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Online Training for the Language Industries: Translation and Interpreting Training in the Digital Era

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Abstract

Language industries (LIs) keep growing while language professionals are required to be proficient in novel skills to meet new market needs. Within this context, an institutional consortium launched the EU-funded FOIL initiative (*Formación Online para las Industrias de la Lengua* - Online Training for Language Industries, 2020-1-ES01-KA226-HE-096155). The FOIL initiative seeks to bridge the gap between the industry and higher-education curricula proposing an innovative, inclusive training model taking the most out of technological advances, and providing a new, industry-oriented and research-based qualification. This paper discusses the online modular training model, focusing specifically on its goals, and the five independent and complementary training modules that integrate its structure, as well as the profile and needs of its prospective users.

Key Words

Translation, Language Industries, Training, Innovation, Online.

1. Introduction

The demands for multilingual communication have grown in the last years due to factors such as the backlogs caused by excessive demand and intensified from the lockdowns experienced, from 2020, in governmental institutions and the media industry, but also the uprising of emergency and crisis situations, as well as multilanguage text production.

The global market is continuously changing due to the expansion of companies and the continued boom in e-commerce and e-learning. Up to this point, today's language industry has adapted well to new changes and is ready to meet new requirements. In fact, the language industry encompasses at least the following key services: globalization (G11n), internationalization (I18n), localization (L10n) and translation (T9n) (GILT) (Angelone *et al.*, 2020: 1). Other fundamental pillars are interpreting, consulting, project management and tool design. According to Angelone *et al.* (2020: 1), in addition to these services, the language industry can also be defined from the perspective of the stakeholders involved, such as language service providers (LSP) and vendors, project managers, terminologists, translators, interpreters, revisers, quality assurance specialists and consultants.

Globalization, technical and technological advancements, artificial intelligence and big data have radically altered the language industry landscape resulting in new roles in the translation and interpreting industries. These have a direct impact on how students are prepared for future careers as successful language industry professionals: "advances in the efficacy of machine translation and artificial intelligence are shaping the language industry at large to an unprecedented extent that extends well beyond the boundaries of written translation" (Angelone *et al.*, 2020: 3).

According to Pielmeier and O'Mara (2020: 41-42), who carried out a linguistic survey among more than 7,000 respondents from the language service providers, translation memories and computer-assisted translation (CAT) tools were used by two-thirds of respondents, quality checkers were used by 60% of the respondents, terminology management tools by 4% and, although machine translation are at the bottom of the list, the numbers show that one in five translators (22%) use it even when clients do not ask for it.

Technological developments are influencing languages from the production step, leading to "feedback loops" when interlingual translation is involved. For instance, through pre-editing, consisting of drafting a text following a set of rules that keep in mind that the text produced could be easily translated by a machine translation engine, the resulting output requires a minimal post-editing effort. Another example is the use of a simplified language in order to adjust the speech patterns when talking to a virtual assistant, so that it can easily recognise the speech, codify it into text and translate it into a foreign language.

Translation educators need to become aware of the changes experienced by the language industries in order to bridge the ever-present gap between industry and

academia, by implementing quick, quality, and inclusive responses to tackle said changes. Industry transformations take place too quickly in the digital era and institutions are not flexible enough to adapt to such changes. In addition, the lack of integration of technological competences in the translation and interpreting curricula (Rico *et al.*, 2018), and the need to include professional and instrumental competences in the training models were also additional reasons which encouraged the design of the FOIL initiative (*Formación Online para las Industrias de la Lengua* – Online Training for Language Industries).

The following section offers an overview of the aims of the FOIL initiative and its target audience. In Section 3 a description of the online training programme is provided, which is characterized by being open-access and flexible. In Section 4 examples of the resources and activities used are presented and, finally, Section 5 draws some conclusions and outlines future research avenues.

