Journal of Education, Innovation, and Communication (JEICOM)

DOI: https://doi.org/10.34097/jeicom-8-2-1

Editors: Dr. Margarita Kefalaki & Dr. Fotini Diamantidaki

Exploring Keller's ARCS instructional design model and Bloom's taxonomy in teaching entrepreneurship in translation and interpreting studies

Evriklea Dogoriti[1]

ABSTRACT

Instructional design benefits from integrating models like Bloom's Taxonomy and Keller's ARCS Model to create engaging and stimulating learning experiences. This is particularly relevant for teaching entrepreneurship in translation and interpreting studies, which requires both theoretical knowledge and practical application. Entrepreneurship education plays a vital role in this field by equipping graduates with the necessary skills to adapt to rapid industry changes and explore opportunities beyond traditional career roles. Keller's ARCS Model (Attention, Relevance, Confidence, Satisfaction) is a widely used motivational model in online and blended learning to address learner motivation. Bloom's Taxonomy provides a framework for classifying learning objectives, which is used in curriculum design and assessment. The proposed framework integrates these two models to align motivational strategies with cognitive development in an effective manner. It guides learners through a structured path that promotes deeper engagement with entrepreneurial concepts at varying cognitive levels (Bloom's levels) while supporting sustained motivation (ARCS). The combination of these approaches aims to prepare students for success as entrepreneurial translators by fostering essential skills and sustained motivation.

Keywords: Entrepreneurship, Instructional Design, ARCS Model, Bloom's Taxonomy, Translation Studies.

[1] Ionian University, Greece - dogoritieva@uoi.gr

1 INTRODUCTION

Instructional design is more than addressing gaps in students' knowledge, skills, or attitudes; it creates engaging learning experiences tailored to learners' goals. Integrating models such as Bloom's Taxonomy and Keller's ARCS Model can help educators design curricula that foster active learning and engagement. Teaching entrepreneurship in translation and interpreting studies benefits from such structured models, as entrepreneurship requires both theoretical insight and practical application (Blankesteijn, Bossink, & van der Sijde, 2021). Despite growing interest in entrepreneurial competences in translator training, the existing literature remains fragmented. Moreover, motivational and cognitive dimensions of translator education are often addressed separately, resulting in pedagogical frameworks that lack coherence. To address these issues, this study proposes an approach combining cognitive (Bloom's Taxonomy) and motivational (ARCS) models. The rationale for this integration is supported by instructional design research demonstrating that student engagement and higher-order learning outcomes are maximized when cognitive and motivational factors are aligned (Merrill, 2020; Reigeluth & An, 2021). This gap is especially noticeable in translator education, where students often report experiencing uncertainty when confronted with business-related tasks, highlighting the need for a pedagogically grounded framework that supports both cognitive and motivational learning to enhance the effectiveness and consistency of entrepreneurship teaching in translation and interpreting programs.

The present study examines how Bloom's Taxonomy and Keller's ARCS model—two established instructional design frameworks—can be combined to provide a coherent, theoretically grounded approach to teaching entrepreneurship in translator training.

1.1 Entrepreneurship in Translation and Interpreting Studies

Entrepreneurship education is increasingly vital in translation and interpreting studies, empowering graduates to create and pursue career opportunities beyond traditional roles. Entrepreneurial skills are essential for adapting to rapid industry changes, such as technological advancements and globalization, and fostering innovation. Research highlights the need to better integrate employability and entrepreneurship competences into translator and interpreter training (Álvarez-Álvarez & Ortego-Antón, 2020; Galán-Mañas, 2017, 2018; Muñoz-Miquel,2020). European frameworks and studies emphasize the importance of creative, adaptive, and market-conscious skills for professional translators and interpreters (T&I). Despite the increased attention to entrepreneurial competence in translator training, current research provides limited guidance on how to teach entrepreneurship methodically using established instructional design principles. Most studies identify what skills translators need (e.g., pricing, marketing, self-management), but they do not explain how these competencies should be developed within a structured pedagogical model (Risku & Dickinson, 2017; Dam, Engberg, & Gerzymisch-Arbogast, 2018). This highlights the need for a more explicit connection between entrepreneurship education and instructional design theory.

