

From Industry Alignment to Adaptive Translator Education: Rethinking Academia–Industry Collaboration in Translation Programs

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Abstract

This conceptual article examines academia–industry collaboration as a dynamic curriculum principle in translator education rather than as a supplementary activity. It adopts an integrative conceptual-analysis approach, drawing purposively on foundational and recent scholarship in curriculum design, translation competence, situated learning, adaptive expertise, employability, and translation technology. The literature is synthesized to clarify how stakeholder needs, competence development, professional participation, and graduate adaptability can be connected within translator education. The article proposes an original curriculum-level model that integrates disciplinary depth, professional breadth, pedagogy, assessment, reflection, and ongoing curriculum review. It also operationalizes the model through collaboration mechanisms, targeted competences, assessment methods, implementation conditions, and indicators of student development. The article argues that sustainable collaboration should prepare graduates who combine deep translation competence with technological, interpersonal, ethical, and adaptive capacities without reducing university education to short-term market training. It further identifies institutional rigidity, uneven faculty preparation, unclear stakeholder roles, and limited empirical validation as key challenges.

Keywords: Academia–Industry Collaboration, Curriculum Design, T-shaped Graduate, Translation Competence, Adaptive Translator Education

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1. Introduction

The translation profession has undergone significant changes in recent decades as a result of globalization, rapid technological development, the rise of artificial intelligence, and the expansion of language services into increasingly specialized domains (Cui et al., 2025; Ho, 2015; Hu, 2026). Translation is no longer limited to the transfer of written texts from one language into another. It now includes a wide range of professional activities, such as localization, audiovisual translation, terminology management, machine translation post-editing, project management, interpreting, multilingual content production, and human–AI collaboration. These changes have reshaped the profile of the translator and have created new expectations for translation graduates, who are now required to combine linguistic and cultural competence with technological, interpersonal, and professional skills (Al-Batineh & Bilali, 2017; European Commission, 2022; Risku, 2018). This transformation has important implications for translator education. While translation programs have traditionally emphasized linguistic competence, theoretical knowledge, and textual analysis, the contemporary language industry requires graduates who are also able to work with digital tools, manage real or simulated projects, communicate with clients, collaborate in teams, and adapt to changing professional conditions. The updated European Master's in Translation (EMT) competence framework, for example, reflects this broader view by emphasizing not only language and translation competence, but also technology, service provision, and personal and interpersonal competence as essential components of translator education (European Commission, 2022). In this sense, translator education can no longer be understood as either purely academic education or narrow vocational training. Rather, it should be viewed as a dynamic pedagogical space in which theoretical knowledge, practical experience, technological competence, and professional awareness are meaningfully integrated.

Several scholars have emphasized the importance of aligning translator education with professional realities through needs analysis, competence-based curriculum design, and socially situated training models. Li (2001, 2002, 2007) argues that translation curricula should be informed by the needs of students, teachers, professional translators, employers, and other relevant stakeholders. Kelly (2005) similarly proposes a systematic approach to curriculum design in which social needs, learner profiles, learning outcomes, teaching methods, assessment, and quality enhancement are logically connected. Kiraly (2000, 2003) further shifts the focus from teacher-centered instruction to collaborative and situated learning, where students gradually develop professional autonomy through authentic or simulated translation practices. Gabr's (2007) quality-centered approach also highlights the need to balance the expectations of students, academic institutions, and the translation market when designing translator education programs.

Despite the growing recognition that translator education should respond to professional realities, the relationship between academic programs and the language industry remains insufficiently developed at the level of curriculum design. Existing scholarship has

established the importance of stakeholder needs analysis, competence-based curricula, socially situated learning, experiential projects, technological competence, and professional employability (European Commission, 2022; Gabr, 2007; Kelly, 2005; Kiraly, 2000, 2003; Li, 2001, 2002, 2007). Nevertheless, academia–industry collaboration is still frequently represented through discrete activities, such as internships, guest lectures, advisory boards, mentoring schemes, and technology workshops, rather than as a coherent principle connecting learning outcomes, course content, teaching methods, assessment, instructor development, and curriculum review. The problem addressed in this article is therefore not whether translator education should respond to professional change, but how collaboration with professional stakeholders can be incorporated systematically into curriculum design without reducing university education to short-term market training. This problem is especially important because translator education must combine professional relevance with theoretical depth, ethical awareness, critical judgment, and the capacity for long-term adaptation (Baer & Koby, 2003; Kelly, 2005; Laviosa & González-Davies, 2020).

To address this curriculum-level problem, the article brings together four interrelated concepts that clarify how professional input enters the curriculum, how collaboration functions within curriculum design, what educational orientation it supports, and what kind of graduate profile it seeks to develop.

First, industry alignment refers to the systematic incorporation of professional needs, stakeholder perspectives, and developments in translation practice into curriculum design. This understanding draws on Li's (2001, 2002, 2007) needs-assessment approach, Kelly's (2005) systematic model of curriculum design, and Gabr's (2007) emphasis on balancing the needs of students, institutions, and the translation market. Alignment does not mean subordinating education to immediate employer demands. Rather, it involves critically interpreting professional input and transforming it into coherent learning outcomes, teaching activities, technological preparation, and assessment practices.

For such alignment to operate systematically, academia–industry collaboration must function as a dynamic curriculum principle. This expression is introduced here to describe collaboration as a continuing influence on curriculum design, implementation, assessment, and revision. It draws on Stenhouse's (1975) view of curriculum as open to testing and development, Biggs's (1996) principle of constructive alignment, and the translation-specific curriculum models of Kelly (2005) and Li (2007). From this perspective, collaboration should inform the coherent and periodic review of learning outcomes, course content, teaching activities, assessment practices, instructor preparation, and program outcomes rather than remain limited to isolated internships or professional events.

When industry alignment is incorporated through this continuing and critically mediated curricular process, it supports what this article terms adaptive translator education. This educational orientation seeks to develop both routine efficiency and adaptive expertise. Hatano and Inagaki (1986) distinguish the efficient performance of familiar procedures from the capacity to modify knowledge and devise responses to unfamiliar problems.

Angelone (2022) applies adaptive expertise directly to translator training, emphasizing the need to prepare translators to manage uncertainty and address non-routine translation problems. Schön's (1983) concept of reflection-in-action further explains how professionals reconsider and adjust their decisions when confronting complex situations. Adaptive translator education therefore prepares students not only to perform established tasks competently but also to respond reflectively and flexibly to changing technologies, workflows, text types, and professional conditions.

The intended graduate profile of this curricular orientation is represented by the T-shaped translation graduate, who combines disciplinary depth with broader boundary-spanning capacities. Bierema (2019) conceptualizes the T-shaped professional as possessing specialist expertise together with the ability to collaborate and operate across professional boundaries, while Eskelinen (2019) applies this model specifically to future translators. In the present framework, the vertical dimension represents deep translation competence, whereas the horizontal dimension encompasses technological literacy, teamwork, client communication, project management, interdisciplinary consultation, ethical reasoning, and lifelong learning. Together, these dimensions represent a graduate who is firmly grounded in translation as a discipline while remaining capable of participating, adapting, and continuing to develop across changing professional contexts.

