

Task-Based Translation Instruction and Metacognitive Awareness¹

Elham Rajab Dorri² & Fatemeh Parham³

Abstract

This study explored the impact of task-based instruction (TBI), rooted in social constructivist theory, on the metacognitive awareness of 23 undergraduate translation students at Jahrom University in a course on “Translating Idioms and Culture-Specific Items.” A pre- and post-treatment within-subjects design was used to measure changes in eight metacognitive subcomponents, covering both knowledge (declarative, procedural, conditional) and regulation (planning, information management, monitoring, debugging, evaluation). Data were gathered through an adapted Metacognitive Awareness Inventory (MAI) and classroom observations. Paired-sample t-tests showed significant improvements ($p < 0.05$) across all subcomponents, with the highest gains in ‘Planning’ (52.17%) and ‘Procedural Knowledge’ (27.23%). Observational data supported these findings, revealing increased autonomy, strategic thinking, and problem-solving among students. No significant gender-based differences were found. The study suggests that the TBI intervention’s structured, collaborative, and reflective components enhanced students’ translation organization and culturally sensitive strategy application, thereby highlighting its effectiveness in developing essential metacognitive skills within translator education.

Keywords: Metacognitive awareness, Metacognitive knowledge, Metacognitive regulation, Social Constructivism, Task-based instruction

1. This paper was received on 13.02.2025 and approved on 14.04.2025.

2. Corresponding Author: Ph.D. Candidate, Translation Studies Department, Allameh Tabataba’i University, Tehran, Iran; email: elhamrajabdorri@gmail.com. ORCI ID: [0000-0003-4341-0547](https://orcid.org/0000-0003-4341-0547)

3. Assistant Professor in Translation Studies, Department of English Translation Studies, Faculty of Persian Literature & Foreign Languages, Allameh Tabataba’i University, Tehran, Iran; e-mail: parham@atu.ac.ir. ORCI ID [0000-0003-4509-1279](https://orcid.org/0000-0003-4509-1279)

Introduction

The post-pandemic digital transformation has reshaped global communication, increasing demand for translators skilled in human-AI collaboration, digital localization, and specialized fields like medicine and technology (Hajmalek & Aghamohammadi, 2023; Matalu, 2024). Universities worldwide, such as the University of Leeds and University College London, have adapted by introducing practice-oriented programs focusing on translation technologies and AI-assisted workflows.

However, despite advancements in understanding translation cognition, many instructional approaches—particularly in Iran—still overlook metacognitive awareness, a critical skill for real-world translation tasks (González-Davies, 2004; Melnichuk & Osipova, 2017). Iranian translation education remains largely teacher-centered, lacking emphasis on student autonomy and reflective learning (Avval, 2013; Ghazizadeh & Jamalimanesh, 2010), which hinders the development of adaptive, strategic thinking needed in today's profession.

Social constructivism, rooted in Vygotsky's (1978) theories and adapted to translation by Kiraly (2014), offers a promising alternative. It frames learning as a collaborative, task-driven process that fosters metacognitive skills through authentic, socially embedded activities. Task-based instruction (TBI), an application of this approach, engages students in realistic translation projects requiring critical analysis and self-regulation. While TBI is established in language education, its potential in translation training—especially in non-Western contexts like Iran—remains understudied.

This research examines TBI's impact on metacognitive awareness among translation students at Jahrom University, focusing on two core components: metacognitive knowledge (understanding one's cognitive processes)

and metacognitive regulation (monitoring and adjusting strategies). The study addresses three questions:

1. How effective is TBI in developing students' metacognitive knowledge?
2. How effective is TBI in enhancing metacognitive regulation?
3. Do male and female students differ significantly in metacognitive awareness after TBI?

By answering these questions, the study aims to inform curriculum reform in Iran and provide a pedagogical model to better prepare translators for evolving industry demands.

Review of Literature

Social constructivism (Vygotsky, 1978; Piaget, 1970; Dewey, 2024) forms the theoretical foundation for modern translation pedagogy. Vygotsky's Zone of Proximal Development (ZPD) emphasizes how collaborative learning and scaffolding enhance cognitive development—a principle Kiraly (2000) applied to translation education by advocating for authentic, task-based environments that develop metacognitive skills, professional competence, and intercultural awareness. Task-Based Instruction (TBI), grounded in constructivist theory, promotes active learning through real-world translation tasks. Early research (Gabr, 2001; González Davies, 2004) highlighted its role in fostering both technical and professional skills, while later studies (Hurtado Albir, 2007; Rodríguez-Inés & Hurtado, 2012) emphasized adaptable, context-sensitive task design. Empirical evidence (Varney, 2009; Li, 2013) demonstrated TBI's effectiveness in enhancing learner autonomy, metacognitive growth, and professional competencies. More recent critiques (Wang, 2018; Matalu, 2024) have reinforced TBI's advantages over traditional methods, particularly in developing metacognitive awareness and practical translation skills.

