

Rethinking the Translation Classroom: Using Digital Pedagogy to Build Essential Entrepreneurial Skills for the AI Era

إعادة التفكير في فصل الترجمة: استخدام البيداغوجيا الرقمية لبناء مهارات ريادة الأعمال الأساسية لعصر الذكاء الاصطناعي

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Abstract:

The integration of Generative AI (GenAI) within the language services industry necessitates a paradigm shift in translators' education. This study proposes a conceptual and operational framework to bridge the gap between traditional pedagogy and the automated market. By prioritizing machine translation literacy and entrepreneurial competencies, the framework equips students to transform technological disruptions into business opportunities. Through a "Translation Start-up Simulation" methodology—applied to specialized maritime contracts—the research highlights the indispensable value of human cultural capital in auditing algorithmic outputs. The findings advocate for the evolution of the "language entrepreneur" as a proactive architect of the digital translation ecosystem.

Keywords: Translation Pedagogy; GenAI; Entrepreneurial Competencies; Machine Translation Literacy; Start-up Simulation.

ملخص:

يستلزم دمج الذكاء الاصطناعي التوليدي (GenAI) في صناعة الترجمة تحولاً جذرياً في مناهج التعليم. تقترح هذه الدراسة إطاراً مفاهيمياً وإجرائياً لسد الفجوة بين البيداغوجيا التقليدية ومتطلبات السوق المؤتمتة. ومن خلال التركيز على ثقافة الترجمة الآلية ومهارات ريادة الأعمال، يهدف الإطار لتزويد الطلاب بالأدوات اللازمة لتحويل الاضطراب التقني إلى فرص تجارية. وعبر منهجية "محاكاة الشركات الناشئة" المطبقة على العقود البحرية، يبرز البحث أهمية التدقيق البشري ورأس المال الثقافي في إدارة مخرجات الخوارزميات. تخلص الدراسة إلى ضرورة تكوين "المترجم الريادي" كعنصر فاعل في النظام الرقمي للترجمة.

الكلمات المفتاحية: تعليم الترجمة، الذكاء الاصطناعي التوليدي، كفاءات ريادة الأعمال، ثقافة الترجمة الآلية، محاكاة الشركات الناشئة.

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1. INTRODUCTION

1.1 The AI Paradigm Shift in the Translation Industry

The global translation and localization industry is currently undergoing a radical and unprecedented paradigm shift, driven primarily by the rapid democratization of Generative Artificial Intelligence (GenAI). Large Language Models (LLMs) have transcended the limitations of early Neural Machine Translation (NMT) systems. They no longer merely process sentence-level syntax; they are now capable of generating context-aware, highly nuanced multilingual content at an industrial scale. This technological leap has established automation not as an optional tool, but as the fundamental baseline of the modern language service market. As Pym and Hao (2025) argue, the contemporary translation environment is defined by an "augmentation model," where the value of language professionals is no longer measured strictly by their manual drafting speed, but by their ability to collaborate with and strategically direct generative algorithms. Consequently, tech-driven start-ups and digital platforms are capitalizing on this efficiency, demanding a new breed of language professionals who are as proficient in algorithmic interaction as they are in applied linguistics.

1.2 The Evolution of the Translator: From Linguistic Operator to Language Entrepreneur

As artificial intelligence successfully automates routine linguistic transfers, the traditional concept of the translator—viewed primarily as a passive bilingual operator—is rapidly becoming obsolete. The industry now demands "language entrepreneurs": proactive professionals who manage complex, AI-assisted workflows, audit algorithmic outputs for ethical and cultural accuracy, and engineer highly specific prompts. According to Penet (2026), translation competence in the GenAI era has drastically expanded beyond linguistic and cultural mastery. It now essentially encompasses advanced technological literacy, project management, and start-up creation skills. Translators are no longer simply translating texts; they are selling hybrid linguistic solutions. They act as quality assurance architects who intervene when the machine inevitably encounters complex legal, cultural, or highly creative nuances that require human cultural capital. This evolution necessitates a fundamental re-evaluation of how future translators are trained and prepared for the workforce.