These concepts have different theoretical statuses. Adaptive translator education is the article's educational synthesis of adaptive expertise and reflective practice, while the T-shaped translation graduate adapts established T-shaped professionalism to the context of translator education. Industry alignment synthesizes stakeholder-oriented needs assessment and curriculum design, whereas dynamic curriculum principle is the article's own analytical formulation. Together, these four concepts frame academia–industry collaboration as a critically mediated, integrated, and continuously revisable curricular process.

This conceptualization builds on, but does not replace, established translation competence and employability models. Translation competence frameworks primarily identify the linguistic, cultural, strategic, instrumental, technological, and professional abilities involved in translation performance (European Commission, 2022; Göpferich, 2009; PACTE, 2011). Employability-oriented models emphasize the transferable capacities that enable graduates to participate effectively in professional environments, collaborate across disciplinary boundaries, and continue developing throughout their careers (Bierema, 2019; Vasilev, 2024). The framework advanced in this article focuses more specifically on the curricular relationship through which these dimensions can be integrated. It proposes academia–industry collaboration as a mechanism connecting disciplinary competence, professional breadth, experiential learning, technological development, assessment, and long-term adaptability. The T-shaped model therefore offers a curriculum-level representation of how deep translation competence can be extended through wider professional and boundary-spanning capacities.

The scope of the article is limited primarily to university-level translator education at undergraduate and postgraduate levels. Its argument may also be relevant to combined translation-and-interpreting programs where the curricular principles discussed can be applied, although the principal emphasis remains on translator education and written-translation-related professional practices. The term industry is used broadly to include private language-service providers, freelance and in-house translation settings, localization and technology companies, government agencies, international organizations, courts, hospitals, schools, non-profit organizations, community-service organizations, and other sectors in which translation and multilingual mediation occur. This broader understanding reflects the socially situated nature of translation and recognizes that professional practice extends beyond commercial language services (Laviosa & González-Davies, 2020; Risku, 2018).

Against this background, the article is guided by the following question:

How can academia–industry collaboration be conceptualized and implemented as a dynamic curriculum principle that supports disciplinary depth, professional breadth, and long-term adaptability in translator education?

To address this question, the article pursues four interrelated objectives. First, it examines the respective and complementary roles of academic institutions and professional stakeholders in translator education. Second, it identifies curricular mechanisms through which collaboration can be implemented, including internships, practicums, real-client and simulated-client projects, advisory boards, mentoring, technology workshops, and portfolio-based assessment. Third, it conceptualizes the T-shaped translation graduate as an integration of deep translation competence and broader boundary-spanning capacities. Fourth, it identifies the institutional, pedagogical, and research-related conditions necessary for sustainable academia–industry collaboration.

The article argues that academia–industry collaboration should be understood not as an external supplement but as a dynamic curriculum principle connecting competence development, experiential learning, technological literacy, assessment, instructor preparation, and professional adaptability. Its contribution lies in integrating needs-based curriculum design, constructive alignment, socially situated learning, adaptive expertise, and T-shaped professional development within a unified curriculum-level account of translator education (Angelone, 2022; Bierema, 2019; Biggs, 1996; Eskelinen, 2019; Kelly, 2005; Kiraly, 2000, 2003; Li, 2007). The purpose is not to make translator education narrowly market-oriented, but to make it professionally informed, pedagogically coherent, critically grounded, and responsive to long-term change.

The remainder of the article is organized as follows. Section 2 explains the article’s conceptual approach and analytical procedure. Section 3 discusses curriculum design and competence-based approaches in translator education. Section 4 examines the foundational and mediating role of academia. Section 5 considers concrete mechanisms for implementing academia–industry collaboration. Section 6 develops the conceptual model of the T-shaped translation graduate. Section 7 addresses the challenges and conditions

associated with sustainable collaboration. Section 8 concludes by outlining the implications, limitations, and future research directions associated with the proposed framework.

2. Conceptual Approach and Analytical Procedure

This article adopts a conceptual and integrative approach to examine how academia–industry collaboration can operate as a curriculum principle in translator education. It does not report an empirical study or claim to provide a systematic or exhaustive review. Rather, it synthesizes selected foundational and recent scholarship to clarify the central concepts, identify a curriculum-level gap, and develop an integrated framework for adaptive translator education.

Because the article is intended as a conceptual synthesis rather than a systematic review, sources were selected purposively for their explanatory relevance, foundational influence, and capacity to illuminate the relationships among curriculum design, professional collaboration, translation competence, and graduate adaptability. The discussion draws primarily on peer-reviewed journal articles, scholarly books, book chapters, and official competence frameworks concerned with translator education, curriculum design, translation competence, experiential and socially situated learning, professional adaptability, employability, translation technology, and academia–industry relations. Foundational works were included when they established influential concepts or models, while more recent studies were selected when they addressed technological change, artificial intelligence, evolving professional roles, or current language–industry expectations. Sources focused only on language learning, general higher education, or professional training without a clear connection to translator education were excluded unless they provided a necessary conceptual foundation, such as adaptive expertise, reflective practice, constructive alignment, or T-shaped professionalism.

The analytical procedure involved four stages. First, needs-based and competence-oriented approaches were examined to identify how curricular goals, stakeholder expectations, learning outcomes, teaching activities, and assessment are connected (European Commission, 2022; Gabr, 2007; Kelly, 2005; Li, 2001, 2002, 2007). Second, socially situated and experiential approaches were used to identify the pedagogical mechanisms through which professional practice can enter the curriculum, including authentic projects, collaboration, reflection, mentoring, and workplace exposure (González Davies, 2004; Kiraly, 2000, 2003). Third, adaptive expertise and reflective practice were incorporated to explain why translator education should prepare students for unfamiliar problems and changing technologies rather than only for established procedures (Angelone, 2022; Hatano & Inagaki, 1986; Schön, 1983). Fourth, the T-shaped model was used to organize the relationship between disciplinary depth and broader professional capacities (Bierema, 2019; Eskelinen, 2019).

Figure 1 was derived from this four-stage synthesis. The vertical dimension was developed from established models of translation competence and represents deep

disciplinary competence in textual analysis, translation problem-solving, revision, cultural judgment, and quality evaluation. The horizontal dimension was derived from the T-shaped professionalism and employability literature and represents technological, interpersonal, managerial, ethical, and boundary-spanning capacities. Curriculum design, pedagogy, assessment, and reflection were positioned as the model's foundations because the literature identifies them as the educational mechanisms through which competence is developed. Academia and the language industry were placed as contextual influences because the article argues that neither should determine the curriculum independently; rather, their interaction should shape the ongoing design, implementation, and revision of translator education.

The resulting model is therefore an analytical synthesis rather than an empirically tested framework. Its purpose is to organize established insights, clarify their curricular relationship, and generate directions for future empirical research and curriculum development.

