Translation-Project Management: A Case Study of an Online Graduate Course

Mónica Rodríguez-Castro and Concepción Godev
University of North Carolina at Charlotte

INTRODUCTION

It used to be that the notion of *language industry* was relatively little-known and it was understood in terms of activities that were dependent on what could be metaphorically labeled as hardware, that is, text on paper. Before the end of the 1990s, when the internet was not yet mainstream, the notion of *language industry* was mainly associated with the publishing industry and the term *language industry* was of relatively low frequency in comparison to its ubiquitous use in more recent times.

Over the last decade the language industry has evolved into an industry sector that has become "primarily digital, outsourced, and project-driven" (Dunne, "Industrialization" 144). The language industry's emergence is the end result of a gradual commodification of language. Several factors have contributed to this commodification, among them, borderless global communication facilitated by the rapid development of information technologies (Da Silva et al. 186-187). Among the myriad activities and businesses that make up the language industry as understood today, translation and language interpreting services are at the center of this industry because of the increasing demand for communication across different languages.

As a result of the rapid industrialization of the translation process, project managers have become an inevitable and indispensable component of the translation workflow (Rodríguez-Castro, "The project manager" 37) and the ability to manage a translation project has emerged as an important metacompetence for language professionals (K. Dunne and E. Dunne 6). Translation-project managers, also known as translation coordinators, not only serve as mediators between language service providers, vendors (e.g. translators and editors), and end clients, but also are in charge of managing the translation workflow and performing sales-related tasks (Rodríguez-Castro, "The project manager" 39). They also play a critical role in managing virtual teamwork dynamics and interpersonal interactions. Because of the implementation of a complex division of labor in translation projects, project management has become an entry-level position for many language service providers. In an entry-level position, translation-project managers typically work under supervision while managing projects but may not be responsible for delivery, quality control (product-oriented approach), and quality assurance (management- or process-oriented approach)[1] (Lawlor, par. 6). As these professionals gain experience in executing complex projects (e.g. software localization), they eventually become associate and senior project managers.

Translation graduate programs are gradually acknowledging the need for the curriculum to keep pace with the needs of the translation industry, which is in line with a philosophy of teaching that supports the connection between academic work and the social realities of future gainful

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[1] Quality Control (QC) is a procedural mechanism that monitors whether the translation conforms to previously agreed requirements with a focus on (product) end-item inspection. All project stakeholders must agree on specific metrics to measure the quality of the final output, and the project manager inspects the quality of deliverables using such metrics. Unlike QC, Quality Assurance (QA) consists of the process of auditing the results from quality control metrics or checklists to ensure conformance to agreed quality standards. QA starts prior to receiving materials from the customer; therefore, it also includes gathering requirements (e.g. linguistic and terminological requirements). QA affords the opportunity for continuous improvements of all project processes and is typically performed by senior project managers since it requires a high degree of subject matter expertise. Albeit both terms are often used interchangeably, many language service providers actually perform QC tasks, that is, the final product check of such elements as spelling errors, numbers, grammar mistakes, etc., but may not have a holistic quality plan that includes QA. See Dunne ("Putting the Cart" 96-97) for a more comprehensive explanation of quality control and quality assurance.

employment (Doyle 80-81), a curricular approach also aligned with the 2007 MLA report (Modern Language Association 236-237). Consequently, new curricular initiatives that integrate project management skills into a translation professional's education are beginning to emerge. The graduate course on translation-project management discussed here was designed within the context of the curricular innovation just mentioned.

This course strengthens the translation curriculum by incorporating project management competencies and content that facilitate students' transition to their future employment in the language industry. It raises student awareness about the many facets of the translation profession and translation careers and, therefore, provides foundational knowledge that is critical to student success in pursuing potential internships or entry-level positions in the industry.

Although there is a clear need to integrate translation-project management tools in the education of graduate students, very few graduate translation programs offer a course that fills this need. An additional limitation of these programs is that the instruction relies on the face-to-face format (Massey 629). In designing the course on translation-project management to be delivered online and asynchronously, the authors sought to make the course accessible by eliminating the time and physical distance barriers that may make face-to-face courses inaccessible to some potential students, many of them limited by their work schedules. The course design, as it was implemented in Spring 2017, incorporates online instruction that is founded on the Quality Matters (QM) online course design principles.

TEACHING METHODOLOGY

The course design and course delivery were guided by the principles of project-based learning (PBL) and task-based learning (TBL) as well as best practices in online instruction as defined by Quality Matters (QM).

PBL and TBL[2] have been widely implemented in translation studies pedagogy over the last decade as effective instructional models for

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[2] Both project-based learning (PBL) and task-based learning (TBL) are learner-centered pedagogies that operate on the principle of learning by accomplishing real-life simulation projects and tasks. A project involves the completion of a series of tasks while a task is a stand-alone activity (González-Davies and Enríquez-Raído 1).

translator education (Inoue 7-10; Kiraly 28-29; Massey 628-629) and translator training (Mitchell-Schuitevoerder 128-129). Both teaching approaches are recognized as student-centered methodologies that promote active engagement in the learning process (González-Davies and Scott-Tennent 160; Kiraly 29). As Don Kiraly posits, within the framework of learner-centered methodologies, learners construct knowledge in a collaborative and "socio-personal" process (29). Constructivism, understood as piecing together meaning and knowledge, is an essential element in project-based assignments (Massey 628). Both methodologies are intertwined since they emphasize process-oriented training where the instructor becomes a coach and no longer provides an answer. The instructor serves as a facilitator that guides learners as they complete their real-life simulation projects (Inoue 8; Massey 628).

PBL and TBL methodologies are particularly relevant to the dynamics of a translation-project management course because complex real-life translation projects are accomplished by setting up objectives and structuring deliverables. Simulating the life of a project from inception to delivery provides students with the opportunity to observe and understand the process of managing a translation project, thus gaining knowledge that may enhance their employability in the translation services sector (Mitchell-Schuitevoerder 132; Torres-Hostench 790).