2. The FOIL initiative

The FOIL initiative has been funded with support from the European Commission through a KA226 Erasmus+ initiative (2020-1ES01-KA226-HE-096155). It is a two-year project led by the University of Valladolid, Spain, with the participation of a Spanish LSP (Hermes Traducciones y Servicios Lingüísticos, SL) and two higher-education institutions (Université Grenoble Alpes, France, and the Computer Technology Institute "Diophantus", Greece). The main objective of this initiative is to develop an innovative training model taking the most out of technological advances to provide a new, industry-oriented and research-based quality qualification. The secondary objectives include designing an open, flexible online course in response to the gaps and requirements identified in online training as a result of the pandemic and creating learning resources enabling autonomous use. These actions will also create synergies and knowledge and transfer links between the university and the private sector by introducing modular, flexible, and autonomous learning strategies.

The initiative is developed according to key action strands based on a previous analysis of industry needs and the language mediator technological toolbox (Corpas Pastor and Sánchez Rodas, 2021; Torres Hostench *et al.*, 2016; Moorkens *et al.*, 2018; Nimdzi, 2021, among others). Once identified, needs are met by developing an online modular course based on language mediation technology. The project management is based on an AGILE method (D'Souza

and Rodrigues, 2015: 828), where the working packages, assessment loops and inter-teams feedback interactions are arranged in a way that every team makes the most out of the others' output in this most efficient possible way.

Thus, FOIL initiative consists of 16 work packages including project design, management and evaluation, and all the activities conducive to the achievement of the objectives. All the information related to the project, together with the materials developed, are open-access and can be found at https://foil.cti.gr. Additionally, further interdisciplinary dialogues are also shared through social media via LinkedIn, Facebook (FOIL project) and Twitter (@FOIL_Project). FOIL project constitutes the first step towards an ongoing technological transformation of language industry training, bearing in mind the heterogeneous profile of present and future professionals, and not restricted to higher-education settings, but geared by the needs of the professional market.

FOIL is intended for three target groups who take an active part: a) translation and language industry undergraduates and graduates at risk of social exclusion due to limited resources, personal care attendants, people living in remote areas, people with special needs or people who, due to COVID-19, cannot access another traineeship; b) language service providers that want to improve the skills of their staff through online training; c) translation and interpreting trainers and professionals from the language industries who are willing to undertake continuous professional development activities. In fact, one of the features of the training structure is inclusiveness, as it provides translation training opportunities to charities, people and companies with limited resources or even people with special needs who cannot move around.

Regarding the expected results, FOIL aims at developing a market-oriented language industry training proposal using Moodle (Modular Object-Oriented Dynamic Learning Environment) as a learning platform that is flexible and open-source, and where materials can be easily downloaded from a single learning management solution. Moodle provides trainers with a personalized environment that fosters interaction, inquiry, and collaboration (Young, 2018). An online modular environment was designed for the training and reskilling of undergraduates, graduates, and professionals alike so that they could enhance their digital competences. In addition, the training proposal aims at bridging the gap between the training offered in higher education and the current demands of language industries.

This innovative, inclusive online training programme makes the most of technological advantages to provide a new, industry-oriented, and research-

based quality qualification to users. It takes into account the changes and needs required by the language industries. The online modular training environment has been designed considering the different components pointed out by Kelly (2005) and developed by Ortego Antón (2022: 88-108) in technological settings in Spanish Higher Education Area. It targets advanced-level undergraduate and postgraduate students and is structured in five different modules. Each module includes contents, resources, activities for specific outcomes, and assessment. The content of each of these elements has been carefully designed considering the profile of the target groups involved in the training process as well as the demands of knowledge, skills and attitudes seen in the language industries.

3. The FOIL Training Structure

When designing the modules, Kelly's (2005) suggestions were taken into consideration, so the following elements were duly included: aims and outcomes, agents involved in the learning and teaching process, contents, resources, methods, techniques and activities, progression and sequencing and assessment and evaluation. In addition, learning tasks were placed in specific environments that simulate as closely as possible an authentic workplace setting. This section describes where the modules are hosted as well as their features and the contents each of the modules covers. In addition, a description of the compulsory components that each module must include is provided.

3.1 The modules

The online course hosted on Moodle learning platform includes five different modules which could be individually completed attending to the new skills that users would like to develop. Moodle offers a set of tools that allow users to manage, communicate, distribute content and work collaboratively, so it is the ideal interactive environment for developing teaching and learning processes.