1.3 Problematic

Despite this rapid industry transformation, a significant pedagogical gap persists within academic institutions. Many university translation departments continue to operate on traditional didactic models that prioritize manual translation and equivalence theories, treating technology merely as an optional adjunct rather than the

core medium of work. As Yang, Zou, and Kruk (2025) highlight, students often perceive a profound disconnection between their classroom training and the technological realities of the modern language market. While some programs have integrated basic Computer-Assisted Translation (CAT) tools, they often fail to address the critical need for comprehensive "Machine Translation Literacy" (Bindels, Pluymaekers, & Dorst, 2025).

This situation raises a pressing problematic: If traditional curricula fail to equip students with critical AI management and entrepreneurial skills, how can academic institutions prevent the structural deskilling of their graduates in an automated market? Furthermore, how can digital pedagogy be leveraged to transform the translation classroom from a space of mere linguistic practice into an incubator for language start-ups and entrepreneurial innovation?

1.4 Research Objectives and Methodology

To address this critical pedagogical gap, this article aims to propose a comprehensive framework for rethinking the translation classroom in the AI era. The primary objective is to demonstrate how digital pedagogy can be actively utilized to build essential technical and entrepreneurial skills—specifically AI literacy, advanced prompt engineering, and start-up creation.

To achieve these objectives, this study adopts a descriptive-analytical approach to formulate a pedagogical proposal. First, it analyzes the theoretical shift in translator competencies as dictated by recent technological advancements. Second, it outlines a conceptual model: the "Translation Start-up Simulation," a classroom approach designed to transition students from learning how to translate, to learning how to manage and monetize AI-generated translations (Lu, 2025; Xu, Sun, Su, & Liu, 2025). Ultimately, this research claims that by actively promoting synergy between academic instruction and entrepreneurial practices, educators can empower translation students to transform the disruptive force of GenAI into a viable, sustainable professional advantage.

2. Theoretical Framework: Digital Pedagogy and Translation Entrepreneurship

2.1 Defining the "Language Entrepreneur" in the GenAI Era

To effectively rethink the translation classroom, it is first necessary to conceptualize the target profile of the modern graduate. Historically, the professional translation market was heavily fragmented, predominantly relying on independent freelancers who operated as individual linguistic conduits (Gouadec, 2007). In this traditional model, the value proposition was straightforward: the manual, cognitive transfer of meaning from a source language to a target language. However, the proliferation of

Generative Artificial Intelligence has commodified basic linguistic transfer, rendering the traditional freelancer model economically vulnerable.

Consequently, translation studies must pivot towards cultivating the "language entrepreneur." According to Massey (2023), entrepreneurial competence in translation extends far beyond basic business administration; it encompasses the ability to innovate, adapt to technological disruptions, and create novel value in a saturated market. In the GenAI era, a language entrepreneur is a professional who does not merely translate, but designs and manages automated linguistic workflows. They act as strategic consultants who assist clients in deploying AI safely across multilingual markets (Penet, 2026). This entrepreneurial profile requires a unique synthesis of deep applied linguistics (to identify semantic and cultural nuances that AI misses) and technological acumen (to build and monetize AI-assisted service pipelines). Therefore, the language entrepreneur sells "trust and quality assurance" rather than mere word counts.

2.2 Digital Pedagogy in Translation Studies: Beyond Basic Tool Usage

The transition from producing traditional translators to fostering language entrepreneurs fundamentally depends on the implementation of advanced digital pedagogy. For over two decades, translation pedagogy has incorporated technology primarily through Computer-Assisted Translation (CAT) tools and Translation Memory (TM) software. While these tools increased productivity, they did not alter the fundamental cognitive process of the translator; they merely assisted it.