A key feature to PBL and TBL instruction is that its pedagogical principles are grounded on emphasizing attention to the processes that will ultimately make it possible to accomplish a translation project. The process-based approach to tasks and projects promotes the development of the multifaceted translation competence that PACTE—the research group Procés d'Adquisició de la Competència Traductora i Avaluació, affiliated with the Universitat Autònoma de Barcelona—has identified as *instrumental sub-competence* (610), which includes ability to locate and use documentation sources and information technology relevant to the target translation project. Additionally, the process-based approach provides opportunities for students to observe three aspects of a translation project that are commonplace in the language industry, namely, the role of virtual teams in the life of a translation project, the role of software, and the role of information technology.

As mentioned at the beginning of this section, because the course was designed for online delivery, the course design follows the Quality Matters rubric (Quality Matters 8-31), which defines standards of best practices based on verifiable data. The QM rubric has been in existence for some

eleven years and has gone through five editions, with each edition incorporating enhancements based on data provided by faculty from a variety of higher education institutions in the United States. The QM rubric is currently used by many universities, including the university where the course under discussion was designed and taught.

Following QM standards and principles, the course was designed to promote student learning by identifying learning outcomes that could be measured. In so doing, we were particularly mindful about assessment in order to fulfill the double role of allowing the instructor to track students' mastery of the material while informing students of their learning progress (Quality Matters 17). The details of how assessment was operationalized are described later under the section Learning Outcomes.

For courses that are totally or partially experimental in the sense of involving instruction on a new topic, implementation of new instructional techniques, or a combination thereof, learning about student perceptions of the course is a must in order to make corrections in future iterations of the course. Therefore, the students enrolled in the course were surveyed at the end of the semester about different elements of the materials and instructional method. The data gathered from the student survey is described under the section Data Collection.

RESEARCH METHOD

Participants

A total of six graduate students (N=6) participated in this study. Students were enrolled in the course, TRAN 6003: Translation-Project Management, in Spring 2017. TRAN 6003 is a non-language-specific, three-credit core course that is typically taken during the first year of graduate studies. This course is a stand-alone introductory course with no specific pre-requisites. This course counts toward the Graduate Certificate in Translation[3] as well as the Master of Arts in Spanish (Translation and Translating Studies Concentration) program. Half the participants were full-time students and the other half were working full-time in the language industry. The average age of the group was 32 years.

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[3] The Graduate Certificate in Translation includes the following language pairs: English<->French, English<->German, English<->Japanese, English<->Russian, and English<->Spanish.

Course Description

The online graduate course[4] on Translation-Project Management discussed in this article is a non-language-specific course that is available to graduate students who work with different language pairs. The course begins with an overview of the US translation industry, its primary business models and translation workflows. Students are able to observe the project management process as it progresses from the initial contact with a prospective client to the final project completion. The course provides opportunities for students to experiment with tasks that translation or localization project managers typically need to complete, and to learn how to use project management software (Gantter or MS Project) and specialized computer-assisted translation (CAT) tools. Throughout the semester, the course dynamic is enriched with information

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[4] The course is worth three credit hours. Students are required to allocate three hours per week to reading assignments and viewing presentations led by the instructor or leaders in the field. These three hours fulfill the instructional component of traditional face-to-face classes. In addition to the time (three hours/week) that graduate students allocate to studying reading and presentation material, they are expected to allocate nine hours per week to complete weekly assignments related to the reading/ presentation materials and to their individual or group projects. Therefore, graduate students have to allocate some 12 hours per week to complete the required work over 15 weeks, which amounts to a total of 180 hours per semester. The graduate student time allocation is inferred on the basis of the Carnegie Unit, which is defined for face-to-face undergraduate courses as follows: One credit is equivalent to one contact hour per week with the professor plus two hours per week of out-of-class work (Silva et al. 25). A three-credit undergraduate course is estimated to require a student time allocation (in-class and out-of-class work combined) of 135 hours per semester. Because the Carnegie Unit was defined for face-to-face undergraduate level courses, it had to be adapted for the graduate level to reflect the fact that, while 12 credits are considered a full-time academic load for undergraduate students, for graduate students nine graduate credits are considered full-time enrollment. This difference between undergraduate and graduate students in the number of credits needed to achieve full-time enrollment implies that graduate courses require more time allocation to out-of-class work. In order to estimate this additional out-of-class time, the 135 hours per semester estimated for an undergraduate course were added to the time allocated to the graduate out-of-class work per graduate credit. 135 hours divided by nine credits equals 15 hour per week. When these 15 hours per week are added to the out-of-class work time allocation of graduate students taking nine graduate credits, the total out-of-class work per week comes down to one additional hour per credit of out-of-class per week, for a total of three hours per credit of out-of-class work, which comes down to nine hours per week of independent work aside from the three hours per week to study/review presentation material.

provided by experienced translation-project managers who share their expertise through published interviews or as virtual guest speakers. Lastly, students learn about furthering their education through project management certifications, and they get acquainted with career paths in project management, the current job market, and strategies for marketing their professional skills to potential clients.

Because the course is both task- and project-based, student assessment is structured around a portfolio that consists of a total of four deliverables[5] and one final project. Each deliverable is a hands-on experience simulation series of tasks estimated to require a maximum of 10 hours for students to complete. The four deliverables are as follows: (1) Defining project scope and potential risks; (2) Generating a work-breakdown structure (WBS); (3) Estimating project budget and submitting quotes; and (4) Designing a responsibility assignment matrix[6] with an emphasis on the communication workflow. The four deliverables include tasks that function as learning scaffolding that supports students' ability to tackle the final project.

More challenging than the four deliverables, the final project consists of two major components: (1) simulation of a translation project, and (2) reflection on lessons learned during the process. The simulation is executed in teams of five students, where each graduate student serves as the project manager for a team of four undergraduate students from another translation course. The undergraduate students in the team play the role of translators, editors and proofreaders. Students are given seven weeks to complete the project. The instructor monitors each phase of the project for each of the teams and provides formative feedback along the way.

One group of formative tasks, which are only marked as completed or not, include the discussion of reading assignments in online discussion boards and Padlets (online "bulletin" boards) where students reflect,

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[5]A *deliverable* is defined in this context as a unique and individual product, element, result, or item that is produced by the students at the conclusion of a specific project component, or at the conclusion of the project as a whole. Deliverables may be outputs in different forms or lengths, and may contain different information (PMBOK® Guide Glossary).