2.1. Integrative Theoretical Structure

The conceptual framework developed in this article combines several theoretical strands that address different dimensions of translator education. Competence-based models identify the knowledge, abilities, and professional dispositions that translation graduates are expected to develop, including translation, technological, interpersonal, and service-provision competences (European Commission, 2022; Göpferich, 2009; PACTE, 2011). The EMT competence framework serves here as a professionally informed competence reference rather than as a complete theory of learning; its competence categories are interpreted through curriculum, situated-learning, and adaptive-expertise perspectives. Curriculum-design approaches explain how these competences can be translated into coherent learning outcomes, teaching activities, assessment practices, and procedures for continuous program review (Biggs, 1996; Kelly, 2005; Li, 2007).

Competence and expertise should not, however, be treated as interchangeable. Competence frameworks identify the knowledge, abilities, and dispositions associated with translation performance, whereas expertise concerns how these resources become integrated, refined, and deployed effectively across tasks and contexts (Shreve et al., 2018). Shreve et al. question the assumption that translation competence and expertise represent the same construct and emphasize the need to connect competence models more closely to psychologically grounded accounts of performance. In the present framework, competence therefore represents the intended developmental content of translator education, while expertise refers to the increasingly effective, reflective, and adaptable application of that competence in practice.

Translation competence should also be understood as developmental and internally interconnected rather than as a static inventory of separate abilities. From a dynamic-systems perspective, competence components develop through interaction and may progress unevenly across learners and contexts (Göpferich, 2013). This reinforces the need

for curricula that provide repeated opportunities for integration, feedback, reflection, and transfer rather than treating competence areas as independently completed outcomes.

Socially situated and experiential approaches provide the pedagogical link between curriculum intentions and professional learning. From this perspective, translation competence develops through participation in authentic or simulated practices, collaboration, reflection, feedback, and increasing responsibility rather than through decontextualized instruction alone (González Davies, 2004; Kiraly, 2000, 2003). Adaptive expertise adds a developmental dimension by distinguishing competent performance in familiar situations from the capacity to reconsider strategies and respond effectively to unfamiliar problems. In translator education, this distinction is especially relevant to changing technologies, workflows, text types, and professional expectations (Angelone, 2022; Hatano & Inagaki, 1986).

The T-shaped model functions as the framework's integrative graduate profile by bringing disciplinary competence into relation with the broader capacities required for participation across professional contexts (Bierema, 2019; Eskelinen, 2019). These theoretical strands therefore serve complementary purposes: competence frameworks specify the intended capabilities, curriculum theory organizes their development, situated learning provides the pedagogical process, adaptive expertise explains responsiveness to change, and the T-shaped model represents their integration in the graduate profile.

3. Curriculum Design in Translator Education

Curriculum design determines how educational purposes, learning outcomes, teaching activities, assessment practices, and expected graduate capabilities are organized within a program. Although curriculum has traditionally been understood as a syllabus or structured body of content, contemporary approaches view it more broadly as a set of planned learning experiences shaped by institutional, social, and professional contexts (Ornstein & Hunkins, 2005; Wiles & Bondi, 2010). This broader understanding is particularly relevant to translator education, where curriculum should not be reduced to a sequence of language and translation courses. Rather, it should provide a coherent developmental structure through which students acquire the knowledge, skills, and professional dispositions required for translation practice.

Translator education occupies an important position between academic learning and professional preparation. Students need linguistic and cultural competence, theoretical knowledge, textual analysis, and critical awareness of translation as a social and ethical activity. They also require experience with translation technologies, terminology management, revision, quality assurance, project workflows, client communication, and collaborative problem-solving. Curriculum design should therefore be organized around clearly articulated competence areas and learning outcomes rather than content coverage alone. This position is consistent with multidimensional models of translation competence, which emphasize that professional performance results from the interaction of linguistic, textual, strategic, technological, and professional abilities rather than from bilingual

proficiency alone (European Commission, 2022; Göpferich, 2009; Kelly, 2010; PACTE, 2011).

Competence-based curriculum design requires a systematic relationship among educational needs, intended outcomes, learning activities, and assessment. This orientation also reflects Vienne's (2000) argument that translator education should determine both which competences future translators require and how those competences can be developed pedagogically. Kelly (2005) proposes that curriculum development should begin with an analysis of social needs and learner profiles and proceed through the formulation of outcomes, teaching methods, assessment practices, and quality-enhancement procedures. Li (2001, 2002, 2007) similarly emphasizes stakeholder-based needs assessment, arguing that students, instructors, professional translators, employers, and translation-service administrators should contribute to the identification of curricular priorities. Gabr's (2007) quality-centered approach further highlights the importance of balancing the expectations and responsibilities of students, academic institutions, and the translation market. Together, these approaches present curriculum development as a responsive and continuously evaluated process rather than a fixed collection of inherited courses.

Responsiveness, however, should not be equated with the uncritical reproduction of immediate market demands. The purpose of curriculum design is to transform relevant professional developments into educationally meaningful outcomes while preserving theoretical depth, ethical reflection, and critical judgment. A well-designed curriculum should therefore prepare students to apply their competence across different contexts rather than training them only for a particular tool, workflow, or occupational role. In this respect, professional relevance and academic purpose are complementary: professional input can help programs identify emerging practices, while academic institutions evaluate and incorporate that input according to coherent pedagogical objectives.

Curriculum design in translator education should consequently be understood as an ongoing and collaborative process. Academic institutions provide the theoretical, pedagogical, and ethical foundations of the program, while professional stakeholders contribute knowledge of current workflows, technologies, quality expectations, and workplace practices. When these perspectives are integrated through constructive alignment, intended competences, learning activities, and assessment mutually reinforce one another rather than functioning as disconnected curriculum components (Biggs, 1996). In translator education, this alignment allows established competence frameworks to be translated into developmental learning experiences while preserving space for professional input, reflective judgment, and curriculum renewal (European Commission, 2022; Kelly, 2005). Curriculum reform should therefore involve the continuing review of educational purposes, competence development, professional developments, and students' capacity to transfer their learning across changing contexts.

4. The Role of Academia in Translator Education

Academic institutions provide the intellectual, pedagogical, and ethical foundations of translator education. While professional stakeholders can contribute knowledge of current workflows, technologies, and workplace expectations, academia remains responsible for defining coherent learning outcomes, organizing curricular progression, designing assessment, and ensuring that students acquire more than immediate job-related skills (Kelly, 2005; Kiraly, 2000; Laviosa & González-Davies, 2020). Translator education should therefore develop not only practical competence but also critical thinking, cultural awareness, research-informed judgment, and an understanding of translation as a socially and ethically situated activity. This responsibility is particularly important in light of continuing debates about the relationship between translation theory, professional practice, and translator training (Chesterman & Wagner, 2002; Gile, 2021).