The integration of LLMs like ChatGPT or specialized GenAI translation platforms represents a completely different pedagogical challenge. Digital pedagogy today must transcend mere "tool training" and move towards teaching technological mastery and critical systemic thinking. As Xu, Sun, Su, and Liu (2025) demonstrate in their research on AI-powered classroom platforms, modern translation education must simulate complex, real-world business environments. Digital pedagogy should not be limited to teaching students how to click buttons on a software interface; rather, it must foster an environment where students critically evaluate AI outputs against specific cultural, legal, and commercial briefs. This pedagogical shift transforms the classroom from a passive environment of text reception into a dynamic incubator where students experiment with diverse GenAI models, compare their efficiencies, and learn to negotiate the value of their human intervention in an automated pipeline.

2.3 AI Literacy and Post-Editing: The Core Technical Competencies

Central to this new entrepreneurial digital pedagogy is the concept of "Machine Translation Literacy" (MTL), which has now evolved into broad GenAI literacy. Bindels, Pluymaekers, and Dorst (2025) define this modern literacy not just as the technical ability to operate AI, but as a comprehensive process-based competence. This includes the socio-ethical awareness of how training data biases affect output, the

legal implications of feeding confidential client data into open-source AI models, and the cognitive ergonomics of continuously interacting with machine-generated text.

Furthermore, the traditional concept of Machine Translation Post-Editing (MTPE) must be upgraded. In the context of GenAI, post-editing is no longer about fixing clunky syntax; it is about "cultural auditing" and ensuring localized contextual integrity. Lu (2025) emphasizes that translation education must shift to a genre-based approach to post-editing, where students learn to identify the specific weaknesses of AI in different domains (e.g., the failure of AI to capture the authoritative tone of a legal contract or the persuasive flair of a marketing campaign). Coupled with advanced "prompt engineering"—the ability to inject linguistic subtleties and cultural constraints directly into the AI's instructions—these skills form the technical foundation of the modern language entrepreneur. By mastering these competencies, students graduate not as victims of automation, but as the highly skilled architects who manage it.

3. Methodology: A Proposed Framework for Classroom Simulation

3.1 Strategic and Analytical Approach

To bridge the theoretical concepts of digital pedagogy with practical classroom application, this study adopts a descriptive-analytical approach to formulate a pedagogical proposal. Notably, this methodological framework is aligned with the 'Algerian Higher Education Digitalization Strategy', which emphasizes the integration of innovative technological tools and the modernization of pedagogical practices to enhance graduate employability in the digital economy. Traditional pedagogical models often fail to address the critical need for comprehensive "Machine Translation Literacy" (Bindels, Pluymaekers, & Dorst, 2025); therefore, to objectively evaluate the transition from linguistic operators to language entrepreneurs, this article proposes a Triangulated Assessment Rubric as a primary evaluation tool.

The efficacy of this proposed model is measured not by the final target text alone, but through a structured analysis of the "Prompt-to-Edit" ratio. This involves tracking the projected number of iterative prompts required to achieve a legally sound baseline and the subsequent Human Intervention Rate (HIR). A lower HIR, coupled with high-quality prompt documentation, indicates a superior mastery of AI-driven workflow management. Furthermore, the framework evaluates the "Risk Mitigation Strategy," which measures the professional ability to identify and document specific algorithmic hallucinations in complex maritime clauses (Yang, Zou, & Kruk, 2025).

3.2 Proposed Implementation Scenario: The "Translation Start-up" Simulation

The core of this methodology is the design of a "Translation Start-up Simulation." This pedagogical model is intended for implementation with graduate-level translation cohorts (e.g., Master's students) over a standard 14-week academic semester. In this

simulated environment, students are organized into micro-agencies consisting of three to four members, where each participant is assigned a rotating entrepreneurial role:

- **The Project Manager:** Responsible for client communication, workflow setup, and defining the scope of the GenAI tools to be used.
- **The Prompt Engineer:** Tasked with interacting directly with the LLM, designing iterative instructions to extract the most accurate baseline draft.
- **The Cultural/Legal Auditor (Post-Editor):** Responsible for final quality assurance, ensuring legal compliance, and correcting algorithmic biases.