[6] PMBOK®, or Project Management Body of Knowledge, defines the Responsibility Assignment Matrix (also known as RAM) as a structure that represents the project organizational breakdown. The work breakdown structure helps to ensure that each task of the project is assigned to an individual or team member. The RAM can be used by the students as a tool to draft a communication plan that informs each team member of their role or task during an activity or a project (PMBOK® Guide Glossary).

criticize and share their thoughts. Another group of tasks that are also formative include hands-on tasks designed for the application of project management principles using open source web-based software Gantter[7] for Google Drive. Activities associated with the development of a work-breakdown structure (WBS) provide an example of blending theory and practice. To develop a WBS, students take the following steps: (1) develop project definition; (2) establish project scope; (3) insert project activities;[8] (4) add dependencies;[9] (5) add project durations, and (6) apply checklist for project completeness prior to submission. Students assimilate this content in one of the deliverables as well as the final project. Broadly speaking, discussion boards are helpful for in-depth understanding of project management skills as well as enhancement of critical thinking skills. Hands-on tasks and role-play activities are designed to apply project management concepts and expedite competency acquisition. The instructions for the final project, which is a real-life project simulation, are provided in the seventh week of the semester. This project requires the integration of content and competencies from the four deliverables.

The pacing of the four deliverables and the final project allows for students to become familiar with most common constraints and risks in translation projects. Throughout the semester, students engage in a number of tasks that are designed to illustrate the application of project management strategies to translation projects typically encountered in the language industry. Students progressively observe quality, cost, and time constraints in the translation-project workflow and are given the opportunity to develop the leadership competencies for managing virtual teams and developing virtual communication plans.[10] A detailed outline of the course content is illustrated in Table 1.

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[7] Gantter for Google Drive is a project management application that allows project managers and their teams to manage project schedules on the cloud.

[8] PMBOK® defines an activity as a component of work performed during a project (see Glossary).

[9] The term *dependencies* is used in this context as a synonym with *precedence relationship*, that is, logical relationships between the preceding activities and the succeeding activities. The most common type of dependency is the one that requires completion of one activity before the next one starts (see PMBOK® Guide, ch. 5, for a comprehensive explanation of this concept).

[10] The ability to manage projects in virtual environments is one of the professional requirements in the language industry, as team members may be working from distant and/or multiple physical locations.

Table 1. Course Content for Translation-Project Management

Week	Contents	Deliverables and Final Project
1	Overview of the language industry; Organizational models: Functional vs. projectized; In-House vs. subcontracting vs. offshoring; Industry pyramid: producers, providers, toolmakers, facilitators, trainers and user communities.	
2	Introduction to the principles of project management; Traditional vs. agile project management; Conceptualization: defining, planning, executing, controlling and closing; Project life cycle and overview of project phases.	
3	Review of translation workflow; Interviewing the client and establishing success criteria; Requirements gathering; Defining and managing project scope; Scope management processes; Defining project objectives and listing project risks; Creation of a project overview statement (POS).	Deliverable 1 assigned
4	Generation of a work breakdown structure (WBS); Creation of project schedule; Identifying and defining project activities; Activity decomposition[11] and deliverables; Sequencing, activity independence and dependencies; Introduction to Gantter for Google Drive.	Deliverable 1 due Deliverable 2 assigned
5	Review of activity sequencing; Estimating activity duration; Methods for estimating activity duration; Duration as a function of resource availability; Time estimates using CAT tools.	
6	Introduction to costs; Methods for estimating costs; Cost budgeting and cost control; Resource leveling based on cost; Review of scope triangle; Kick-off meetings for final project.	Deliverable 3 assigned

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[11] The term *decomposition* is defined in this context as the subdivision of project deliverables into smaller, more manageable components until the work associated with accomplishing the activity and its deliverables is defined in sufficient detail to support *executing*, *monitoring* and *controlling* the work of the whole activity (PMBOK® Guide, ch. 5).

Week	Contents	Deliverables and Final Project
7	Resource leveling; Micro-Level project planning; Building and managing an effective project team; Leadership skills in successful virtual teamwork.	Deliverable 2 due Final project assigned
8	Recruiting and organizing the project team; Vendor management; Proposals: RFI, RFP, RFQ; Qualifying vendors; Contracts and purchase order submission; Review of résumé's critical skills.	
9	Managing the project team and team communications; Managing team meetings, communications, and the communication plan; Conflict management and conflict avoidance; Reporting progress.	Deliverable 3 due Deliverable 4 assigned
10	Monitoring and controlling project progress; Schedule control and status reports; Setting the baseline, tracking, analyzing variance and reporting; Graphical reporting tools.	
11	Project constraints; Dependencies, lag, slack and critical path; Compressing the schedule, crashing and fast-tracking; Finalizing the schedule and cost based on resource availability work packages.	
12	Guest speaker: expert localization project manager; Project management certifications.	Deliverable 4 due
13	Closing projects; Client acceptance of deliverables; Postmortem; Final report; Lessons learned; Client review.	
14	Value-added project management; Translator's multifaceted professional profile; Branding yourself.	Final project due

Instruments and Procedures

Quality Matters Standard 2 establishes that a clear identification of learning objectives is an essential part of the learning process as it allows a learner to identify specific competencies (Quality Matters 12). These objectives have to be logically matched to the learning outcomes, which in turn have to be aligned with the measurement of outcomes as assessed in graded assignments and projects (Quality Matters 7, 12). This network

of interconnections between objectives, learning outcomes, and assessment is what Quality Matters calls *alignment*. This alignment can be visualized by drawing an *alignment map*, as shown on Table 2, where learning outcomes (LOs) are matched to the assignments that are used to measure the learning outcomes (Quality Matters 6).

The learning outcomes identified for the graduate course in translation-project management are defined as follows: students completing this course will be able to

LO I. Demonstrate effective organizational and communication skills when managing translation workflows, virtual project teams, and stakeholders in an online environment;

LO II. Apply project management problem-solving techniques;

LO III. Conduct project planning activities;[12]

LO IV. Apply project management principles using project management tools throughout all the project stages, from project planning to project completion.

