitive Learning</p>	<p>individual learning</p> <p>visual, verbal, logical</p>	<p>Formative assessment, self-assessment.</p> <p>Rubric.</p>	<p>High referring the prompt handling of the tool after watching the video tutorials.</p> <p>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).</p> <p>Critical thinking still lacks often so the selected sources are not always reliable or suitable.</p>	<p>Students strengthened critical thinking and research competence.</p> <p>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.</p>

Competences and CAT tools

3. Terminology management creating a database

Create a glossary with Termbase.eu, extracting the terminology from the compiled corpora.

The screenshot displays the Termbase.eu interface for managing terminology. At the top, there is a navigation bar with tabs for 'All', 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'L', 'M', 'N', 'P', 'R', 'S', 'T', 'V', 'W', and 'S'. Below this, a 'CONCEPT' header is followed by a row of action buttons: 'View', 'Edit', 'Images', 'Examples', 'Lock', and 'More'. The main content area is divided into two language sections: 'SPANISH' and 'GERMAN'. The 'SPANISH' section shows a concept entry for 'atención ambulatoria' with a yellow square icon. Below it, a 'Definition #1' is provided: 'Departamento responsable de elaborar la programación quirúrgica, con el objeto de garantizar la realización de los eventos quirúrgicos y la existencia de los insumos necesarios. file5637616'. The 'GERMAN' section shows a concept entry for 'ambulante Betreuung' with a yellow square icon. On the right side, a 'CONCEPT' sidebar contains a 'Hide' button and a table with the following data: 'Unique ID', 'Last Changed' (2018.01.09 19:58), and 'Public' (Yes). Below the table, there is a 'Relations' section with a 'Hide' button, a dropdown menu set to 'Referen', a checked checkbox, an empty input field, and an 'Add new relation' button.

Competences and CAT tools

Subcompetences according to EMT (2017)	Soft skills	CAT-tools and task	Teaching strategy	Learning theory	Learning style / channel	Assessment type, tool and criteria	Average improvement in assessment	Learning outcome
<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - decision-making - problem solving 	<p>termbases.eu</p> <p>Build a terminological database attending guidelines.</p>	Teacher- directed, learner-directed, computer-assisted	<p>Learning by doing</p> <p>Trial and error</p> <p>Cognitive Learning</p>	<p>individual learning</p> <p>visual, verbal, logical</p>	<p>Formative assessment, self-assessment.</p> <p>Rubric.</p>	<p>Low referring terminology management and completeness of the information demanded for the terminology card.</p>	<p>Students learnt to follow instructions of a video tutorial and improved autonomous learning.</p> <p>Students disposed of a basic glossary for translating texts from a specific area.</p>

Competences and CAT tools

4. Enhancing use of translation memory: Wordfast Anywhere

Translation ES-DE of 5 informational 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

← → ↻ https://www.freetm.com/anywhere.html

Wordfast Anywhere Archivo Edición Visualización Traducción Revisión Memorias & Glosarios Ayuda Personalizar

Empezar/Siguiente Anterior Cerrar Provisional Copiar Origen Expandir Contraer Traducir PM Eliminar Destino Auto Propagar Alternar Re. Siguiente Re. Copiar Re. Previo Re. Altura Destino Web Speech