1.2 Research Questions

To address this gap, the present study frames the following research questions:

- What educational objectives are supported by Bloom's Taxonomy and Keller's ARCS model, respectively, in the context of entrepreneurship education for translator students?
- To what extent do Bloom's and ARCS align with core educational and psychological theories relevant to translator training?
- Can a blended ARCS–Bloom approach offer a more coherent and comprehensive instructional framework for entrepreneurship education in T&I?
- What types of learning activities *for developing translators' entrepreneurial skills* can be derived from this integrated framework to support both cognitive growth and learner motivation?

1.3 Instructional Design in T&I Education

While instructional design has been widely applied in professional education, its systematic integration in T&I pedagogy remains limited. Within translator training, instructional practices often emerge from curriculum constraints rather than from theoretically grounded design principles (Kiraly, 2016). As a result, stronger pedagogical frameworks are needed to support the development of complex translator competences through structured learning (Orlando, 2019). Recent studies highlight the need for structured pedagogical approaches in translator education (González-Davies & Enríquez-Raído, 2016).

2 METHODOLOGY

This article describes an approach to designing entrepreneurship courses for translators based on Bloom's Taxonomy of cognitive processes (1956) and Keller's (2010) motivational concepts. The study employs a qualitative, theory-based approach, drawing on existing literature and theoretical frameworks to analyze the integration of Keller's ARCS model and Bloom's Taxonomy in entrepreneurship education, with a focus on translation and interpretation studies. The paper reviews the historical background, key principles, and the alignment of both models with educational and psychological theories. It further presents a structured, step-by-step framework for applying both models to curriculum design, with practical, instructive activities for each cognitive and motivational stage. No primary data collection was conducted; instead, the analysis

is based on a critical review and synthesis of academic sources relating to instructional design and translator education. Rather than collecting empirical data, the study engages in an analytical synthesis of established instructional design models to determine their applicability to entrepreneurship education in translation studies. Conceptual framework development is a recognized qualitative research method in educational design (Anfara & Mertz, 2015).

2.1 Educational Objectives

Each model distinctly addresses educational objectives by informing curriculum design and learning outcomes. Bloom's taxonomy provides a hierarchical structure for learning objectives, focusing on cognitive, affective, and psychomotor domains (Stapleton-Corcoran, 2023). It facilitates curriculum planning and assessment, helping students develop from basic knowledge to advanced competencies. Conversely, Keller's ARCS model addresses educational objectives by focusing on learner motivation through attention, relevance, confidence, and satisfaction. Research suggests that applying the ARCS model in instructional design can enhance motivation, engagement, and academic achievement, leading to a more engaging learning experience. This combination of frameworks prepares students for entrepreneurial challenges as future translators (Larson & Lockee, 2019).

2.2 The ARCS Motivational Design Model

Keller's ARCS Model structures motivation through **Attention, Relevance, Confidence**, and **Satisfaction** (Keller, 2009). The ARCS model incorporates verbs at each level, offering educators and learners direct guidance on the types of activities associated with each level. Attention focuses on stimulating curiosity and maintaining learners' interest. Relevance ensures that learning content connects meaningfully with students' personal goals and professional aspirations. Confidence supports learners' belief in their ability to complete tasks successfully, while Satisfaction reinforces positive learning experiences through feedback or achievement. This taxonomy underscores the significance of metacognition and highlights the interconnection of cognitive methods (Li & Keller, 2018). In teaching entrepreneurship to translators, the ARCS model may offer a more subtle approach to cognitive processes. It will guide learners in grasping and applying entrepreneurial concepts, assessing their learning, and finding tailored solutions to translation business challenges (Keller, 2009). Keller's model is necessary when learner motivation may be challenging or when learners have varied backgrounds and preferences. Within the theoretical framework, the ARCS model suggests that various learning approaches can impact learning outcomes. Keller's ARCS Model (Attention, Relevance, Confidence, Satisfaction) provides a structured framework for designing instruction that supports learner motivation and sustained engagement (Keller, 2009). The ARCS model has been applied across diverse educational contexts, where it has been shown to enhance student participation and overall satisfaction with learning tasks (Baker & Robinson, 2017; Huang & Oh, 2018; Bauman et al., 2021; Tung & Alissa, 2021). Keller's ARCS Model of