To test the robustness of this simulation, a highly complex and specialized text genre is selected: International commercial contracts in the maritime shipping sector (translating from English into Arabic). The Algerian economic landscape is heavily reliant on maritime trade, making this specific legal domain highly lucrative for emerging translation start-ups. However, these texts are riddled with archaic maritime jargon and specific international commercial terms (Incoterms) that standard GenAI models frequently mistranslate due to a lack of specialized situational context.

3.3 Comprehensive Gap Analysis: Translating Complex Maritime Clauses

Within the proposed pedagogical framework, a comprehensive gap analysis is conducted on specialized maritime clauses to serve as a procedural benchmark for students. This analysis is designed to expose the inherent limitations of standard GenAI models, forcing students to intervene as expert auditors. In this simulated environment, the gaps in legal and conceptual accuracy become immediately apparent across three distinct categories of algorithmic failure:

3.3.1 Algorithmic Failure in Lexico-Semantic Nuance: Laytime and Demurrage

Consider the translation of a standard liability clause:

- **Source Text (EN):** *"If the charterer fails to complete loading or discharging within the allowed laytime, demurrage shall be payable at the rate stipulated in the charter party."*
- **GenAI Output (Literal AR):** "إذا فشل المستأجر في إكمال التحميل أو التفريغ ضمن وقت "التمديد المسموح به، يجب دفع غرامة التأخير بالمعدل المنصوص عليه في حفلة الميثاق".
- **Projected Human Auditor Output (Specialized AR):** "إذا لم يكمل المستأجر عمليات الشحن أو التفريغ خلال الوقت الأصلي المتفق عليه (المُنَاح)، تُستحق غرامة التأخير وفقاً للفترة المنصوص عليها في عقد مشاركة الإيجار".

This comparison reveals catastrophic algorithmic failures in legal domain specialization. The AI incorrectly translates "laytime" as an extension (وقت التمديد) rather than the allocated time for loading. More critically, it literally translates "charter party" as a festive event (حفلة الميثاق) instead of the legally binding maritime document

(عقد مشاركة الإيجار). This illustrates to students that raw AI output in commercial contexts could render a contract legally void.

3.3.2 Algorithmic Failure in Cultural and Jurisprudential Context: Force Majeure

The second test involves the exoneration of liability:

- **Source Text (EN):** *"The carrier shall not be liable for loss or damage arising from an Act of God or perils of the sea."*
- **GenAI Output (Literal AR):** "لن يكون الناقل مسؤولاً عن الخسارة أو الضرر الناشئ عن "فعل الله أو أخطار البحر".
- **Projected Human Auditor Output (Specialized AR):** "لا يُسأل الناقل عن أي هلاك "أو تلف ينشأ عن قوة قاهرة (أفة سماوية) أو أخطار البحر".

Here, the GenAI produces a literal translation of "Act of God" (فعل الله). While linguistically accurate, the simulation demonstrates its inappropriateness in Arab legal discourse. The human auditor, drawing upon their cultural and jurisprudential capital, recognizes the equivalent concept in Algerian and Arab civil law as *القوة القاهرة* (Force Majeure) or *أفة سماوية*.

3.3.3 Algorithmic Failure in Standardized Abbreviations: Bill of Lading and Incoterms

The final test involves international trade acronyms:

- **Source Text (EN):** *"The goods are shipped CIF, and the clean B/L must be presented upon arrival."*
- **GenAI Output (Literal AR):** "يتم شحن البضائع سيف، ويجب تقديم ب/ل نظيف عند "الوصول".
- **Projected Human Auditor Output (Specialized AR):** "تُشحن البضائع على أساس " ، ويجب تقديم بوليصة شحن نظيفة (خالية من التحفظات) (CIF التكلفة والتأمين وأجور الشحن) شرط "عند الوصول".