One of academia's central responsibilities is to create learning environments in which translation competence develops progressively through theory, practice, reflection, and feedback. Bilingual proficiency alone does not produce professional translation competence; students must learn to analyze communicative purposes, identify and solve translation problems, justify decisions, revise texts, evaluate quality, and respond to contextual and ethical constraints (PACTE, 2011; Schäffner & Adab, 2000). Academic programs therefore need to organize learning experiences that connect conceptual understanding with authentic or simulated professional tasks rather than treating theory and practice as separate components.

Experience alone, however, does not necessarily produce expertise. Shreve (2006) emphasizes deliberate practice: focused activity designed to improve specific aspects of performance through challenging tasks, feedback, evaluation, and repeated adjustment. In translator education, this suggests that authentic tasks should be sequenced developmentally and accompanied by feedback and reflection rather than treated as professional exposure alone.

Academia also has a mediating role between education and professional training. Training may focus on the performance of specific tasks, such as using translation technologies, managing terminology, revising texts, or completing client-based projects. Education has a broader purpose: it enables students to understand why translation decisions matter and how translation is shaped by cultural, social, technological, and ethical conditions (Baer & Koby, 2003; Kelly, 2005; Kiraly, 2000, 2003). The challenge is therefore not to choose between education and training, but to design curricula in which training is intellectually grounded and academic education remains professionally meaningful.

This mediating role requires academia to evaluate, select, and pedagogically transform professional developments rather than transfer them directly into the curriculum. Not every workplace practice, technological trend, or short-term market demand should automatically become a curricular priority. Academic programs must determine which

developments contribute to enduring competence and which respond only to temporary conditions. In doing so, they can transform professional input into pedagogically structured experiences that support reflective judgment, ethical responsibility, and the transfer of learning across contexts (Kelly, 2005; Laviosa & González-Davies, 2020).

The role of the instructor is central to this process. Translation instructors are not merely transmitters of linguistic knowledge; they interpret curriculum goals and translate them into tasks, feedback, assessment, and opportunities for reflection (Gile, 2009; Kelly, 2008; Kiraly, 2000). They therefore require both pedagogical competence and an informed understanding of professional translation practice. Instructors should be able to connect theory and practice, design meaningful translation assignments, integrate relevant technologies, provide constructive feedback, and guide students in evaluating their own decision-making. When instructors lack familiarity with current professional practices or when professional experience is not pedagogically framed, the curriculum may remain disconnected from either academic or workplace realities.

Academia's role is consequently both foundational and mediating. It provides the intellectual, pedagogical, and ethical structure through which professional developments are evaluated and transformed into developmentally appropriate learning experiences. This responsibility requires academic programs to distinguish between enduring competence needs and temporary market demands, to connect professional input to coherent learning outcomes and assessment, and to preserve critical judgment, ethical awareness, and transfer of learning. In this way, students are prepared not only to enter professional practice but also to evaluate, adapt to, and participate responsibly in its continuing development.

5. Academia–Industry Collaboration: From Rhetoric to Implementation

If academia provides the intellectual and pedagogical structure of translator education, collaboration with professional stakeholders helps ensure that this structure remains connected to the realities of translation practice. Such collaboration should not be treated as occasional external input, but as a structured component of curriculum design that exposes students to authentic workflows, technologies, quality expectations, and professional forms of problem-solving (Al-Batineh & Al Tenaijy, 2024; Kelly, 2005; Kiraly, 2000, 2003; Risku, 2018).

Internships, practicums, and work placements are among the most direct forms of collaboration. They allow students to observe how translation assignments are negotiated, managed, revised, delivered, and evaluated, while also introducing them to deadlines, client expectations, confidentiality, teamwork, and quality-assurance procedures. When supported by clear learning outcomes and supervision, these experiences can help students develop professional confidence and greater autonomy as they move toward participation in the translation community (Kiraly, 2003).

Real-client and simulated-client projects can provide similar benefits within the curriculum. Rather than translating isolated texts solely for grading, students work through the stages of a professional assignment, including brief analysis, terminology research, translation, revision, formatting, delivery, and reflection. Such projects position translation as a situated activity and require students to justify decisions, negotiate problems, and evaluate their work in relation to purpose and audience (González Davies, 2004; Kiraly, 2000; Risku, 2018). They may also include interaction with subject-matter experts, which is particularly important in specialized translation because students need to learn how to obtain, evaluate, and apply domain-specific knowledge (Eskelinen, 2019). From a socially situated perspective, the value of these activities lies not only in their authenticity but also in the forms of participation they create. This perspective also treats competence as emerging through participation in meaningful activity rather than as a predetermined body of knowledge transferred intact from instructor to student (Kiraly, 2015). Students move from supported performance toward greater responsibility as they negotiate briefs, distribute roles, consult others, revise work, and reflect on outcomes. Professional learning therefore emerges through participation, interaction, and guided reflection rather than through exposure to workplace tasks alone (González Davies, 2004; Kiraly, 2000, 2003).

Collaboration may also take the form of advisory boards, curriculum-review panels, guest lectures, mentoring schemes, and joint workshops. Advisory boards involving translators, interpreters, project managers, localization specialists, language-service providers, and representatives of public institutions can help programs identify emerging professional needs and review the continuing relevance of course outcomes. Guest speakers and mentors can provide insight into specialization, professional ethics, freelance practice, career pathways, and workplace expectations. Their contribution is most valuable when it is connected to program objectives rather than treated as isolated professional exposure (Gabr, 2007; Kelly, 2005; Li, 2007).

Technology-oriented collaboration is especially important in a field increasingly shaped by CAT tools, terminology systems, translation memories, machine translation, localization platforms, project-management systems, and AI-supported workflows. Industry partners can contribute current knowledge, access to tools, and examples of professional practice, while academic programs remain responsible for integrating this input critically and pedagogically. The aim should not be dependence on a particular platform, but the development of technological literacy and the ability to evaluate tools in relation to translation quality, workflow requirements, ethics, and professional responsibility (European Commission, 2022; Nitzke et al., 2019; Oner Bulut, 2019; Ren & Wang, 2025).

The term *industry* should also be understood broadly. Translation and interpreting take place not only in commercial language-service companies, but also in government agencies, courts, hospitals, schools, international organizations, non-profit institutions, community settings, media organizations, and technology companies. Partnerships across these sectors can expose students to different communicative, institutional, and ethical

conditions. For example, public-service and community contexts may foreground accessibility, confidentiality, and cultural mediation, while localization and technology settings may emphasize workflow management, usability, terminology control, and multilingual content production.

Professional exposure becomes educationally meaningful only when it is pedagogically structured. Internships, workshops, projects, and mentoring should therefore be linked to explicit learning outcomes, supervision, reflection, feedback, and assessment. Reflection journals, portfolios, project reports, peer review, self-assessment, and supervisor feedback can help students connect experience with competence development (Gabr, 2007; Johnson, 2003; Kelly, 2005; Li, 2007). Portfolio-based assessment is especially useful because it allows students to document both translation products and the reasoning, revision, and professional processes that produced them.