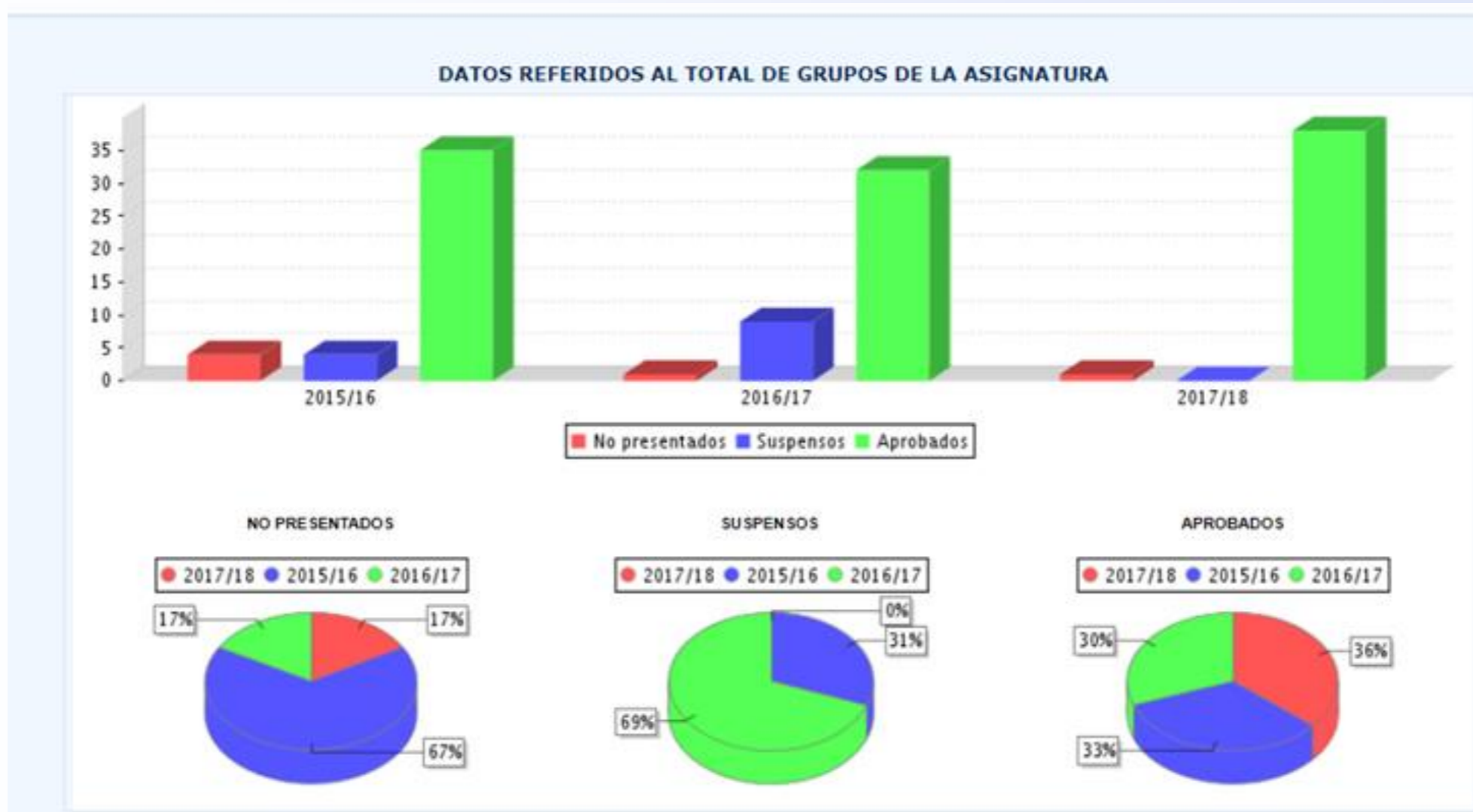
Existencia Vorliegen
 intraocular intraokulär
 presión Augeninnendruck
 intraocular
 realizar durchführen
 Tonometria Tonometrie
 tratar behandeln

En las fases de la medición de la presión intraocular (tonometría), una prueba indolora que se realiza en pocos minutos, se puede sospechar de la existencia de la patología.

<Principio de Fichero>

1	El glaucoma (7)	Das Glaukom (1)	98
2	Diagnóstico	Diagnose	99
3	A través de la medición de la presión intraocular (tonometría), una prueba indolora que se realiza en pocos minutos, se puede sospechar de la existencia de la patología.	Durch Messung des Augeninnendrucks (Tonometrie), ein schmerzloser Test, der in wenigen Minuten durchgeführt wird, kann das Vorliegen der Krankheit vermutet werden.	99
4	Las personas con glaucoma presentan una elevación anormal en la presión intraocular.		0
5	Sin embargo, no todas las personas con tensión intraocular elevada tienen glaucoma, se trata sólo de un factor de riesgo de la patología.		0
6	En estos casos se requieren dos pruebas adicionales para corroborar el diagnóstico: la perimetria o examen del campo visual y la oftalmoscopia u observación del nervio óptico en el fondo de ojo.		0

Competences and CAT tools



Competences and CAT tools

Subcompetences according to EMT (2017)	Soft skills	CAT-tools and task	Teaching strategy	Learning theory	Learning style / channel	Assessment type, tool and criteria	Average improvement in assessment	Learning outcome
<ul style="list-style-type: none"> - Check, review and revise their own work - Recognize the importance of data ownership and data security issues - Adapt rapidly to new tools and IT resources - Make effective use of CAT tools 	<ul style="list-style-type: none"> - Strategic, autonomous and continuous learning - Decision-making and problem-solving - Critical reasoning - Team working 	<p>Wordfast Anywhere</p> <p>Translate with the help of TM informational texts on the disease of glaucoma, translated by MT (ES-DE, into the foreign language))</p>	Teacher- directed, learner-directed, computer-assisted	<p>Learning by doing</p> <p>Trial and error</p> <p>Cognitive Learning</p> <p>Collaborative Learning</p>	<p>individual learning</p> <p>collaborative learning</p> <p>visual, verbal, logical</p>	<p>Formative assessment,</p> <p>P2P assessment</p> <p>Final exam</p>	<p>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.</p> <p>There was no student who failed the final exam.</p>	<p>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.</p> <p>Critical reasoning and justification of decisions improved by way of P2P assessment.</p> <p>Motivation and self-esteem among the weaker students grew.</p>

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

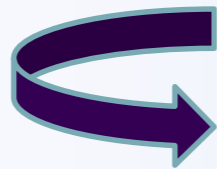
Does it make sense to use TM?

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. =>technology.**

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Do New Technologies Improve Translation Pedagogy?

The paper presented was elaborated within the framework of:

Cátedra
estratégica | Interactividad
Diseño
Experiencias

uma.es

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