motivation can be viewed as a problem-solving approach to learning that guides instructional designers in developing engaging eLearning activities. The relevance of the ARCS model for entrepreneurship education is supported by recent research showing that motivational scaffolding significantly improves achievement and purpose in skills-based courses (Chang & Lehman, 2022). However, its application to T&I remains limited, and no studies have yet examined how ARCS can complement cognitive models such as Bloom's Taxonomy within entrepreneurship-oriented translator training.

2.3 Bloom's Taxonomy of Educational Objectives

Bloom's taxonomy is a framework for categorizing educational objectives into six hierarchical levels: **Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating** (Bloom, 1956). It focuses on cognitive skills and the development of critical thinking abilities. Bloom's Taxonomy is a helpful tool for structuring learning experiences. In teaching entrepreneurship to translators, Bloom's Taxonomy can help educators design a curriculum that covers fundamental business concepts, supports problem-solving, and fosters creativity in business careers. It offers a clear distinction between the material (WHAT of learning), the approach (HOW of learning), and the knowledge of "learning how to learn" (Panthalookaran, 2022, p. #). Bloom's taxonomy focuses on developing cognitive areas without differentiating learners' competencies as classified by the theories of multiple intelligences (Gardner, 1983).

Bloom's Taxonomy provides a structured way to formulate educational objectives, but it is primarily a cognitive framework and does not address motivational aspects of learning (Maslow, 1954; Kompa, 2017). In entrepreneurship education, learners are required to go beyond traditional cognitive tasks and engage in more integrative and novel thinking (Panthalookaran, 2022). Bloom's revised taxonomy distinguishes lower-order thinking skills—remembering, understanding, and applying—from higher-order skills such as analyzing, evaluating, and creating (Anderson & Krathwohl, 2001; Mgecha, 2024), which support entrepreneurial decision-making and problem-solving.

The three **Higher-Order Thinking Skills (HOTS)**—Analyzing, Evaluating, and Creating—are particularly critical for developing entrepreneurial competence among translators. The ability to **Analyze** (Level 4) allows students to review complex market information, competitor tactics, and technological changes within the language industry. This skill is crucial for identifying potential market niches or evaluating the market competition for a new translation service. The following level, **Evaluating** (Level 5), clearly reflects the risk assessment and decision-making processes intrinsic in entrepreneurship. Translators must assess the feasibility of business models, the efficacy of marketing industries, and the quality assurance of translation workflows. Finally, at **Creating (Level 6), the peak of cognitive complexity,** genuine innovation takes place. This level requires students to synthesize knowledge from all previous levels to produce a novel output, such as a comprehensive business plan for a new type of translation agency or an innovative solution to an industry pain point (e.g., using a unique blend of machine translation and post-editing services).

This creative blend is the objective of entrepreneurship education, transforming students from service providers into value makers. The sequence of these HOTS, when effectively motivated by the ARCS model's emphasis on Confidence and Satisfaction, ensures that cognitive labor translates into professional competence. Recent studies in business and innovation education show that Bloom's higher-order levels—analyzing, evaluating, and creating—are particularly effective for fostering entrepreneurial reasoning and decision-making (Martin & Iucu, 2019). This supports the relevance of Bloom's hierarchy for structuring entrepreneurial learning activities for translators.

Table 1. Summary of Cognitive Levels (Bloom's) and Motivational Elements (ARCS)

Model	Primary Focus	Core Components	Educational Objective
Bloom's Taxonomy	Cognitive Domain (Intellectual Skills)	Remembering, Understanding, Applying, Analyzing, Evaluating, Creating	Systematically develop higher-order critical thinking abilities.
Keller's ARCS Model	Motivational Domain (Learner Engagement)	Attention, Relevance, Confidence, Satisfaction	Cultivate and sustain intrinsic learner motivation throughout the learning process.