Taken together, these mechanisms show how professional participation can be incorporated into translator education through structured tasks, supervision, reflection, feedback, and assessment. Their educational value depends not on workplace exposure alone, but on how effectively they contribute to competence development and curricular progression. The following section considers how these experiences support the disciplinary depth, professional breadth, and adaptability represented in the T-shaped graduate model.

6. Preparing the T-Shaped Translation Graduate

A future-oriented translation curriculum should prepare graduates not only for current professional roles but also for continuing changes in technologies, workflows, and forms of language work. Translation graduates may work as translators, revisers, post-editors, localization specialists, project coordinators, terminology managers, subtitlers, interpreters, or multilingual content specialists. Translator education should therefore support professional adaptability rather than prepare students for a single, fixed occupational profile (Al-Batineh & Bilali, 2017; European Commission, 2022; Risku, 2018).

The T-shaped model provides a useful way to conceptualize this goal. Bierema (2019) describes the T-shaped professional as combining substantial depth in a specific discipline with broader capacities that support collaboration, communication, problem-solving, and work across professional boundaries. Eskelinen (2019) applies this model to the future translator, emphasizing that translation-specific expertise should be complemented by the ability to interact with subject-matter experts and participate in wider professional communities.

In translator education, the vertical dimension of the T represents deep translation competence. This includes the ability to analyze source texts, interpret communicative purpose, solve textual and cultural problems, make and justify translation decisions, revise translations, and produce target texts that are accurate, functional, and contextually appropriate. This dimension is consistent with multidimensional models of translation competence, although competence categories should not be assumed to constitute expert

performance automatically. Their professional value depends on how effectively they are integrated and applied across tasks and contexts (European Commission, 2022; Göpferich, 2009; PACTE, 2011; Shreve et al., 2018). Disciplinary depth remains essential because technologies can support translation processes, but they do not remove the translator's responsibility for meaning, context, quality, ethics, and communicative effectiveness.

The horizontal dimension represents the broader capacities that enable graduates to apply translation competence across different professional environments. These include technological literacy, project management, terminology management, teamwork, client communication, research competence, intercultural awareness, ethical reasoning, entrepreneurship, and lifelong learning. Bierema (2019) associates this dimension with collaboration, interpersonal communication, technical awareness, cultural adaptability, and problem-solving, while Vasilev (2024) emphasizes communication, critical thinking, teamwork, and adaptability within T-shaped curriculum design. These capacities are also consistent with the EMT competence framework, which identifies technology, service provision, and personal and interpersonal competence alongside language, culture, and translation competence (European Commission, 2022).

Technological literacy is an important component of this professional breadth, but it should not be reduced to mastery of one software package. Translation memories, terminology systems, machine translation, localization platforms, and AI-supported workflows continue to evolve. Students therefore need to learn how to evaluate, compare, and use technologies critically in relation to translation quality, workflow demands, data responsibility, and ethical judgment (European Commission, 2022; Nitzke et al., 2019; Oner Bulut, 2019). Recent scholarship further indicates that AI integration in translator education should preserve human agency, critical evaluation, creativity, ethical judgment, and cultural sensitivity rather than treating technological efficiency as an educational end in itself (Cui et al., 2025; Ren & Wang, 2025). Technological breadth alone does not guarantee adaptability. Students may become proficient in established tools while remaining dependent on familiar procedures. Adaptive expertise instead requires them to recognize when routine strategies are insufficient, diagnose emerging problems, and modify their approach in response to unfamiliar task conditions (Angelone, 2022; Hatano & Inagaki, 1986). Within the T-shaped model, adaptability therefore arises from the interaction between disciplinary depth and professional breadth: deep translation knowledge supports principled judgment, while broader technological and interpersonal capacities enable that judgment to be applied flexibly across contexts. This adaptive capacity also depends on metacognitive regulation: the ability to plan an approach, monitor the effectiveness of decisions, recognize emerging difficulties, and evaluate or revise strategies. Making such processes visible through reflective reports, process commentary, portfolios, and guided self-assessment can help students move from task completion toward greater awareness and control of their translation decision-making (Zheng, 2025).

Within the proposed model, adaptive expertise and metacognitive regulation function as developmental capacities, whereas adaptability is treated as a broader graduate outcome.

Adaptive expertise concerns the ability to modify knowledge and strategies when routine procedures are insufficient, while metacognitive regulation involves planning, monitoring, and evaluating one's decision-making (Angelone, 2022; Hatano & Inagaki, 1986; Zheng, 2025). Adaptability, by contrast, refers to the broader capacity to transfer and apply these resources across unfamiliar technologies, workflows, text types, and professional contexts. Professional identity and long-term professional development are likewise treated as outcomes of sustained participation, reflection, and continuing learning rather than as isolated competence components.

The T-shaped model also clarifies the relationship between disciplinary competence and employability. Employability should not be understood as preparation for one immediate job or a narrow set of market tasks. Rather, it involves the capacity to transfer knowledge across roles, communicate with different stakeholders, adapt to new tools and conditions, and continue developing professionally. The horizontal dimension extends the professional reach of translation competence, while the vertical dimension ensures that broader skills remain anchored in disciplinary expertise. Without depth, professional breadth risks becoming a collection of generic skills; without breadth, disciplinary competence may be difficult to apply across changing professional settings.

Preparing T-shaped graduates therefore requires curricular integration rather than the addition of disconnected skills courses. Translation theory, textual analysis, specialized translation, revision, research, technology, project management, ethics, and collaborative practice should be connected through coherent learning outcomes and developmental progression. Experiential activities such as client-based projects, interdisciplinary consultation, mentoring, and reflective portfolios can help students understand how these dimensions interact in professional practice (Bierema, 2019; González Davies, 2004; Vasilev, 2024). The aim is not to increase the number of curriculum components, but to organize them so that disciplinary depth and professional breadth develop in relation to one another.