These learning outcomes are consistent with the objectives and the assessment plan for the course (see alignment map in Table 2). The assessment was performed by using five assignments: four deliverables and one final project. The assessment of learning outcomes relied on assessment rubrics (see Appendix A for sample rubric) that were specific to each assignment. The four deliverables were completed individually and are aligned with outcomes as defined. The assessment of the final project, however, was divided into two parts as follows: (1) a team project where students apply competencies that they put into practice in deliverables 1-4, and (2) a reflection on lessons learned from reviewing the team's performance. This reflection followed PMBOK® guidelines (Project Management Body of Knowledge, Project Management Institute 2008), which directed students to reflect on critical peculiarities of their projects, such as constraints, challenges, and successes in the translation workflow. The alignment map used for direct assessment of each learning outcome is illustrated in Table 2.

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[12] While planning project activities, students enhance their understanding of the interdependence of such variables as cost, quality, and time. Therefore, students learn to forecast project costs while setting up timelines and controlling quality. See Dunne's "Managing the Fourth Dimension," pp. 120-121, for an exhaustive review on the methodology suggested by the Project Management Institute to identify and evaluate project constraints.

Table 2. Learning Outcomes and Assessment Alignment Map

Learning Outcomes	**Assessment**
LO I. Demonstrate effective organizational and communication skills for managing translation workflows, virtual project teams, and stakeholders in an online environment.	Deliverable 4 Final project
LO II. Apply project management problem-solving techniques.	Deliverable1 Final project
LO III. Conduct project planning activities.	Deliverable 1 Deliverable 3
LO IV. Apply project management principles using project management tools throughout all the project stages, from project planning to project completion.	Deliverable 1 Deliverable 2 Final project

Data Collection and Analysis

In order to assess the four learning outcomes, five grading rubrics were designed in the course, one for each assignment. As a way of illustration, one of these rubrics is presented in Appendix A. This grading rubric was used for Deliverable 2, and illustrates performance criteria for LO IV. In LO IV, students demonstrate their ability to apply project management principles using project management tools throughout all the project stages. Specifically in Deliverable 2, the rubric is used to assess student ability to apply such project management principles as estimating activity durations and costs, allocating human resources, among others, and using Gantter for Google Drive. As can be seen from the rubric in Appendix A, evaluation of student performance ranges from "Needs Improvement" to "Excellent." Similar rubrics were created for the other assignments. The measurement of LO IV was quantified by using the performance indicator discussed below.

The assessment of learning outcomes was operationalized by establishing a performance indicator for each learning outcome. Each

performance indicator was calculated from an aggregate of assignments submitted by the students during the semester. The performance indicator determined the percentage of students achieving cumulative grades that were higher than the statistical average (Rodríguez-Castro, "Learning Outcomes" 170). For example, if a performance indicator is calculated as 70, it means that 70% of the students achieved the outcome; Mónica Rodríguez-Castro ("Learning Outcomes" 181) provides extensive details on this type of metric. This metric was not used to determine students' course grades, rather it was designed for the purpose of this study to gain insight on achievement (or lack thereof) of each learning outcome as measured quantitatively through direct assessment of assignments.

Because the course on Translation-Project Management, as discussed here, was delivered online for the first time, it was important to understand the elements of the course from the student perspective. Consequently, a survey was designed for the purpose of gathering information on what the students in the class perceived as working or not working for them (see Appendix B). This survey was administered online during the fourteenth week of the semester. The survey consisted of a Likert-scale questionnaire of 16 items phrased as statements that students needed to rate on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

RESULTS AND DISCUSSION

Table 3 shows the overall results for the four learning outcomes that were investigated in this study (see Table 2). These results aggregate the data for the entire group of students enrolled in the course (N=6). The performance indicator is the percentage of students scoring more than the minimum threshold in the rubric for the aggregate of assignments used to evaluate the achievement of each learning outcome (see Table 2). As may be observed in Table 3, the indicators for LOs I, III, and V are relatively high (83.3%) whereas LO II shows a lower performance indicator (66.7%). Since the number of students was small, the statistical significance is low. However, the approach to measuring achievement of learning outcomes, as shown in this study, can be implemented in any course regardless of the number of participants.

Table 3. Direct Assessment of Learning Outcomes

Learning Outcomes	Performance Indicator (%)
LO I. Demonstrate effective organizational and communication skills when managing translation workflows, virtual project teams, and stakeholders in an online environment.	83.3
LO II. Apply project management problem-solving techniques.	66.7
LO III. Conduct project planning activities.	83.3
LO IV. Apply project management principles using project management tools throughout all the project stages, from project planning to project completion.	83.3

The aggregate for outcomes I, III, and IV is indicative of overall student achievement of these outcomes. Assignments associated with LO I included a demonstration of organizational and communication skills, which are necessary for effective online interactions among stakeholders. Having to design a responsibility assignment matrix for Deliverable 4 proved to be effective as indicated by the results of LO I.

Achievement of LOs III and IV, as opposed to LOs I and II, was associated with very gradual mastery of content, since students had more time to understand basic principles and then engage in hands-on activities to comprehend the content. Assignments in this case allowed students to make satisfactory progress toward achieving these learning outcomes. Particularly in the case of understanding project costs, timelines, and quality, hands-on tasks were assigned over multiple weeks, thereby providing students with opportunities to receive formative feedback on project planning activities and application of project management tools prior to applying these concepts to the final project. In addition to the

hands-on tasks, the instructor not only presented multiple case studies to facilitate the understanding of content, but also provided opportunities for students to interact with industry experts.

The performance indicator for LO II is 66.7% (see Table 3), considerably lower than the indicators for the other three outcomes. This could be attributed to the fact that this outcome predominantly measured analytical and critical thinking skills through Deliverable 1 and the final project. In fact, both assignments seemed to be the hardest for all the students in the class. It is also possible that the students were unable to (1) comprehend the complexity of the course content associated with both assignments and (2) blend theory and practice in such a short span of time. Students did not succeed in carefully analyzing and critically evaluating constraints, weaknesses, and successes observed during the project; thus, they were unable to exhibit higher order thinking and self-analysis in the reflective paper. The final project required bringing together cumulative knowledge stemming from Deliverables 1 through 4 and involved carrying out extensive research. On both accounts, the final project showed that student performance fell short.