Bloom's Taxonomy, as well as Behaviorist, Cognitivist, and Constructivist theories, has established how blended learning can be integrated into learning environments with instructional design, online resources, pedagogy, and principles supporting each theory. According to Behaviorists, the principle of learning is based on how the process impacts changes in behavior. Scientific inquiry aims to observe and measure outward behavior (Bush, 2006, p. 14). As for the cognitivists, they emphasize the systematic construction of knowledge (Bruner, 1990; Gagne et al., 1993), in which learners acquire and interpret knowledge. Cognitivism is about the learner's mind and its acquisition of knowledge. Learning is about integrating new knowledge with prior knowledge. Technology is considered a cognitive tool that enables learners to actively participate in knowledge construction, engage in critical thinking, and pursue higher-order learning (Jonassen, 2002; Kim & Reeves, 2007). Instructional scaffolding of higher-level skills from lower-level skills is related to the Vygotskian constructivist approach (Keene et al., 2010; Vygotsky, 1978). Others view a hierarchy in the three lowest levels, while the three higher levels are parallel (Anderson & Krathwohl, 2001). Some researchers claim that the Application may precede the introduction of concepts (Tomei, 2010, p. 66), with the real-world context first and the theory second, as in the problem-based learning method.

3 RESULTS

3.1 The Proposed Integrated Framework

Despite the business skills required of translators, academic curricula offer insufficient frameworks for their development. This article describes an approach to designing entrepreneurship courses for translators based on Bloom's taxonomy of cognitive processes and Keller's (2010) motivational concepts. Keller's ARCS model of motivation (Attention, Relevance, Confidence, Satisfaction) can complement Bloom's by fostering motivation at each stage of learning. Adapting Bloom's Taxonomy involves utilizing cognitive and applied skills essential for budding entrepreneurs, while focusing on translation as a business and innovation strategy. The framework aligns motivational strategies with cognitive development in a structured way. The two models can be blended to guide learning outcomes while keeping students engaged and motivated:

- **Step-by-Step Learning:** Using Bloom's levels (which consist of six hierarchical levels—remembering, understanding, applying, analyzing, evaluating, and creating), each step encourages deeper cognitive engagement with entrepreneurial ideas, while ARCS supports sustained motivation and student empowerment.
- **Real-World Connection:** Entrepreneurial concepts can be linked to a translator's daily practices, aligning cognitive and motivational goals with students' future professional needs.
- **Collaborative Learning:** Group work where students apply, analyze, and evaluate entrepreneurship concepts in translation scenarios, increasing interaction, creativity, and motivation.
- **Feedback Loops:** Frequent feedback, peer review, and iterative design activities are critical for ARCS. They build confidence and allow for self-reflection.

The use of a taxonomy is an essential tool. It enables educators to assess students' interactions with course materials and the structure of an individual's knowledge. These two activities are of great importance in education (Anderson & Krathwohl, 2001). Integrating the two frameworks allows learning across multiple levels. Such activities can provide students with the information they need to achieve an objective (Anderson & Krathwohl, 2001). The knowledge and methods of the suggested methodology, along with the types of learning that can occur at each level, are presented below in a step-by-step, structured manner. The integration of Bloom's cognitive stages with ARCS motivational components also aligns with the principle of constructive alignment (Biggs & Tang, 2011), which argues that learning outcomes, activities, and motivational support must be designed coherently to promote deep learning. This provides additional theoretical grounding for the proposed ARCS–Bloom instructional framework.