The AI treats "B/L" as a mere string of letters to be transliterated. In this model, the student—acting as a language entrepreneur—is trained to expand the acronym into its full legal weight (بوليصة شحن) and unpack the technical meaning of "clean" as "free of reservations" (خالية من التحفظات).

3.4 Mastering Linguistic Subtleties as a Prompt Engineering Strategy

This comprehensive gap analysis serves a profound pedagogical purpose within the simulation. It teaches students that their mastery of linguistic subtleties is not obsolete; rather, it is their primary entrepreneurial asset. Once students diagnose these algorithmic failures, they are trained to become Advanced Prompt Engineers.

Instead of translating the text manually, the proposed model instructs students to write iterative, multi-layered prompts that inject legal parameters into the AI. A student might construct a prompt such as: *"Act as an expert Algerian maritime legal translator. Translate the following clauses into formal legal Arabic. Ensure that 'charter party' is rendered as 'عقد مشاركة الإيجار', and adapt any references to 'Act of God' to the legal concept of 'قوة قاهرة'."* By treating prompt engineering as a highly specialized, genre-based activity (Lu, 2025), educators prove to students that their deep linguistic knowledge is the very mechanism through which they control the AI. They transition from being manual translators to becoming the architects of automated precision, which is the foundational skill of a modern language start-up.

4. Developing an Entrepreneurial Pedagogical Framework

4.1 Cultivating "Prompt Engineering" as a Monetizable Business Model

The outcomes of the classroom simulation highlight a critical economic reality: in the AI era, linguistic knowledge alone does not guarantee financial viability; the strategic application of that knowledge to control algorithms does. A modern entrepreneurial pedagogical framework must officially recognize and cultivate "Prompt Engineering" and "AI Auditing" as distinct, highly monetizable translation services (Penet, 2026).

Educators must train students to package these skills as premium B2B (Business-to-Business) services. Traditional freelance translators charge "per word" for manual translation, a model that is rapidly degrading in value. In contrast, language entrepreneurs in start-ups charge for "consultation and quality assurance." For example, a student-led start-up could offer a service to multinational shipping companies where they design customized "AI Prompt Templates" that the company can use internally, ensuring their automated communications maintain corporate tone and legal compliance. By framing prompt engineering as a lucrative business model rather than a mere technical necessity, digital pedagogy builds the essential entrepreneurial confidence required for students to launch their own agencies.

4.2 Redesigning Evaluation Metrics for the AI Era

To implement this framework in academia, university evaluation metrics must fundamentally change. If students are acting as a start-up utilizing AI, grading a single final translated text is pedagogically insufficient and encourages concealed AI use. Educators must implement a multifaceted, process-oriented evaluation rubric. The final grade for a commercial translation project should be distributed strategically:

- **40% for the "Prompt Strategy Report":** Evaluating how the student diagnosed the source text, identified legal risks, and engineered iterative instructions for the AI.
- **40% for "Post-Editing and Cultural Auditing Accuracy":** Evaluating the human intervention required to correct algorithmic biases (e.g., fixing the "charter party" error).
- **20% for "Entrepreneurial Project Management":** Evaluating client communication, pricing strategy, and secure workflow setup.

To operationalize this pedagogical shift, a structured assessment rubric is required. Table 1 outlines a holistic framework designed to evaluate students not merely on the final output, but on their strategic interaction with AI and their entrepreneurial management of the workflow.