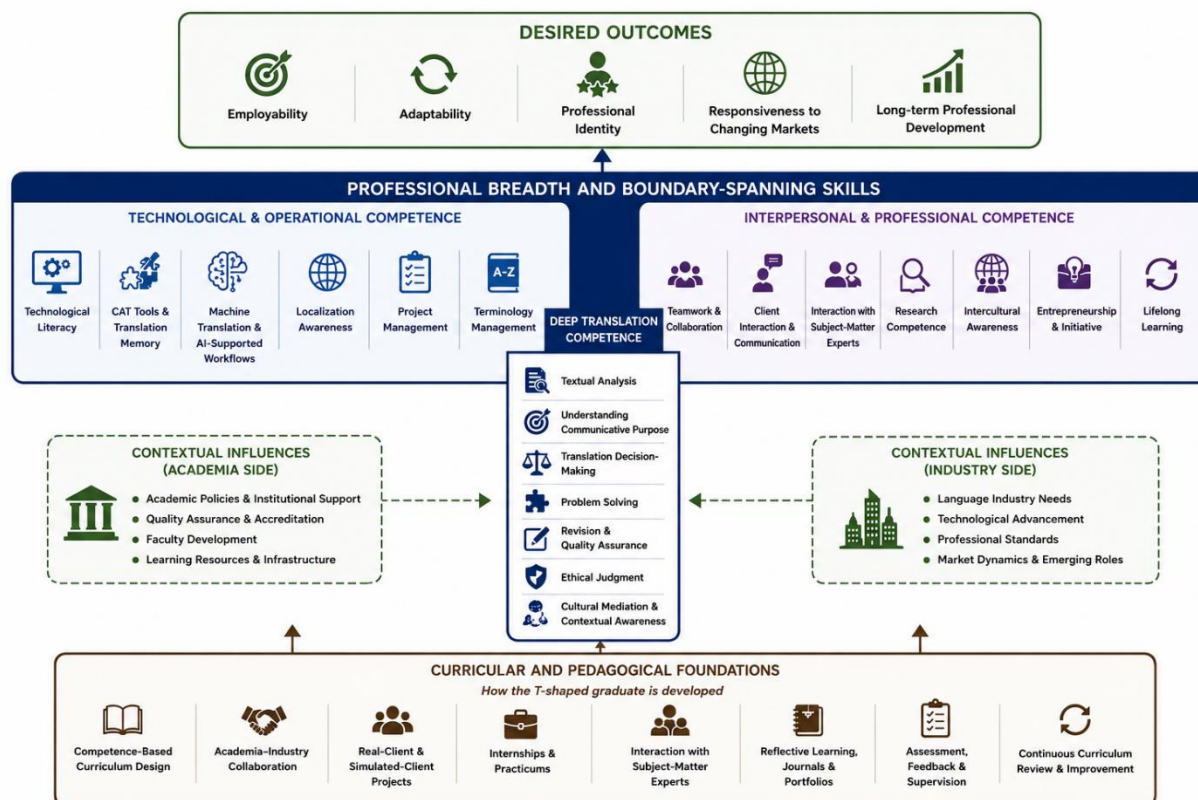
Figure 1 represents this integrated conception of the T-shaped translation graduate. The vertical dimension depicts deep translation competence, while the horizontal dimension represents broader professional and boundary-spanning capacities. Curriculum design, pedagogy, assessment, and reflective learning form the educational foundation of the model, whereas academia and the language industry provide the principal contextual influences. The model thus presents graduate adaptability as emerging from the interaction among disciplinary depth, professional breadth, and a curriculum shaped through critically mediated academia–industry collaboration.

Figure 1 should be read primarily from the bottom upward. The curricular and pedagogical foundations provide the educational conditions through which deep translation competence and broader professional capacities are developed. Academia and the language industry function as contextual influences that inform, but do not independently determine, curriculum design and implementation. The interaction between disciplinary depth and professional breadth, supported by the model's curricular and pedagogical foundations,

contributes to the desired outcomes represented at the top of the model. This upward organization represents a proposed developmental relationship rather than an empirically validated causal sequence.

The desired outcomes shown at the top of Figure 1 represent distinct but interrelated dimensions of graduate development. Employability refers to the capacity to participate effectively across changing professional roles and contexts, while adaptability concerns the ability to transfer knowledge and modify strategies when confronting unfamiliar tasks, technologies, and workflows (Angelone, 2022; Bierema, 2019; Hatano & Inagaki, 1986). Professional identity involves responsible participation in professional communities and an informed understanding of one's role, values, and obligations as a translator. Responsiveness to change refers to the ability to recognize and respond critically to emerging professional and technological conditions, while long-term professional development reflects continued learning and competence development beyond graduation.

Figure 1. Conceptual Model of the T-Shaped Translation Graduate



Note. This original conceptual model was developed by the author through the conceptual synthesis described in Section 2. The vertical dimension represents deep translation competence, while the horizontal dimension represents broader professional and boundary-spanning capacities. The model is informed by translation competence frameworks, T-shaped professionalism, adaptive expertise, and curriculum-design scholarship and is not reproduced or adapted from a single existing model.

6.1. Operationalizing the T-Shaped Graduate Framework

Figure 1 provides a conceptual representation of the relationship among disciplinary depth, professional breadth, curricular foundations, and contextual input from academia and the language industry. To make this relationship more applicable to curriculum development, Table 1 translates the model into representative forms of collaboration, targeted competences, assessment approaches, implementation conditions, and possible indicators of student development. The framework is illustrative rather than prescriptive: programs may adapt its components according to institutional resources, program level, local professional contexts, and student needs.

Each row in Table 1 represents a possible curriculum pathway through which the relationships depicted in Figure 1 may be enacted. The collaboration mechanism identifies the educational or professional context in which learning occurs; the targeted competences connect that context to the vertical and horizontal dimensions of the T-shaped model; the learning and assessment methods indicate how development may be supported and documented; the implementation conditions specify the institutional and pedagogical requirements for meaningful participation; and the illustrative indicators identify possible evidence of student or program development. Table 1 therefore operationalizes the relationships within the conceptual model rather than reproducing its visual categories directly.

The collaboration mechanisms represented in Table 1 operate at different but complementary levels of curriculum implementation. Real-client and simulated-client projects are primarily course-level mechanisms; internships and practicums involve supervised workplace participation; mentoring, advisory boards, and career-oriented workshops function mainly at the program and professional-network levels; and periodic curriculum review operates at the level of program governance and institutional renewal. The rows should therefore not be interpreted as equivalent activities, but as interconnected mechanisms through which the conceptual model may be implemented across classroom, workplace, program, and institutional contexts.

The table also reflects the distinction between routine performance and adaptive expertise. Students should not only learn to perform established professional tasks efficiently, but also develop the capacity to respond reflectively to unfamiliar problems, changing technologies, and uncertain professional situations (Angelone, 2022; Hatano & Inagaki, 1986). The proposed indicators therefore include evidence of reflection, transfer of learning, problem-solving, and decision justification alongside task completion and product quality.

The illustrative indicators in Table 1 represent different forms of evidence rather than a single unified measurement scale. Some indicators concern translation products, such as accuracy, quality, and fulfillment of the brief; others concern professional behavior, including teamwork, deadline management, communication, and ethical conduct. A further group concerns reflective and metacognitive performance, such as the ability to justify

decisions, respond to unfamiliar problems, and transfer learning across contexts. Program-level indicators, including documented curriculum revisions, graduate feedback, and employer perceptions, provide evidence at a different level of analysis. These indicators should therefore be interpreted according to their intended purpose and should not be combined into a single score without further empirical validation.