Table 2. Integrated ARCS-Bloom Framework for T&I Entrepreneurship

Bloom's Cognitive Level (Goal)	Keller's ARCS Element (Strategy)	Core Entrepreneurial Skill Developed	Sample Activity in Translation & Interpreting (T&I) Education
1. Remembering	Attention (A)	Foundational Business Terminology	Use real-life entrepreneurial success stories in T&I to capture interest; interactive quizzes on terms like "freelancer" or "market research."
2. Understanding	Relevance (R)	Concept Interpretation and Connection	Discuss case studies of successful translators; explain how different business models (agency vs. freelance) relate to client relations and workflow management.
3. Applying	Confidence (C)	Practical Skill Implementation	Draft a client proposal or create a basic pricing model for a specific language pair; build confidence through small, manageable application tasks.
4. Analyzing	Confidence + Relevance (C/R)	Strategic Deconstruction and Market Analysis	Analyze the pros and cons of freelancing versus starting an agency; critically assess different marketing strategies (e.g., social media vs. networking) for a specific niche.
5. Evaluating	Satisfaction (S)	Critical Assessment and Decision-Making	Peer review of classmates' drafted business plans, providing constructive feedback on feasibility, pricing, and client-acquisition strategies.
6. Creating	Satisfaction (S)	Innovation and Synthesis	Synthesize all knowledge to create a comprehensive business plan for a specialized T&I service, including financial projections and branding strategy.

Note. T&I = Translation and Interpreting.

3.1.1 Level 1: Remembering

- **Cognitive Goal (Bloom's Taxonomy):** At this stage, students must recall and list basic concepts of entrepreneurship, translation theory, and business practices.
- **Motivational Strategy (ARCS—Attention):** Use real-life entrepreneurial success stories in the translation industry, or interactive quizzes on basic terms such as pricing strategies or translation quality standards, to capture students' attention.
- **Activity Example:** At this foundational level, students memorize entrepreneurial terminology, basic concepts of translation theory, and the role of entrepreneurship in the translation industry. They may be asked to recall definitions of terms like "freelancer," "business plan," or "market research," as well as translation concepts such as equivalence or fidelity. Flashcards or quizzes may cover fundamental concepts such as freelancing, business structures, and translation project workflows. Students list the main stages of a translation project workflow and fundamental entrepreneurship principles relevant to translators, such as networking or pricing strategies

3.1.2 Level 2: Understanding

- **Cognitive Goal:** Students explain the meaning of entrepreneurial concepts in their own words and understand how they apply to the translation profession.
- **Motivational Strategy (ARCS—Relevance):** Relevance is ensured by linking classroom learning to real-world translation scenarios. Emphasis is placed on the importance of entrepreneurship for freelance translators and small agencies.
- **Activity Example:** Discussion about case studies of successful translators who built businesses. Students explain how entrepreneurship helped them expand their client base or manage their workflow. They can describe how client relations affect the success of a freelance translation business or explain the different business models (freelancer vs. translation agency).

3.1.3 Level 3: Applying

- **Cognitive Goal:** To apply knowledge by creating business plans, setting pricing, or developing client communication strategies. Students apply their knowledge of entrepreneurship to real-world translation scenarios. They may draft business plans or explore practical business challenges in translation projects. This step involves dissecting and examining the relationship between entrepreneurial strategies and translation practices.
- **Motivational Strategy (ARCS—Confidence):** Students build confidence by guiding them through small, manageable tasks, such as creating a basic freelance translation website or a pricing model.

- **Activity Example:** Analysis of a case study of a productive freelance translator, identifying key strategies they employed to expand their business (e.g., marketing, specialization in a niche, or use of technology). Developing a pricing template for a freelance translator, considering market demand, expertise, and language pairs; alternatively, creating a client proposal for a translation project based on a specific niche (e.g., medical translation). Students role-play interactions with potential clients or apply their knowledge by creating sample business proposals for translation projects.

3.1.4 Level 4: Analyzing

- **Cognitive Goal:** Students analyze various business models in translation, examine marketing strategies, or study the use of digital tools (e.g., CAT tools, online translation platforms).
- **Motivational Strategy (ARCS—Confidence + Relevance):** Students collect feedback on their analyses, discuss, and compare different entrepreneurial strategies.
- This helps them build confidence as they see how their skills align with professional translation practices. Students are guided through small, manageable tasks, such as creating an essential freelance translation website or a pricing model. They can evaluate the effectiveness of various entrepreneurial strategies within the translation industry.
- **Activity Example:** Review of different marketing strategies for freelance translators, such as social media promotion, networking, or attending translation conferences. What strategies might be most beneficial for various sectors of the translation industry? Analyze the pros and cons of freelancing versus starting a translation agency. Students compare their findings with industry reports.