A modular course gives users the opportunity to choose their own training itinerary by attending just those modules required to hone novel skills in order to meet new market needs (Álvarez Álvarez and Ortego Antón, 2020). Each module has a duration of 200 hours, equivalent to 8 ECTS, and they comprise of eight or nine sections. The entire course is intended to be carried out over 40 weeks, and each module lasts around 5 weeks. Besides, modules have been

developed, in English, considering the knowledge, skills and attitudes which should be reinforced according to the global demands of the language industry, but with special attention to the French, Greek and Spanish markets. The modules, which could be considered as independent courses, are open access available at FOIL webpage (https://foil.cti.gr/) under a Creative Commons license, as shown in Figure 1.

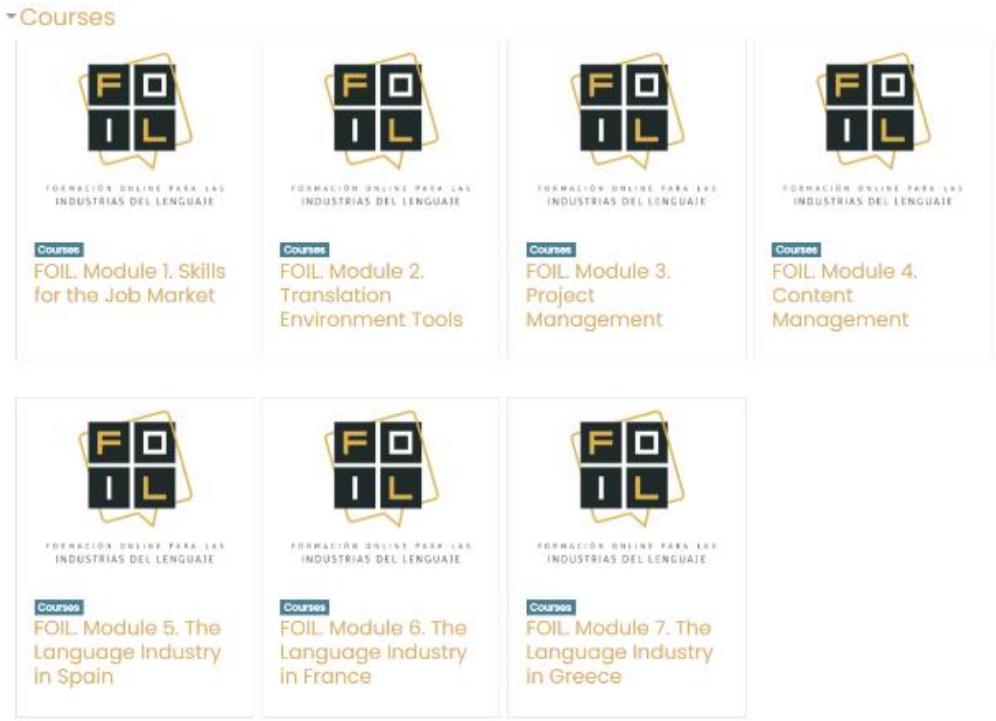


Figure 1. Modules of the training proposal.

The first module, entitled "Skills for the job market" describes the set-up and management of LSP, and offers knowledge about branding and marketing, task management and planning, team working and team management, and communication and trust building. In addition, it explores professional ethics as well as professional careers, and ends with an outlook on professional niche markets.

The second module focuses on "Translation Environment Tools". It provides a general overview of the tools and methods for corpora compilation and

exploitation, text mining and terminology management, CAT tools, machine translation, and post-editing. This module aims to provide trainees with a quick but general overview of technologies and technology-induced processes in order to showcase the different categories of tools that are made available to translators and professionals. As Bowker (2015: 93) states, "any training program should be flexible enough to adapt to evolving commercial needs", so the module has been designed taking into account that "technology training cannot be set up solely to address the latest trends but must take a more balanced approach that includes providing students with transferable skills, such as the ability to engage in critical analysis and problem solving" Bowker (2015: 95).