Table 1: Operational Framework for Academia–Industry Collaboration in Translator Education

Stakeholders	Collaboration mechanism	Targeted competences	Learning and assessment methods	Implementation conditions	Illustrative indicators
Academic instructors, professional translators, and language-service providers	Real-client or simulated-client translation projects	Translation problem-solving, project management, client communication, revision, teamwork, and quality assurance	Project briefs, translation portfolios, reflective reports, peer review, instructor assessment, and client or supervisor feedback	Clear roles, realistic briefs, appropriate supervision, confidentiality safeguards, feasible deadlines, and transparent assessment criteria	Translation quality, brief fulfillment, revision accuracy, deadline management, teamwork, and reflective decision-making
Universities, employers, public institutions, and community organizations	Internships, practicums, and supervised work placements	Professional conduct, workflow awareness, adaptability, ethical judgment, communication, and workplace autonomy	Supervisor evaluations, reflective journals, student self-assessment, competency checklists, and post-placement reports	Formal agreements, designated supervisors, learning outcomes, regular communication, equitable access, and structured feedback	Supervisor ratings, fulfillment of responsibilities, workplace problem-solving, ethical awareness, and transfer of academic learning
Academic programs, technology specialists, localization companies, and language-service providers	Technology workshops and AI-supported translation tasks	Technological literacy, tool evaluation, post-editing, data awareness, workflow management, and adaptive problem-solving	Tool-comparison tasks, post-editing exercises, error analysis, process reports, and critical technology evaluations	Access to relevant platforms, instructor preparation, data-security safeguards, ethical guidelines, and a focus on transferable learning	Appropriate tool selection, recognition of tool and output limitations, justification of technology choices, improved machine-generated output, and adaptation to changing conditions
Students, instructors, and subject-matter experts	Interdisciplinary consultation and specialized translation projects	Terminology research, domain knowledge acquisition, consultation skills, intercultural communication, and professional inquiry	Terminology records, consultation logs, annotated translations, oral presentations, and reflective accounts	Access to subject-matter experts, clear consultation procedures, appropriate project scope, and integration with specialized courses	Terminological accuracy and consistency, quality of consultation, use of expert feedback, and improved handling of domain-specific problems
Academic programs, alumni, professional associations, and industry mentors	Mentoring, advisory boards, guest lectures, and career-oriented workshops	Professional identity, career awareness, entrepreneurship, networking, ethical awareness, and lifelong learning	Career plans, reflective responses, mentoring records, professional portfolios, and participation-based assignments	Sustained participation, clear roles, diverse professional representation, continuity, and alignment with curriculum outcomes	Career-planning clarity, awareness of professional roles and standards, network development, portfolio quality, and continued professional learning
Faculty, curriculum committees, employers, graduates, and professional associations	Periodic curriculum review and stakeholder consultation	Program-level alignment, responsiveness to professional change, and continuous curriculum	Graduate surveys, employer feedback, curriculum mapping, advisory-board reports, and program-review	Institutional support, regular review cycles, representative participation, and procedures for documenting and	Alignment with professional expectations, documented curriculum revisions, graduate feedback, employer

Stakeholders	Collaboration mechanism	Targeted competences	Learning and assessment methods	Implementation conditions	Illustrative indicators
		Curriculum improvement	Documents	Acting on feedback	Perceptions, and sustained program improvement

Note. The framework is an original operationalization of the conceptual model presented in Figure 1. The mechanisms, assessment methods, and indicators are illustrative rather than empirically validated and should be adapted to program level, institutional context, and available resources. The framework draws on curriculum design and stakeholder needs (Gabr, 2007; Kelly, 2005; Li, 2001, 2002, 2007), situated and experiential translator education (González Davies, 2004; Kiraly, 2000, 2003), portfolio-based learning (Johnson, 2003), adaptive expertise (Angelone, 2022; Hatano & Inagaki, 1986), T-shaped professionalism (Bierema, 2019; Eskelinen, 2019), and translation competence (European Commission, 2022; Göpferich, 2009; PACTE, 2011).

The operational framework illustrates how the T-shaped graduate model can inform curriculum decisions without prescribing a single form of implementation. Its central principle is that collaboration mechanisms should be connected to identifiable competences, pedagogically structured assessment, supportive implementation conditions, and observable evidence of student development. Importantly, the framework extends beyond routine professional preparation. Following the distinction between routine and adaptive expertise, translator education should enable students both to perform established tasks competently and to modify their strategies when confronting unfamiliar technologies, texts, workflows, or professional constraints (Angelone, 2022; Hatano & Inagaki, 1986). The aim is therefore to develop graduates whose disciplinary depth and professional breadth are supported by reflective judgment, transfer of learning, and the capacity to adapt responsibly as translation practice changes.

7. Challenges and Conditions for Sustainable Academia–Industry Collaboration

Although academia–industry collaboration can strengthen translator education, its implementation depends on institutional, pedagogical, and organizational conditions. Without clear structures, shared expectations, and mechanisms for evaluation, collaboration may remain occasional or symbolic rather than becoming an integrated part of curriculum design (Gabr, 2007; Kelly, 2005; Li, 2007).

One major challenge is institutional rigidity. Translation programs are often constrained by accreditation requirements, staffing limitations, budget restrictions, administrative procedures, and fixed program structures. These constraints can delay curriculum revision, limit access to technologies, and make it difficult to establish internships or external partnerships. Sustainable collaboration therefore requires administrative support, flexible curriculum-review procedures, and mechanisms for regular renewal (Kelly, 2005; Laviosa

& González-Davies, 2020; Salari & Khazaei Farid, 2015). Recent research also identifies institutional rigidity as a significant obstacle to the integration of translation technologies in the AI era (Sánchez-Castany, 2025).

A second challenge is the speed of technological and professional change. Translation technologies, workflows, and occupational roles evolve more quickly than many university curricula can be revised. Programs that follow current tools too closely may become outdated, whereas programs that ignore technological change risk losing professional relevance. The appropriate response is therefore not continuous tool replacement, but the development of adaptable technological literacy, problem-solving, and transferable competence (European Commission, 2022; Nitzke et al., 2019; Oner Bulut, 2019).

Faculty preparation is another essential condition. Translation instructors vary in their familiarity with professional workflows, translation technologies, project management, and AI-supported practices. Some may have strong academic backgrounds but limited recent professional experience, while others may possess industry expertise without formal pedagogical preparation. This unevenness can weaken curriculum implementation. Instructor development should therefore include both pedagogical training and continuing engagement with professional and technological change (Gile, 2009; Kelly, 2008; Salinas, 2007; Sánchez-Castany, 2025). In the context of generative AI, faculty preparation may also need to address AI literacy, data literacy, prompting, evaluation, and ethical use (Penet et al., 2026).

The role of industry partners must also be clearly defined. Guest lectures, internships, workshops, and mentoring can contribute to student learning, but only when responsibilities, learning outcomes, supervision, and feedback are established. Collaboration that depends solely on informal personal contacts may be difficult to sustain and evaluate. More durable arrangements may include advisory boards, curriculum review, project supervision, mentoring, technology workshops, and structured feedback on student performance (Gabr, 2007; Kelly, 2005; Li, 2007).