3.1.5 Level 5: Evaluating

- **Cognitive Goal:** Students at this level evaluate the effectiveness of different entrepreneurial strategies within translation, such as choosing between niche specialization and broad service offerings.
- **Motivational Strategy (ARCS—Satisfaction):** Provide opportunities for self-evaluation and peer feedback. Students critically assess their own work and that of others, which increases their satisfaction and solidifies their learning.
- **Activity Example:** Students critically assess different marketing strategies for freelance translators, such as social media promotion, networking, or attending translation conferences. Which strategies might be most effective for different segments of the translation industry? Students evaluate their peers' business plans and provide constructive feedback on the feasibility of pricing, marketing, and client-acquisition strategies in translation.

3.1.6 Level 6: Creating

- **Cognitive Goal:** The highest level of Bloom's Taxonomy involves synthesizing ideas to create something new. Students should design their entrepreneurial strategies or solutions to translation industry challenges.
- **Motivational Strategy (ARCS—Satisfaction):** Students feel accomplished when they showcase their work by presenting their business ideas to industry professionals or creating portfolios.
- **Activity Example:** Creation of a complete business plan for starting a translation agency or a specialized freelance translation service, integrating branding, marketing, and client acquisition strategies.

4 IMPLICATIONS AND RECOMMENDATIONS

The integrated ARCS-Bloom framework presented in this paper underpins notable concerns for translator education pedagogy and curriculum design, going beyond theoretical discussion to practical recommendations for its implementation.

4.1 Implications for Educational Practice

The twofold alignment of cognitive and motivational goals provides a structured framework for instructors to work within. By ensuring that motivational strategies (ARCS) are applied at every stage of cognitive development (Bloom's), the framework moderates the risk of student disengagement often associated with abstract or complex coursework. For instance, the transition from **Understanding (Level 2)** to **Applying (Level 3)**, a common point of disappointment, is supported by overtly promoting **Confidence** through relevant, low-risk application activities. This approach shifts the instructor's effort from delivering a syllabus to designing motivational coursework.

4.2 Enhancing Self-Efficacy and Autonomy

A primary benefit of integrating ARCS, particularly the **Confidence** and **Satisfaction** elements, is the building of **self-efficacy** among future translators. By advancing through the six levels, students gain expertise in complex entrepreneurial skills. The use of peer feedback and self-evaluation (Level 5: Evaluating) fosters autonomy, enabling students to analyze their business models before facing practical market conditions. This enhanced self-efficacy is crucial for maintaining a successful freelance career, where initiative, resilience, and independent problem-solving skills are needed. This integrated perspective also aligns with research suggesting that

entrepreneurial competence requires both cognitive complexity and motivational resilience (Lackéus, 2015). Within translator training, where students may feel less confident engaging with business-related tasks, the motivational components of ARCS—particularly Confidence and Satisfaction—play a crucial role in sustaining engagement and promoting self-efficacy (Biel & Sosoni, 2020).

4.3 Limitations

It is essential to acknowledge that this study offers a **theoretical framework**. Its effectiveness is based on the sound principles of Bloom's Taxonomy and Keller's ARCS Model; however, it has not yet been empirically tested. Implementation requires significant commitment from educational institutions, including: (1) training faculty in both instructional design models, and (2) allocating time for the complex, collaborative, and feedback-intensive activities suggested at the higher cognitive levels. Future research should overcome these limitations by focusing on quantitative studies to measure changes in student motivation, entrepreneurial competence, and long-term career outcomes.