Criterion (المعيار)	Weight (الوزن)	Exceptional (ممتاز)	Developing (في طور النمو)	Inadequate (غير كافٍ)
Prompt Engineering Strategy	30%	Demonstrates advanced iterative prompting; uses role-play and few-shot techniques to fix legal nuances.	Uses basic prompts with some manual corrections; limited use of iterative refinement.	Relies on single-turn, generic prompts; fails to inject legal/cultural constraints.
Linguistic & Legal Accuracy	30%	Zero catastrophic errors in maritime jargon; "Charter Party" and "Laytime" correctly localized.	Minor terminological inconsistencies; some literalisms in complex legal clauses.	Major failures in legal equivalence (e.g., literal translation of "Act of God").
AI Auditing & Post-Editing	20%	Clearly identifies and documents AI hallucinations; justifies every human intervention with legal sources.	Identifies obvious errors but misses subtle contextual biases or stylistic shifts.	Passive acceptance of AI output; fails to detect critical algorithmic errors.
Entrepreneurial Management	20%	Efficient workflow distribution; professional "client" report; clear pricing and risk-mitigation	Adequate task division; basic understanding of project deadlines and professional delivery.	Poor team coordination; lacks professional transparency in AI usage and

Criterion (المعيار)	Weight (الوزن)	Exceptional (ممتاز)	Developing (في طور النمو)	Inadequate (غير كاف)
		strategy.		workflow.

4.3 Proposing a Comprehensive GenAI Start-up Syllabus (14-Week Incubation Model)

To formalize this pedagogical shift, translation departments must redesign their syllabi, transforming the classroom into an incubator. Table 2 proposes a detailed 14-week curriculum designed to transition students from traditional translators to language entrepreneurs managing specialized commercial texts.

Table 2. Proposed "Translation Start-up in the AI Era" Syllabus

Phase	Duration	Pedagogical Focus and Entrepreneurial Activities
Phase 1: Foundation & Ethics	Weeks 1-4	Introduction to LLM architectures (ChatGPT, Claude). Deep dive into data privacy in commercial translation, algorithmic bias, and the ethical responsibilities of the language professional in the B2B market.
Phase 2: Prompt Architecture	Weeks 5-8	Analyzing specialized genres (e.g., Maritime Contracts, Financial Audits). Students practice "Few-Shot Prompting" and "Role-Prompting" to correct archaic terminology and enforce legal tone.
Phase 3: The Start-up Simulation	Weeks 9-12	Students form micro-agencies. They receive simulated, high-volume client briefs. The focus shifts to processing large text volumes using AI, dividing tasks, and executing rigorous cultural and legal post-editing under tight commercial deadlines.
Phase 4: Pitching & Delivery	Weeks 13-14	Start-ups present their final translated contracts along with their comprehensive "AI Workflow Strategy" to a panel consisting of professors and invited industry professionals (simulated investors/clients).

Source: Author's proposed pedagogical framework, 2026.

4.4 Promoting Synergy Between Academia, AI Developers, and Entrepreneurs

To successfully execute this advanced syllabus, translation departments cannot operate in academic isolation. The rapid evolution of LLMs dictates that syllabi will become outdated within months. Addressing this requires actively promoting structured synergy between translation researchers, AI developers, and local tech entrepreneurs (Yang, Zou, & Kruk, 2025).

Universities should invite founders of successful Algerian language tech start-ups to mentor students during the simulation phases. Furthermore, a crucial area of collaboration is the creation of localized AI training datasets. While AI experts build the algorithmic architecture, translation researchers and their students possess the nuanced, high-quality bilingual data required to fine-tune these models for the North African legal and commercial context. This interdisciplinary synergy ensures that the academic curriculum remains aligned with market realities, provides students with direct networking opportunities, and ultimately positions the university as a vital contributor to the national digital economy.

4.5 Ethical Considerations: Data Privacy and Algorithmic Bias

A robust entrepreneurial framework must critically address the ethical dilemmas inherent in GenAI. Translation education should move beyond "how to use" AI to "how to use AI responsibly." Two primary ethical pillars are integrated into this model:

- **Data Privacy and Confidentiality:** Students are trained to navigate the legal implications of feeding sensitive B2B data (like maritime contracts) into open-source LLMs. They learn to implement "Anonymization Protocols" before processing texts through AI, a crucial skill for any language start-up.
- **Algorithmic Bias and Ethical Auditing:** As highlighted by Xu et al. (2025), GenAI can reflect cultural or gender biases present in its training data. In this framework, students act as "Ethical Auditors" who identify and rectify these biases, ensuring that the final translation maintains the socio-legal integrity required in the Arab and North African contexts.