The third module, led by Hermes Traducciones y Servicios Lingüísticos SL (the LSP partner) addresses "Project Management". First, general concepts of project management and professional standards are provided. Next, translation workflow is detailed, project documentation is tackled, different methods to calculate project-related productivity are faced, and basic notions about quality management and quality control are outlined. Based on the professional expertise of the leading partner, and with the aim of going over all the core concepts in this section, the module finishes with a section which focuses on process indicators.

The fourth module on "Content management" covers content creation, transcreation, revision, review, proofreading, desktop publishing (DTP), search engine optimization (SEO) and search engine marketing (SEM) as well as accessibility.

The fifth module is adapted to the features of local markets, so users could choose France, Greece or Spain. This is the reason why seven modules appear in Figure 1. Some of the contents offered in each local module are identical, such as accounting and quality standards and ISO certification. Following typical patterns of each national language industry market, discussions revolve around aspects such as types of companies and freelancers, taxation, professional associations, personal skills accreditation and tendering systems.

Finally, with regards to non-tangible results, this project introduces a paradigm shift in university and professional training. Though the experience of an online open-access modular structure where language skills are not directly considered and contents are arranged in packages which can be taken independently – completion of the full course being optional – the proposal contributes to bridging the gap between industry and translator training, all by introducing new,

more resilient methodologies for training and performance assessment in the face of social challenges.

3.2 Components of the modules

Each module contains, at least, the following components:

a) a directory of resources where tasks and materials are organized through labels;

b) a data repository where any type of document or web page can be saved;

c) a space for asynchronous communication, i.e., a forum, which makes it possible for participants to exchange and share information with each other;

d) a short video that includes an overview of the sections of the module, together with the main aspects to be addressed in each section, and a longer video with a detailed explanation of the main terms and concepts. A PDF document with the transcript of the video contents is provided alongside the video presentation;

e) two infographics providing a summary of the section and an overview of the key concepts used in the course;

f) a PDF manual containing explanations and examples;

g) a quiz designed using different types of questions: open, close, scroll, multiple choice, etc.;

h) assessment activities which include compulsory quizzes.

The next section will focus on to the Translation Environment Tools module and will provide specific examples of each of the resources and activities that were designed to integrate into the FOIL course.

4. A case of study: Translation environment tools

The Translation Environment Tools module is designed as a response to the fact that "there have been several reports indicating that a considerable number of translators do not seem to be sufficiently well trained in the use of CAT tools" (Bowker, 2015: 89). Although translation programmes have taken steps to incorporate some form of technology instruction, the effectiveness of the technology education that is currently being offered is called into question. According to Bowker (2015: 90), "students should be provided not only with translation technology knowledge and know-how that will enable them not only to master the tools, but also to develop the strategic and reflexive skills needed for adopting best practices and for making informed decisions with regard to tool selection and use."

This module provides students with a fundamental understanding of the underlying concepts and principles of translation technology usage and takes into account that professionals should be flexible enough to adapt to evolving commercial needs.

This module, worth 8 ECTS, is sub-divided into eight different sections: 1. Corpora, 2. Text mining, 3. Terminology management, 4. CAT Tools I, 5. CAT Tools II, 6. Machine Translation, 7. Post Editing and 8. Localisation and web design.

Each module includes common elements, a forum for announcements and questions which has a double purpose: it serves to promote communication between trainers and trainees, and, at the same time, trainees can address questions and problems in search of an answer by other trainees or by trainers (see Figure 2).

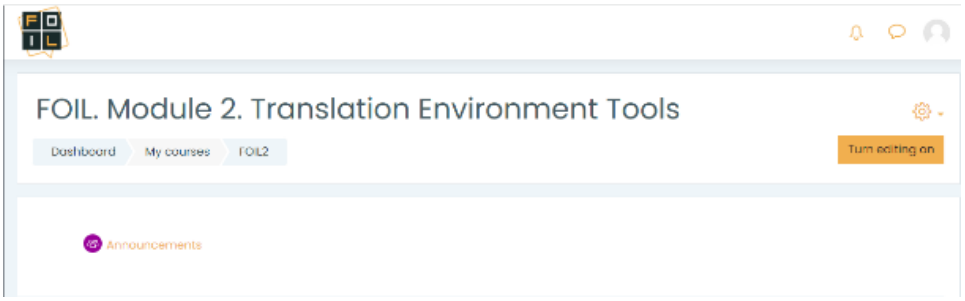


Figure 2. Example of forum (FOIL Project, 2022)

The second common element, displayed in Figure 3, is a video presentation that offers an overview of the contents of each of the sections involved in the module.