5 CONCLUSION AND FUTURE RESEARCH

5.1 Conclusion

In conclusion, the proposed framework for teaching entrepreneurship to translators by integrating Keller's ARCS model with Bloom's Taxonomy offers a comprehensive approach that addresses students' cognitive development and intrinsic motivation. The framework fosters a thorough insight into entrepreneurial concepts by aligning cognitive learning stages (from remembering to creating) with motivational strategies (attention, relevance, confidence, and satisfaction). It maintains learner involvement throughout the educational process. By addressing an under-theorized area of T&I pedagogy, this study provides a clearer conceptual foundation for entrepreneurship education grounded in validated instructional design theory. The integration of motivational and cognitive dimensions responds directly to the shortcomings identified in the state of the art and provides a theoretically informed basis for future empirical research. This dual approach aims to help students develop practical entrepreneurial skills, such as business planning and client management, while engaging in relevant, empowering activities and applying these skills to substantial real-world scenarios. Integrating ARCS and Bloom's models supports effective teaching practices. It prepares students for the challenges of modern entrepreneurship, equipping them with the skills and confidence to thrive. By integrating these two models, the framework can ensure that students acquire the necessary knowledge and skills and remain motivated and confident throughout their learning journey.

5.2 Suggestions for Future Research

For future research, several areas could be explored to further integrate Keller's ARCS model with Bloom's Taxonomy in teaching entrepreneurship to translators. While this framework is theoretically supported, future studies could empirically test its effectiveness in actual educational settings. By delving deeper into practical applications, the proposed framework may contribute to improving how translators can effectively prepare for entrepreneurial success in a dynamic global market. Research could measure student outcomes in terms of entrepreneurial success, confidence-building, and business competencies. Moreover, as technology is increasingly applied to translation and entrepreneurship, future research could examine how digital tools and learning management systems (LMS) can be incorporated into the framework to enhance cognitive and motivational elements.

REFERENCES

Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.

Anfara, V., & Mertz, N. (2015). Theoretical frameworks in qualitative research. Sage.

Álvarez-Álvarez, S., & Ortego-Antón, L. (2020). Exploring the use of technology to foster students' entrepreneurial competences in translation training. The Interpreter and Translator Trainer, 14(2), 173–193. https://doi.org/10.1080/1750399X.2020.1741549

Baker, R. L., & Robinson, J. S. (2017). Using Keller's ARCS model and experiential learning theory to guide instructional design. Journal of Agricultural Education, 58(1), 18–35. https://doi.org/10.5032/jae.2017.01018

Bauman, C., Aharony, I., & Armon, S. (2021). Teaching entrepreneurial skills to non-business students: The role of the ARCS model. Journal of Education for Business, 96(5), 329–338.[A30.1]

Biel, Ł., & Sosoni, V. (2020). Translator competences and professional challenges. The Interpreter and Translator Trainer, 14(4), 456–475.[A31.1]

Biggs, J., & Tang, C. (2011). Teaching for quality learning at university (4th ed.). McGraw-Hill.

Blankesteijn, M., Bossink, B., & van der Sijde, P. (2021). Science-based entrepreneurship education as a means for university–industry technology transfer. International Entrepreneurship and Management Journal, 17(2), 779–808. https://doi.org/10.1007/s11365-019-00623-3

Bloom, B. S. (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain. Longman.

Bruner, J. (1990). Acts of meaning. Harvard University Press.

Bush, J. (2006). A meta-analysis of the effectiveness of the ARCS model on student learning. Educational Technology Research and Development, 54(3), 269–283.[A32.1]

Chang, Y., & Lehman, J. (2022). Motivational challenges in entrepreneurship education: Applying the ARCS model. Teaching in Higher Education, 27(4), 588–604.

Dam, H. V., Engberg, J., & Gerzymisch-Arbogast, H. (2018). Cognitive and entrepreneurial competences in translator education. John Benjamins.

Gagné, R. M., Yekovich, C. W., & Yekovich, F. R. (1993). The cognitive psychology of school learning (2nd ed.). HarperCollins.

Galán-Mañas, A. (2017). The development of professional competences in master's degree programs in translation and interpreting: An empirical study on the entrepreneurial skills of future professionals. Perspectives: Studies in Translation Theory and Practice, 25(4), 543–562. https://doi.org/10.1080/09074167.2017.1306376

Galán-Mañas, A. (2018). Training translators for the market: Entrepreneurship education in the curriculum. The Journal of Internationalisation and Localisation, 4(1), 163–181. https://doi.org/10.1075/jial.00007.gal

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. Basic Books.