The sixteen-item online survey (Appendix B) on student perceptions was measured for internal consistency. The Cronbach alpha coefficient[13] for the entire instrument is 0.92. Four out of the 16 survey items, namely items 1, 4, 12, and 16, have been selected to showcase students' responses that provide insight into student perceptions compared to the direct assessment performed by the instructor. Figure 1 illustrates student perception of LO I (Demonstrate effective organizational and communication skills when managing translation workflows, virtual project teams, and stakeholders in an online environment). 66% of the students agreed and 17% strongly agreed that the final project enhanced their organizational and professional skills. Student perception is in close alignment with direct assessment performance indicator of 83.3 (Table 3). Because of how the final project was structured, student perception may be interpreted to indicate that they are confident about having acquired the necessary skills to manage the translation workflow from inception to completion while managing team interactions in a virtual environment.

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[13] The Cronbach alpha is a coefficient of reliability used to measure the internal consistency of a test score for a sample of data collected from a survey and is often used in social sciences and translation studies. The value varies between 0 and 1: the higher the value, the better the instrument validity is considered to be.
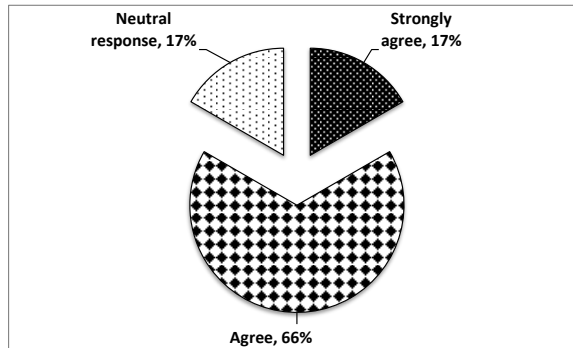
Figure 1. Survey Response to item 16. "The final project has improved my ability to manage translation workflows and virtual teams."

With regards to LO III (Conduct project planning activities) student perception is also in line with direct assessment result of 83.3 (Table 3). Figure 2 shows that all the students either agreed (33%) or strongly agreed (67%) that they learned the content related to LO III. Understanding this content is essential since it can be challenging for non-experienced language professionals to complete projects successfully, as bringing a project to fruition depends on the project manager's ability to understand the priorities from each stakeholder and weave them into the action plan. Project planning consists of applying the methodology described in the PMBOK® Guide (ch. 3) for identifying potential constraints so that the project may be delivered as scheduled without compromising budget and agreed level of quality. It is often very challenging to provide high quality at very low costs or rush a large project with a limited budget. Therefore, the translation-project manager is challenged to set the balance and decide on the tradeoff of these variables for successful project completion.
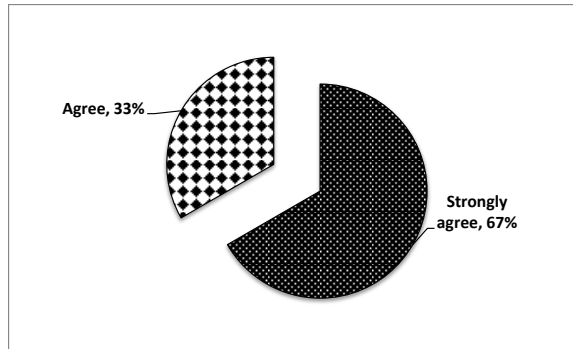
Figure 2. Survey Response to item 1. "Assignments have allowed me to understand costs, timelines and quality in the language industry."

The student survey results (Figure 3) also show consistency with performance indicator 83.3 (Table 2) for the LO IV (Apply project management principles using project management tools throughout all the project stages, form project planning to project completion). The students either strongly agree (66%) or agree (17%) that they have improved their ability to use project management tools. A similar perception is reported by the students for the use of Gantter for Google Drive (17% agree and 66% strongly agree). The hands-on tasks designed for the course may have contributed to giving students the amount of exposure to the industry tools that they needed to gain confidence in their ability to use them.
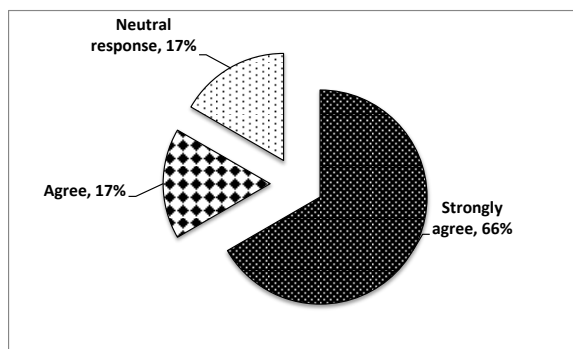

Figure 3. Survey Response to item 4. "The course has improved my ability to use a wide variety of tools during multiple phases of the translation workflow."

Student perception as reflected in the response to survey item 12 (Figure 4) contrasts with a relatively low performance indicator of 66.7 (Table 2) for LO II (Apply project management problem-solving techniques). The students either strongly agreed (83%) or agreed (17%) that they were able to identify and analyze constraints in the translation workflow and accordingly apply problem-solving techniques. Therefore, they were confident about their problem-solving skills and their ability to execute a project successfully.
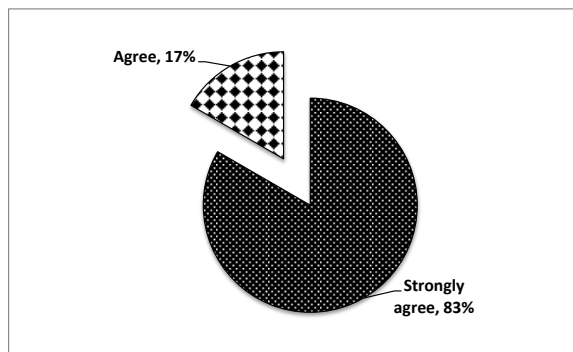

Figure 4. Survey Response to item 12. "Assignments have allowed me to demonstrate my level of skill mastery at executing a project."

In summary, overall student perception of the course is very positive[14] and their perception corresponds with the performance indicators of three out of four learning outcomes. The responses indicate that students think they have achieved the four learning outcomes established for the course. However, student perception of their learning outcomes achievement is markedly more optimistic than direct assessment results. Particularly, direct assessment of LO II indicates that this outcome was achieved by ca. 66% students whereas 100% of the students perceived that they achieved this outcome. This could be attributed to a sense of overconfidence in their metacognitive perceptions (i.e. reflecting upon one's mastery of the content, concepts, or tasks), which may have prevented students from

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[14] It may be worth noting that five (83%) out of the six students enrolled in the course indicated on the end-of-semester course evaluation that, although they enjoyed the online course, they would have preferred to take the course in a face-to-face format.

applying strategies to verify whether or not their perceptions were grounded on tangible evidence. Students' metacognitive perceptions "are often error-prone" (Ehrlinger and Shain 142) and in this case their overconfident metacognitive perceptions show inaccurate insights into their learning of topics and materials, and possibly their overall ability to find effective solutions to complex problems. Nonetheless, this is a preliminary conclusion that needs to be investigated further.