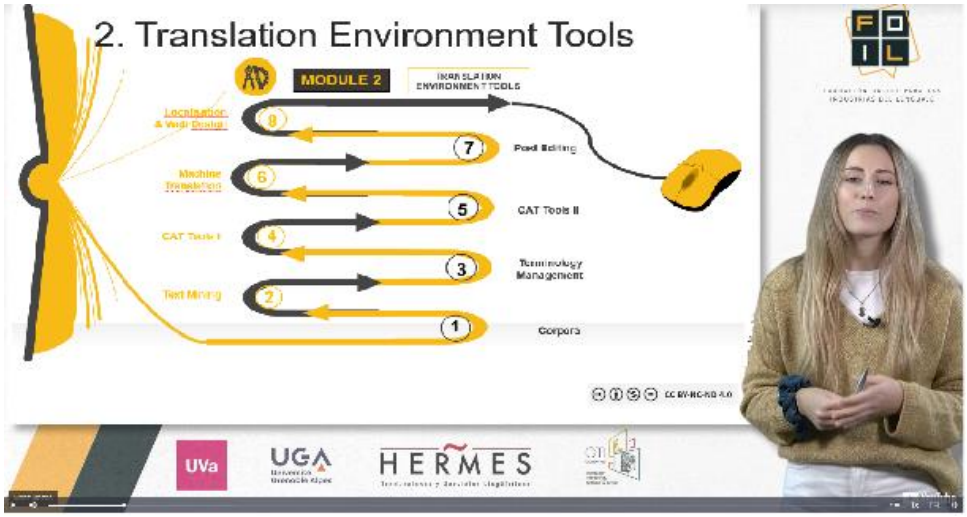


Figure 3. Example of video presentation (FOIL Project, 2022)

Alongside the video presentation a PDF file outlines the concepts addressed so that trainees can easily follow the content.

Due to space constraints, only one of the submodules will be further fleshed out. This particular one covers terminology management, is worth 1 ECTS (25 hours) and lasts for a full week. Trainees who successfully complete the submodule will have achieved the following learning outcomes:

a) To manage and assess available specialized documentation resources which are needed for multilingual communication;

b) to handle the latest technologies applied to translation, interpreting and language industries: data recovery, terminology management systems, CAT tools, machine translation, postediting, etc.;

c) to become familiar with the different stages related to technologies involved in translation and language industries projects; and

d) to apply terminology management to translation and language industries projects.

Terminology management, which establishes the principles and methods for preparing and compiling terminologies (ISO, 2009), is covered here to equip trainees with the basic concepts and know-how skills through a number of elements. Following Warburton (2021: 8), terminology management in a broad sense includes terminography (working with term bases), the use of various other tools (such as concordancers and term extraction tools) and overseeing the entire corporate terminology initiative including its integration into extended systems.

First, an infographic provides a summary of the key points, as shown in Figure 4, so trainees could have a general outlook of the section.