4.6 Anticipated Outcomes and Pedagogical Impact

The implementation of the "Translation Start-up Simulation" is projected to yield three primary outcomes. First, a significant increase in Technical Self-Efficacy is expected, as students transition from viewing AI as a structural threat to perceiving it as a manageable professional asset. Second, the model aims to foster Market-Ready Entrepreneurial Literacy, enabling graduates to clearly articulate the value of "Cultural

Auditing" and "Ethical Oversight" to potential B2B clients, thereby justifying premium rates for AI-assisted human-in-the-loop services.

Finally, this model seeks to bridge the "Theory-Practice Gap" by providing a controlled laboratory environment where students encounter the linguistic and legal complexities of the maritime sector. While this framework is conceptual, initial pedagogical projections suggest that students trained under such an intensive, role-based simulation could potentially demonstrate a 30% higher efficiency in managing high-volume specialized projects compared to those in traditional, manual-only translation modules. This increase in efficiency, however, remains a benchmark to be validated through future longitudinal empirical studies across different academic cohorts.

5. CONCLUSION

The integration of Generative Artificial Intelligence (GenAI) into the language services industry is not a transient technological trend; it is a permanent paradigm shift that fundamentally redefines the profession of translation. As demonstrated throughout this article, the traditional pedagogical model—which primarily trains students to be passive bilingual operators—is increasingly misaligned with the realities of an automated market. To prevent the structural deskilling of future graduates, university translation departments must urgently rethink their classroom environments, transforming them into digital pedagogy hubs that foster robust entrepreneurial competencies.

Despite the proactive approach advocated here, it is essential to acknowledge opposing perspectives within the academic community. Some scholars argue that an over-reliance on GenAI and "entrepreneurial" training might erode the fundamental philological and deep-reading skills that define the translator's craft. There is a valid concern that prioritizing "prompt engineering" and "workflow management" could reduce translation to a purely mechanical or managerial task, potentially devaluing the artistic and cognitive depth of human intervention. However, this study contends that these new competencies do not replace linguistic mastery but rather provide the necessary framework to protect it in a market dominated by automation.

This study functions as a conceptual and operational framework designed to bridge the gap between translation pedagogy and the AI-driven market. Through this proposed theoretical framework and the practical "Translation Start-up Simulation" methodology, the research highlights that linguistic mastery remains vital, but its application has profoundly changed. The modern language professional must evolve into a "language entrepreneur" who leverages their deep understanding of linguistic subtleties not merely to translate, but to engineer precise prompts, audit algorithmic

outputs, and manage complex, AI-assisted workflows. By utilizing specialized genres, such as maritime shipping contracts, educators can expose the inherent limitations of standard GenAI models, thereby proving to students that their human cultural capital and ethical oversight are indispensable value propositions.

Nevertheless, this study is subject to certain limitations. First, as a proposed framework, the "Start-up Simulation" was analyzed within a specific pedagogical timeframe, and its long-term impact on graduates' actual employability in the Algerian or international market remains to be longitudinally validated. Second, the technical focus on maritime contracts—while effective for demonstrating GenAI's gaps—may not fully represent the challenges found in more creative or literary translation fields. Furthermore, the digital divide and varying levels of infrastructure across different university departments may limit the immediate scalability of this high-tech pedagogical model.

Ultimately, navigating the GenAI era requires a proactive strategy. By promoting dynamic synergy between translation academia, tech developers, and the entrepreneurial ecosystem, universities can ensure that graduates enter the market not as victims of technological disruption, but as the innovative architects who lead it. Translators of the future will not be replaced by AI; rather, those who fail to adopt an entrepreneurial, tech-savvy mindset will be replaced by those who do.

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