CONCLUSIONS

The design of the online Translation-Project Management course was articulated around several research goals that included pedagogical design and quantitative measurement of learning outcomes. A fundamental pedagogical goal was that the course needed to be grounded on sound teaching strategies proven to work in asynchronous online learning environments. While pedagogical strategies are expected to be the backbone of any teaching and learning environment, in the asynchronous online environment the intentionality of those strategies becomes more critical because of the absence of real-time communication. Quality Matters principles of online course design provided the structure that shaped the four learning outcomes that were analyzed. Another pedagogical goal was to integrate a process-based learning method that would allow us to observe student progress as it unfolded through tasks and assignments that were structured in such a way that students could make corrections through formative feedback before the final submission for a grade.

With regards to the learning outcomes, the researchers sought to assess the achievement of four learning outcomes within the process-based learning environment as articulated for each of the assignments. The learning outcomes assessment was carried out from the perspective of both the instructor (direct assessment) and the students.

Student perception of each outcome, as reported in an online survey, confirmed the results from direct assessment with the exception of LO II (Apply project management problem-solving techniques). Overall, students struggled with the final project. Even though there were scaffolding tasks woven into the course so that specific parts of the final project would be more manageable, those parts were still challenging. In hindsight, the difficulties that the students faced may be attributed to the

fact that, in spite of the scaffolding tasks, there was not enough time to assimilate information and concepts that by and large were novel, given that the Translation-Project Management course is a stand-alone course in the curriculum with regards to the content that it addresses. In a future iteration of this course, the time allocated to scaffolding tasks could be increased by shortening the time dedicated to other components. Students may benefit from more tasks on analyzing and evaluating problems prior to the initiation of the final project; this could stimulate their higher-order thinking at an earlier stage in the problem-solving process. For instance, a more successful approach in the future could be to have students perform additional hands-on tasks on the topics of gathering requirements and defining project objectives earlier in the semester, over weeks two and three. This approach would allow time for the instructor to help students in: (1) connecting one concept to another; and (2) designing graphic organizers that would help students to organize their thoughts. In the following weeks, students could start developing higher-order thinking by building on the foundational knowledge with more complex content that enables them to identify project risks and potential constraints. Along the same lines, the instructor could design weekly tasks that aim at: (1) having students make inferences by first providing real-world examples and further helping them understand when information is implied; (2) providing a step-by-step process that could help them with acquiring problem-solving techniques that might serve as a framework for the final project; and (3) create mind movies that allow students to visualize concepts that are hard to learn. This sequence of task scaffolding represents a brief example of how weekly tasks performed early on in the semester could contribute to the development of students' problem-solving skills that are necessary for a complex and open-ended final project.

The fact that the majority of the students were able to achieve three out of the four learning outcomes, namely LOs I, III, and IV, suggests that these outcomes were commensurate with the amount of exposure to the material. While it is not possible to ascertain the extent to which the project- and task-based teaching approach aided in the achievement of outcomes, it is likely that this approach facilitated the learning process because of the close connection between the tasks accomplished in preparing for the four deliverables and the final project. In this regard, the survey responses to survey (Appendix B) items 8, 13, and 15 indicate that the students valued positively the task- and project-based dynamic.

The course design, teaching approach, and learning outcomes assessment method can be adapted to courses that may deal with subject matters other than translation-project management. Instructors who may want to replicate the design and teaching approach presented here need to be aware that task- and project-based assignments require frequent individual supervision of the material produced by students. The feedback frequency is inherent to the task- and project-based teaching approach, where learning is understood to emerge from both the dialogic dynamic between students and instructor and the opportunity to complete low-stake tasks that build up to more complex ones. Because of the feedback frequency, instructors adopting this teaching approach will have to gauge the ideal enrollment cap depending on the number of tasks and projects as well as their complexity.

LIMITATIONS AND FUTURE RESEARCH

While this study presents information that may be useful to instructors and researchers interested in implementing task- and project-based learning in courses delivered online, the learning outcomes and the student survey results cannot be generalized to other student populations because the number of students enrolled in the course was small. The survey could be improved in the future in order to pinpoint why student perception regarding the achievement of LO II diverges from direct assessment. Another iteration of the same course with a larger enrollment is needed to ascertain the enrollment cap of online courses such as the one discussed here.

Although this study offers a possible instrument for evaluating student perceptions of the teaching methodology, course content, and learning outcomes, the findings about the overconfident metacognitive perceptions merit special attention. A future study could focus on teasing out the specific factors contributing to student (mis)perceptions. Comprehending underlying reasons behind student perceptions could be helpful for devising new tools that could be implemented to monitor student progress and mastery of the content intermittently over the semester, particularly in online course offerings. These findings could help instructors in identifying the concepts that are more difficult for their students in a shorter span of time and, therefore, dedicate more class time or reinforcement. Furthermore, the effectiveness of task- and project-based

learning, discussed in this study, as well as the delivery of online instruction, could be analyzed by using a control group and comparing the outcomes between the control group and the experimental group in multiple translation courses. Such a study would be beneficial to establish best practices in task- and project-based learning for online translation programs.