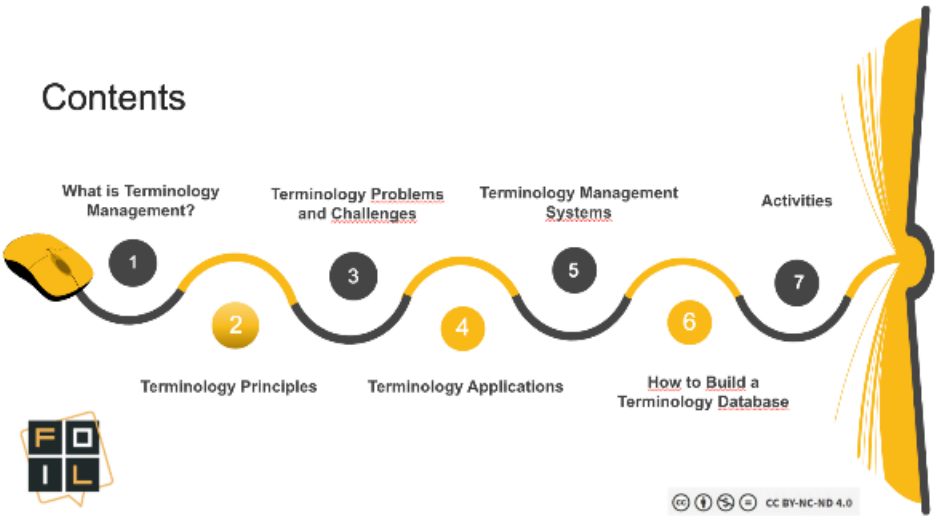


Figure 4. Example of a chart with graphic elements (FOIL Project, 2022)

Secondly, a video explains the core concepts of terminology management (Figure 5), including the principles that govern terminology, such as univocity, concept orientation, autonomy, data granularity, data elementality, data integrity, repurposability and data integrity (Warburton, 2021: 21-32). The main problems and challenges dealing with terminology are overviewed, focusing on the synonyms and the equivalents in the target language. Terminology applications and terminology management systems are included as well, defined as "a tool

used to store terminological information in and retrieve it from a term base" (Bowker, 2002: 61). Finally, guidelines are provided so trainees will be able to build their own terminology database. These guidelines include patterns to develop the structure of the entry as established by ISO 16642- Terminological Markup Framework (Warburton, 2021: 181) as well as the content of the term base, which should be aligned with the purposes and needs of the end-users to be efficient and appropriate.

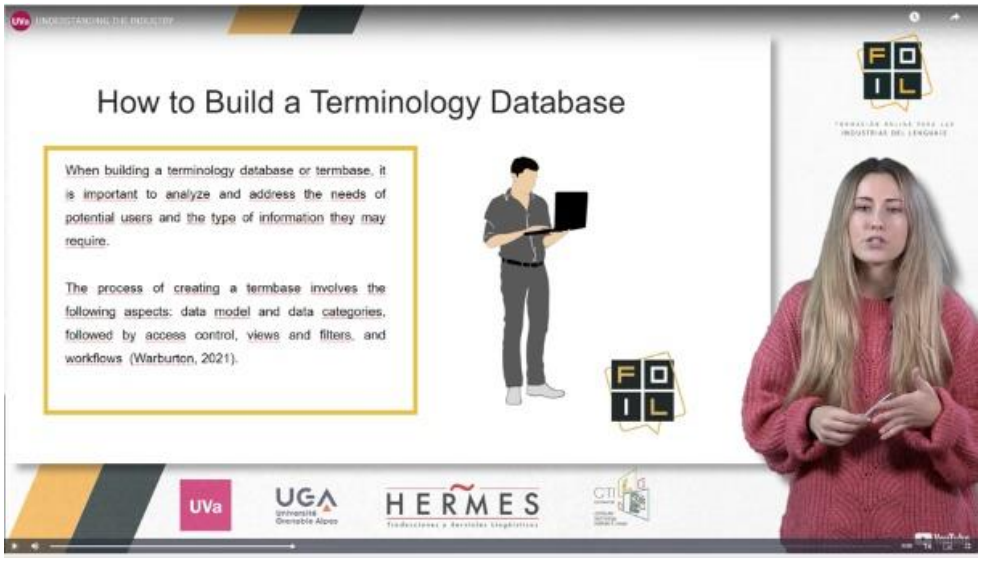
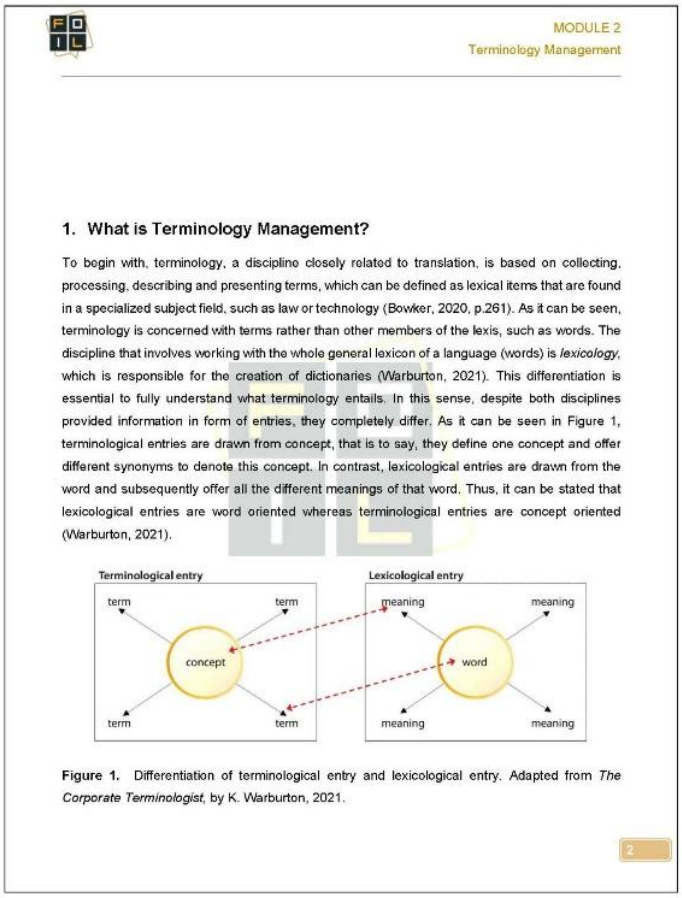