González-Davies, M., & Enríquez-Raído, V. (2016). Situated learning in translator and interpreter training: Bridging research and good practice. The Interpreter and Translator Trainer, 10(1), 1–11. https://doi.org/10.1080/1750399X.2016.1154340

Huang, H. S., & Oh, E. (2018). The effects of instructional design based on the ARCS model and behaviorism on learner motivation and achievement in an online course. Journal of Educational Technology Development and Exchange, 11(1), 1–18.[A33.1]

Jonassen, D. H. (2002). Designing research-based instruction for constructivist learning. Springer.

Keene, R., & Hand, D. (2010). Vygotsky's socio-cultural theory: A framework for promoting higher-order thinking in college classrooms. Journal of College Teaching & Learning, 7(4), 1–8.[A34.1]

Keller, J. M. (2009). Motivational design for learning and performance: The ARCS model approach. Educational Technology Research and Development, 57(3), 269–283.

Keller, J. M. (2010). Motivational design for learning and performance: The ARCS model approach. Springer. https://doi.org/10.1007/978-1-4419-1250-3

Kim, M. H., & Reeves, T. C. (2007). Using technology in constructivist classrooms: A mixed methods study. Educational Technology Research and Development, 55(2), 119–142.[A35.1]

Kiraly, D. (2016). Towards a constructivist approach to translator education. Translation and Interpreting Studies, 11(1), 68–87.[A36.1]

Kompa, K. (2017). A motivational analysis of Maslow's hierarchy of needs and Keller's ARCS model in the context of lifelong learning. International Journal of Education and Development Using ICT, 13(2), 5–18.[A37.1]

Lackéus, M. (2015). Entrepreneurship in education: What, why, when and how. OECD Working Paper.

Larson, M. B., & Lockee, B. B. (2019). Streamlined ID: A practical guide to instructional design (2nd ed.). Routledge. https://doi.org/10.4324/9781351258722

Li, K., & Keller, J. M. (2018). The motivational design of learning objects: An ARCS approach. Educational Technology Research and Development, 66(4), 949–967. https://doi.org/10.1016/j.compedu.2018.03.019

Martin, C., & Iucu, R. (2019). Developing higher-order thinking for entrepreneurship: A Bloom's taxonomy approach. Journal of Entrepreneurship Education, 22(3), 1–12.[A38.1]

Maslow, A. H. (1954). Motivation and personality. Harper & Row.

Mgecha, P. (2024). Bloom's taxonomy of educational objectives: A critical review. International Journal of Academic Research in Education and Review, 12(1), 1–12. https://doi.org/10.37745/ijelt.13/vol12n36577

Merrill, M. D. (2020). First principles of instruction: Identifying and designing effective, efficient and engaging instruction. Educational Technology Research and Development, 68(2), 853–876.[A39.1]

Muñoz-Miquel, A. (2020). Translation and interpreting as a profession: Some proposals to boost entrepreneurial competence. Hermes, 60, 29–46. https://doi.org/10.7146/hjlcb.v60i0.121309

Orlando, M. (2019). Training 21st-century translators: A problem-based learning approach. Routledge.

Panthalookaran, V. (2022). Beyond Bloom's taxonomy: Emergence of entrepreneurial education. Higher Education for the Future, 9(1), 45–61. https://doi.org/10.1177/23476311211046176

Reigeluth, C., & An, Y. (2021). Instructional-design theories and models: A learner-centered paradigm (Vol. 4). Routledge.

Risku, H., & Dickinson, A. (2017). Situated learning in translator and interpreter training. The Interpreter and Translator Trainer, 11(1), 1–12.[A40.1]

Stapleton-Corcoran, E. (2023). Bloom's taxonomy of educational objectives. Center for the Advancement of Teaching Excellence, University of Illinois Chicago. https://teaching.uic.edu/blooms-taxonomy-of-educational-objectives/

Tomei, L. A. (2010). Designing instruction for the higher education curriculum. Information Science Reference.

Tung, W. S., & Alissa, N. A. (2021). The effects of flipped learning and ARCS model on students' motivation and learning achievement in a university course. International Journal of Emerging Technologies in Learning, 16(2), 213–228.[A41.1]

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.