APPENDIX A: RUBRIC FOR GRADING DELIVERABLE 2

Criteria	Needs Improvement	Marginal	Adequate	Good	Excellent
1. Project Definition	The project definition is not clearly stated. A significant number of project goals and objectives are missing.	The project definition is not clearly stated. Some project goals or objectives are missing or contradictory or illogical. Descriptions lack contextual information.	Adequate listing of project goals and objectives. Some objectives or goals are too generic or illogical. Some descriptions lack contextual information and clarity.	Project goals and objectives are stated in the description and consistently logical. The description is clear with sufficient contextual information.	Project goals and objectives are clearly stated in the description and consistently logical. The description is very clear with all relevant contextual information.
2. Project Scope	The project scope is not clearly stated. It does not define the highest level of what needs to be done. Significant items of what has to be created or delivered are missing.	The project scope is clearly stated but does not define the highest level of what has to be done. Some items relevant to what has to be created or delivered are missing.	Adequate statement of project scope, with a definition of the highest level of what has to be done. Adequate list of what has to be created and adequate list of deliverables.	Project scope is stated logically. The scope has a good definition of the highest level of what has to be done. A good list of what has to be created. Good lists of deliverables.	Project scope is clearly and logically stated. The scope includes a detailed definition of the highest level of what has to be done. An excellent list of what has to be created. Excellent lists of deliverables.
3. Project Constraints	Project constraints are stated too broadly or lack contextual information. Project constraints are not properly identified, a significant number of constraints is missing.	The project constraints are not clearly stated. Insufficient number of project constraints. Some constraints are not appropriate. Some constraints are not meaningful.	An adequate number of project constraints are identified and stated. An adequate number of constraints are listed.	Project constraints are identified and stated. A good number of relevant constraints.	Project constraints are clearly identified and well stated. A meaningful number of relevant constraints.
4. Activity Definition	Most activities are stated too broadly to be meaningful. Activities are not useful for tracking project to completion.	Several activities are not stated clearly. Some activities do not focus on function. Some definitions are not meaningful or sufficient. Some activities involve form rather than function. Loose adherence to verb-noun form.	Adequate statement of activities. Some activities are stated vaguely. Insufficient listing of number of activities. A few activities involve form rather than function. Loose adherence to verb-noun form in some cases.	Most activities are significant. Activities generally focus on function rather than form. Good activity and sub-activity breakdown. Most activities stated clearly using verb-noun form.	All activities are significant. All activities focus on function rather than form. Excellent activity and sub-activity breakdown. All activities clearly stated using verb-noun form.

Criteria	Needs Improvement	Marginal	Adequate	Good	Excellent
5. Number of Meaningful Activities	A significant number of activities needed to meaningfully define the project scope.	More activities are needed to fully define project scope.	An adequate number of meaningful activities is included.	Most of the project is divided into a good number of meaningful activities.	Project is divided into an excellent number of meaningful activities throughout.
6. Allocation of Human Resources	Individuals are poorly linked to activities. Most of the individuals have been assigned too many or too few activities.	Poor linking of activities to individuals. Some individuals appear to be underutilized or overutilized.	An adequate linking of activities to individuals, but some weaknesses exist. Activity delegation appears reasonable overall, but a few individuals are underutilized or overutilized.	Good linking of activities to individuals. Activities are evenly distributed between individuals with a few exceptions.	Individuals accurately linked to activities throughout. Activities are evenly distributed between individuals with an excellent amount of detail.
7. Identification of Dependencies	Inadequate identification of activity dependencies or illogical dependencies. The sequence of activities is inaccurate and the critical path cannot be identified.	Some activity dependencies are identified, but those listed are illogical. The critical path has not been identified.	An adequate number of dependencies are identified. Overall, the number of dependencies listed will allow for establishing the sequence of activities. Identification of a clear critical path is not apparent.	Dependencies are generally well defined and accurately listed. A good sequence of activities. The critical path has been identified.	Dependencies are comprehensively defined and accurately listed. An excellent sequence of activities. The critical path has been clearly identified.
8. Identification of Human Resources & Supplies	Inadequate identification of human resources, materials and supplies. The number of resources listed is insufficient to complete the project.	Some resources, materials and supplies missing or not defined. Insufficient to complete the project.	An adequate number of resources, materials and supplies are defined. Some missing critical activities could impede project completion.	Human resources, materials and supplies needed to complete the project are generally well defined but some important details are unclear or missing.	Resources, materials and supplies needed to complete the project are comprehensively defined.

Criteria	Needs Improvement	Marginal	Adequate	Good	Excellent
9. Activity Durations	Activity durations are not meaningful or substantiated. A significant number of activity durations is not adequate and will not enable tracking the project adequately. Activity durations are not realistic.	Some of the activity durations are not clearly stated or calculations are not adequate. Most activity durations do not enable tracking the project adequately. Some activity durations are not credible.	Most of the activity durations are clearly stated, but some calculations are not adequate. Some activity durations do not allow for sufficient project scheduling. Some activity durations are not credible.	Activity durations are clearly calculated and clearly stated with a few exceptions. The overall calculation of activity durations allows sufficient project scheduling.	Activity durations are correctly calculated and clearly stated. The overall calculation of activity durations allows for accurate project scheduling.
10. Costs	Costs are not meaningful due to inadequate activity definition and resource allocation. Costs are inaccurate or insufficient to track the project within budget.	Costs are not defined in sufficient detail to enable tracking the project adequately within budget.	An adequate list of costs is planned but not reasonably defined or justified. More detail is necessary to enable tracking the project adequately within budget.	A good list of costs is planned and costs, with a few exceptions, generally appear sufficient to enable tracking the project adequately within budget.	The costs of all materials and resources are thoroughly planned to enable project completion within budget.
11. Milestones	A significant number of milestones are missing. Milestones do not adequately define tangible interim goals, demonstrate progress or enforce completion within schedule.	Some milestones are not clearly stated and do not provide tangible interim goals, demonstrate progress or enforce completion within schedule.	An adequate list of milestones is included which provides tangible interim goals, but insufficient to demonstrate progress or enforce completion within schedule.	A good list of milestones is included which provides tangible interim goals. Milestones are sufficient to define tangible goals, demonstrate progress and enforce completion within schedule.	A well apportioned number of milestones provide tangible interim goals, demonstrate progress and enforce completion within schedule.
12. Content	The content is too generic and WBS is not created following specified guidelines for content.	WBS lacks essential information on scheduling, resources, costs and milestones. WBS is not created following specified guidelines for content.	WBS is usable but crucial information on activity project definition and scope is missing. An adequate number of activity durations and costs are included, but overall WBS does not allow for accurate project tracking.	WBS generally follows specified guidelines for content. WBS allows for accurate project tracking.	WBS clearly follows specified guidelines for content. WBS is very well developed and allows for accurate project tracking.