Figure 5. Example of video presentation II (FOIL Project, 2022)

Together with a PDF text that contains its transcript, each video has a manual, in PDF format, containing the video content with further details. The manual carefully fleshes out each of the concepts explained in the video, including basic references and additional resources, and endeavours to offer a theoretical approach to the field, as shown in Figure 6.



MODULE 2
Terminology Management

1. What is Terminology Management?

To begin with, terminology, a discipline closely related to translation, is based on collecting, processing, describing and presenting terms, which can be defined as lexical items that are found in a specialized subject field, such as law or technology (Bowker, 2020, p.261). As it can be seen, terminology is concerned with terms rather than other members of the lexis, such as words. The discipline that involves working with the whole general lexicon of a language (words) is *lexicology*, which is responsible for the creation of dictionaries (Warburton, 2021). This differentiation is essential to fully understand what terminology entails. In this sense, despite both disciplines provided information in form of entries, they completely differ. As it can be seen in Figure 1, terminological entries are drawn from concept, that is to say, they define one concept and offer different synonyms to denote this concept. In contrast, lexicological entries are drawn from the word and subsequently offer all the different meanings of that word. Thus, it can be stated that lexicological entries are word oriented whereas terminological entries are concept oriented (Warburton, 2021).

Figure 1. Differentiation of terminological entry and lexicological entry. Adapted from *The Corporate Terminologist*, by K. Warburton, 2021.

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Figure 6. Example of PDF manual (FOIL Project, 2022)

A second infographic with additional visual representations is included (see Figure 7). It summarises the key points of the section: the benefits of terminology management, also known as terminology work, are detailed, the terminology principles are summarised, terminology problems and challenges are addressed, terminology applications are listed, terminology management systems are described and classified and, finally, some key points about how to build a terminological database are provided. This resource is relevant because it provides an overview of the main topics that trainees must bear in mind.