A further limitation concerns the evidence base. Although the literature strongly supports professionally informed curricula, experiential learning, technology training, and stakeholder collaboration, there is still limited systematic evidence about which models are most effective, for which students, and under what institutional conditions. More research is needed on how collaborative arrangements influence competence development, professional identity, technological adaptability, employability, and the transfer of learning across contexts (Al-Batineh & Al Tenaijy, 2024; Gaspari et al., 2015; Tomozeiu et al., 2016).

Finally, sustainable collaboration requires agreement on its educational purpose. Academia and industry may emphasize different priorities, but these priorities need not be treated as oppositional. Professional relevance, productivity, and technological competence can be combined with critical thinking, ethical responsibility, intercultural awareness, and reflective judgment. The key condition is that collaboration remain pedagogically guided

and directed toward students' long-term development rather than immediate workforce preparation alone.

Effective academia–industry collaboration therefore depends on institutional support, flexible curriculum structures, prepared instructors, clearly defined stakeholder roles, structured assessment, and ongoing evaluation. When these conditions are present, collaboration can function as a sustainable curriculum mechanism rather than a fragmented set of professional activities.

8. Conclusion

This article has argued that academia–industry collaboration can function as a dynamic curriculum principle when professional input is critically mediated through curriculum design, pedagogy, assessment, instructor preparation, and ongoing program review. Rather than treating internships, guest lectures, projects, or technology workshops as isolated activities, the proposed framework connects them to identifiable competences, structured learning processes, implementation conditions, and evidence of student development.

The framework developed in this article integrates several complementary theoretical perspectives. Translation competence frameworks identify the disciplinary, technological, interpersonal, and service-related capacities that students are expected to develop, while constructive alignment connects these capacities to learning activities and assessment (Biggs, 1996; European Commission, 2022; Göpferich, 2009; PACTE, 2011). Socially situated learning explains how competence emerges through meaningful participation, collaboration, feedback, and increasing professional responsibility rather than through the transmission of predetermined knowledge alone (Kiraly, 2000, 2003, 2015). The distinction between competence and expertise further indicates that possessing individual competence components does not automatically produce integrated professional performance (Shreve et al., 2018). Such integration requires developmentally sequenced practice, reflection, feedback, and repeated adjustment, as emphasized in work on deliberate practice and expertise development (Shreve, 2006). Adaptive expertise and metacognitive regulation extend this developmental process by preparing students not only to perform familiar tasks efficiently but also to recognize uncertainty, monitor their decisions, and revise their strategies when established procedures are no longer sufficient (Angelone, 2022; Hatano & Inagaki, 1986; Zheng, 2025).

Within this theoretical structure, the T-shaped translation graduate represents the framework's intended educational outcome. The vertical dimension consists of deep translation competence, including textual analysis, problem-solving, revision, cultural judgment, and ethical responsibility. The horizontal dimension includes technological literacy, collaboration, client communication, project management, interdisciplinary consultation, and lifelong learning. The value of the model lies not simply in combining specialized and transferable skills, but in showing how disciplinary depth, professional breadth, reflective judgment, and adaptability should develop in relation to one another. The operational framework presented in Table 1 translates this model into collaboration

mechanisms, competence targets, assessment approaches, implementation conditions, and illustrative indicators. It therefore offers programs a structured basis for examining how professional collaboration might be connected to curriculum outcomes rather than treated as isolated exposure to the workplace.

The framework also has practical implications for the respective roles of academia and professional stakeholders. Academic institutions remain responsible for protecting theoretical depth, pedagogical coherence, ethical inquiry, critical judgment, and the long-term development of students. Professional stakeholders can contribute current knowledge of workflows, technologies, quality expectations, specialized contexts, and emerging roles. Sustainable collaboration depends on neither side determining the curriculum independently. Professional input must be evaluated and transformed into educationally appropriate experiences, while academic programs must remain sufficiently responsive to avoid becoming disconnected from changing translation practices. This balance is especially important in the context of artificial intelligence, where students require not only experience with emerging technologies but also the ability to evaluate their limitations, preserve human agency, and make accountable professional decisions.

Several limitations should nevertheless be acknowledged. First, the proposed model is a conceptual synthesis rather than an empirically validated framework. The relationships represented in Figure 1 and Table 1 have not yet been tested across institutions, program levels, national contexts, or language markets. Second, the literature was selected purposively for its conceptual relevance and does not constitute a systematic or exhaustive review. Third, the broad category of “industry” includes heterogeneous commercial, public, institutional, technological, and community settings whose expectations may differ substantially. Finally, the framework does not prescribe a universal curriculum model. Its implementation will necessarily depend on institutional resources, program aims, faculty expertise, student populations, local professional conditions, and access to sustainable external partnerships.

Future research should consequently move from general advocacy toward the empirical examination of particular collaboration models and their educational effects. Studies could investigate the following questions:

1. How do real-client projects, simulated-client projects, internships, mentoring, and advisory-board involvement differ in their effects on students’ translation competence, professional identity, and adaptive expertise?
2. Which forms of assessment most effectively capture not only translation-product quality but also metacognitive regulation, reflective decision-making, transfer of learning, and responsiveness to unfamiliar problems?
3. How do disciplinary depth and professional breadth develop across undergraduate and postgraduate programs, institutional contexts, specialization areas, and regional language industries?

4. What forms of instructor development are needed to integrate professional work-flows, translation technologies, and AI-supported practices without weakening pedagogical and theoretical coherence?
5. How do graduates transfer the competences developed through academia–industry collaboration into professional practice over time, and which curriculum experiences contribute most strongly to sustained adaptability?
6. How can the operational indicators proposed in Table 1 be refined, validated, and used for curriculum evaluation without reducing complex professional development to narrow performance measures?

Longitudinal, comparative, mixed-methods, and design-based studies would be particularly valuable because they could examine both measurable outcomes and the developmental processes through which students integrate competence, reflection, professional participation, and adaptive performance.

Ultimately, translator education should neither isolate itself from professional practice nor respond uncritically to short-term market demands. Its responsibility is to prepare graduates who can perform translation work competently while also questioning established procedures, learning from experience, evaluating new technologies, and adapting responsibly to unfamiliar conditions. Academia–industry collaboration becomes educationally valuable when it supports this broader developmental purpose. Its goal is not merely to make students fit the language industry as it currently exists, but to prepare reflective, ethical, and adaptable professionals capable of participating critically in how that industry continues to evolve.

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Ethical approval

Ethical approval was not required for this study because it is a conceptual article based exclusively on published scholarly literature and publicly available professional frameworks. The study did not involve human participants, personal data, or animal subjects.

Author contributions

Eyhab Bader Eddin was solely responsible for the conceptualization of the study, the selection and analysis of the literature, the development of the conceptual model and operational framework, the preparation of the figure and table, and the drafting and critical

revision of the manuscript. The author read and approved the final version of the manuscript.

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Data Availability Statement

No new empirical data were generated or analyzed in this conceptual study. All the sources and materials underpinning the analysis are publicly available and are cited in the reference list; therefore, data sharing is not applicable.

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