Criteria	Needs Improvement	Marginal	Adequate	Good	Excellent
13. Submission Requirements	The assignment does not meet the overall requirements specified in guidelines. Incorrect file is submitted, files are missing in submission or are not accessible.	Assignment does not meet some of the requirements specified in guidelines. Incorrect file is submitted or some files are missing in submission.	The assignment meets an adequate number of requirements specified in guidelines.	The assignment meets all requirements specified in guidelines.	The assignment meets all requirements specified in guidelines. All files are submitted and accessible in the correct format.

APPENDIX B: STUDENT SURVEY

Rating Scale: "Strongly Agree (5)" to "Strongly Disagree (1)"

Items (statements):

1. Assignments have allowed me to understand costs, timelines and quality in the language industry.

2. Language industry topics and examples covered in the course were interesting and informative of the current status of the language industry.

3. Assignments have improved my ability to use Gantter for language industry projects.

4. The course has improved my ability to use a wide variety of tools during multiple phases of the translation workflow.

5. Working in teams has improved my ability to participate in group work.

6. The course has helped me to understand the importance of having a communication plan prior to project initiation.

7. Assignments for the course have improved my written communication skills.

8. The materials and tutorials provided to practice Gantter were useful.

9. Assignments have allowed me to improve my ability to identify and examine textual and cultural problems frequently observed in translation projects.

10. Skills learned in the course are relevant to translators.

11. The course has improved my ability to manage a project from inception to final.

12. Assignments have allowed me to demonstrate my level of skill mastery at executing a project.

13. I liked the hands-on tasks (e.g. lab practice) designed for the course.

14. Padlet activities used in the course have helped me to think critically.

15. Padlet activities used in the course have helped me learn more effectively.

16. The final project has improved my ability to manage translation workflows and virtual teams.

Works Cited

Da Silva, Emanuel, Mireille McLaughlin, and Mary Richards. "Bilingualism and the Globalized New Economy: The Commodification of Language and Identity." *Bilingualism: A Social Approach*, edited by Monica Heller, Palgrave Macmillan, 2007, pp. 183-206.

Doyle, Michael. "A Responsive, Integrative Spanish Curriculum at UNC Charlotte." *Hispania*, vol. 93, no. 1, 2010, pp. 80-84.

Dunne, Keiran J. "Putting the Cart Behind the Horse: Rethinking Localization Quality Management." *Perspectives on Localization*, edited by Keiran J. Dunne, John Benjamins, 2006, pp. 95-117.

---. "Managing the Fourth Dimension: Time and Schedule in Translation and Localization Project." *Translation and Localization Project Management*, edited by Keiran J. Dunne and Elena S. Dunne, John Benjamins, 2011, pp. 119-152.

---. "The Industrialization of Translation: Causes, Consequences and Challenges." *Translation Spaces*, vol. 1, 2012, pp. 143-68.

Dunne, Keiran J., and Elena S. Dunne. "Mapping Terra Incognita: Project Management in the Discipline of Translation Studies." *Translation and Localization Project Management*, edited by Keiran J. Dunne and Elena S. Dunne, John Benjamins, 2011, pp. 1-16.

Ehrlinger, Joyce, and Ashley E. Shain. "How Accuracy in Students' Self Perceptions Relates to Success in Learning." *Applying Science of Learning in Education: Infusing Psychological Science into the Curriculum*, edited by Victor A. Benassi, Catherine E. Overson, and Christopher M. Hakala, Society for the Teaching of Psychology, 2014, pp. 142-151.

González-Davies, María, and Vanessa Enríquez-Raído. "Situated Learning in Translator and Interpreter Training: Bridging Research and Good Practice." *The Interpreter and Translator Trainer*, vol. 10, no. 1, 2016, pp. 1-11.

González-Davies, María, and Christopher Scott-Tennent. "A Problem-Solving and Student-Centred Approach to the Translation of Cultural References." *Meta*, vol. 50, no. 1, 2005, pp. 160-179.

Inoue, Izumi. "PBL as a New Pedagogical Approach for Translator Education." *Meta*, vol. 50, no. 4, 2005, pp. 1-20.

Kiraly, Don. "From Teacher-Centred to Learning-Centred Classrooms in Translator Education: Control, Chaos or Collaboration?" *Innovation*

and E-learning in Translator Training: Reports on Online Symposia, edited by Anthony Pym, Carmina Fallada, José Ramón Biau, and Jill Orenstein, Universitat Rovira i Virgili, 2003, pp. 27-31.

Lawlor, Annette. "Career Paths in Localization." *Lion People. Make the Right Connection*, 23 Jun 2015, www.lionpeopleglobal.com/career-paths-in-localization.

Massey, Gary. "Process-Oriented Translator Training and the Challenge for E-learning." *Meta*, vol. 50, no. 2, 2005, pp. 626-33.

Mitchell-Schuitevoerder, Rosemary. "A Project-based Methodology in Translator Training." *Tracks and Treks in Translation Studies: Selected Papers from the EST Congress*, edited by Catherine Way, Sonia Vandepitte, Reine Meylaerts, and Magdalena Bartlomiejczyk, John Benjamins, 2010, pp. 127-142.

Modern Language Association (MLA). "Foreign Languages and Higher Education: New Structures for a Changed World." *Profession,* 2007, pp. 234-245.

PACTE: Procés d'Adquisició de la Competència Traductora i Avaluació. "Investigating Translation Competence: Conceptual and Methodological Issues." *Meta*, vol. 50, no. 2, 2005, pp. 609-619.

Project Management Institute. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. Project Management Institute, 2008.

Quality Matters™. *Standards from the Quality Matters Higher Education Rubric Workbook*. 5th ed., Quality Matters, 2014. www.qualitymatters .org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationR ubric.pdf

Rodríguez-Castro, Mónica. "Learning Outcomes of Computer-Assisted Translation: Direct Assessment and Self-assessment." *Translation, Globalization and Translocation*, edited by Concepción Godev. Palgrave, 2018.

---. "The project manager and virtual translation teams: Critical factors." *Translation Spaces*, vol. 2, 2013, pp. 37-62.

Silva, Elena, Taylor White, and Thomas Toch. *The Carnegie Unit: A Century-Old Standard in Changing Education Landscape*. Carnegie Foundation for the Advancement of Teaching, 2015.

Torres-Hostench, Olga. "Occupational Integration Training in Translation." *Meta*, vol. 57, no. 3, 2012, pp. 787-811.