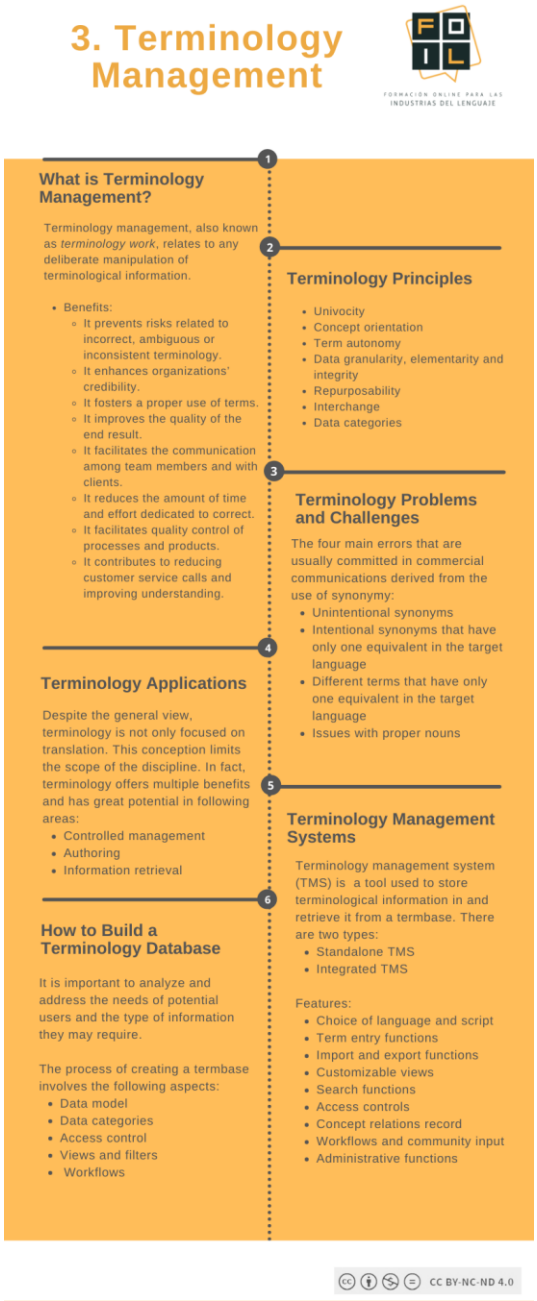

Figure 7. Example of a summary chart (FOIL Project, 2022)

Finally, trainees need to complete a compulsory quiz to pass the course, and additional non-compulsory activities are proposed. In this submodule one of the activities consists of producing a deliverable emulating a real professional case scenario. Students need to compile a corpus, extract the relevant terminology with an automatic term extractor such as TermoStat Web 3.0. (Drouin, 2003) and produce a bilingual database with MultiTerm, which is one of the most used terminology management systems according to previous research (Steurs *et al.*, 2015; Ortego Antón, 2017; Costa *et al.,* 2018). In addition, a quiz composed of multiple-choice questions to assess the acquisition of knowledge and skills is also proposed.

Among the results expected, the FOIL online modular course includes a technology-based, trainee-centred answer to language industry needs. In so doing, the project intends to inform training proposals at higher-education institutions with ad hoc solutions providing relevant learning experiences in a modular training and educational model further articulated as an online course.

Conclusions

The FOIL project promotes the development of an online open-access modular course that is intended to improve the employability of those who enrol. The training principles focus on soft skills and leave aside any specific language skill or linguistic performance. The different modules provide trainees with the knowledge and tools necessary to develop their professional performance and meet the demands of the language industry markets. It also promotes critical thinking and autonomous self-training strategies, which are essential for lifelong learning and are recommended by the guidelines of the European Higher Education Area (EHEA)[1]. The project also has a critical impact on accessibility, lowering entry barriers to a booming industry for those who cannot access current qualification opportunities either for personal, economic, geographic or any other reason derived from the COVID-19 pandemic, through the design of an online training environment based on Moodle platform.

Its advantages include meeting the needs of language industries to help bridge the gap between the industry and higher-education curricula. Besides, the FOIL training initiative provides open-access modular course. As the course is divided into several modules, trainees could choose their own training path and complete

[1] See: http://www.ehea.info.

it fully online. Thus, the open-access online modular course will enhance employability in exceptional contexts such as students living in remote areas where they have limited access to in-class teaching, disabled people or caregivers of children, elderly people, or disabled people. The FOIL course takes stock of translation and interpreting technologies to promote autonomous learning strategies and ultimately improve the employability of translation graduates and language professionals.

The project puts forward an innovative use of technology as applied to professional training and knowledge transfer through an open-access modular online course and entails a valuable training paradigm shift: from a linear, pre-ordered sequence of discrete units to flexible modules. Furthermore, the FOIL initiative is being integrated into professional postgraduate programs offered by the participating institutions, such as a European Master's program co-led by the University of Valladolid, Spain, and the University of Grenoble-Alpes, France.

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