In Iran, translation education has traditionally relied on teacher-centered methods, but recent scholarship advocates for constructivist, task-based approaches.

Studies (Khoshsaligheh et al., 2011; Rezvani & Askari Bigdeli, 2013) found that social constructivist methods improve translation quality, motivation, and problem-solving skills. Student feedback (Ebrahimi, 2013) further supports the demand for more learner-centered, relevant instruction. However, research (Hosseini et al., 2019; Hajmalek & Aghamohammadi, 2023) indicates that Iranian programs still lack authentic task integration, despite TBI's demonstrated benefits in fostering collaboration, reflection, and metacognitive development.

While TBI's effectiveness in enhancing metacognitive awareness has been explored in some contexts (Mellinger, 2019; Chen, 2024), its impact in non-Western settings—particularly Iran—remains understudied. Given the influence of cultural and institutional factors on learning, further empirical research is needed to assess TBI's role in metacognitive skill development and inform its localized implementation in Iranian translation education.

Methodology

Study Design

This study examines the potential effect of task-based teaching within a social constructivist framework, on undergraduate translation participants' metacognitive awareness. Using a within-subject design, the research compares pre- and post-treatment outcomes through the metacognitive awareness inventory. A within-subjects design was utilized in this study, where each participant served as their own control.

Participants

The study involved 23 undergraduate students (6 male, 17 female), aged 20–24, enrolled in a compulsory 'Translating Idioms and Culture-Specific Items' course at Jahrom University, Iran (spring 2023–2024). This convenience sample represented the entire available cohort. All participants had completed prerequisite translation theory and practice courses, ensuring baseline competency. Following ethical

protocols, verbal informed consent was obtained, with data anonymized and handled confidentially.

Treatment: Task-based Instruction

The instructional treatment was purpose-built for this study, designed according to task-based teaching principles within a social constructivist framework. Drawing from Kiraly's *A Social Constructivist Approach to Translator Education* (2000, Chapter 3) and González Davies' *Multiple Voices in the Translation Classroom* (2004, Chapter 2), the materials emphasized active learning, collaboration, and contextualized problem-solving. González-Davies' (2004, pp. 70–75) framework proposes a progression from focused activities to full tasks and projects.

While full tasks were not implemented, the 28 designed activities followed this progression, each aligned with course objectives (2–3 per session). Activities were designed as structured, goal-oriented engagements that promote authentic, collaborative, and reflective learning to support translation skill development. Activities addressed both tangible (language, food, clothing) and intangible (beliefs, traditions, customs) cultural dimensions. Most were classroom-based, with some assigned as homework. Example activity provided. A sample activity is presented in appendix 1.

This activity develops metacognitive awareness by guiding students through a structured process beyond simple information retrieval. They plan their online research on Iranian clothing, monitor their search, and assess findings. The discussion questions (Step 1 a & b) prompt evaluation of the information's quality, accuracy, adequacy, and cultural sensitivity. This reflection encourages critical thinking about both content and research strategies, helping students recognize biases, gaps, and their own learning and assessment processes.

Importantly, activities were sequenced in increasing complexity to support cognitive development and reflective practice. For example, students progressed from initial tasks like analysing media and drafting 'a short article' (Activity 1, Steps 1–3) to later synthesizing extensive research into a full '*Academic Article*' (Activity 27, Step 1) and then completing its '*Translation and Cultural Adaptation*' (Activity 28, Step 1). This escalation from foundational analysis and short-form production to comprehensive scholarly work and professional translation clearly fostered cognitive growth and deepened reflective practice. Each session promoted metacognitive awareness through structured activities combining lectures and collaborative translation tasks. Key strategies included: role-based group work to enhance strategic awareness; reflective discussions analyzing decisions and challenges; progressively complex tasks requiring deeper analysis; and instructor feedback highlighting effective cognitive strategies. This integrated approach developed self-regulation while addressing real-world translation challenges.

To evaluate student performance dynamically, Vygotsky's sociocultural principles guided a formative assessment approach (1978, pp. 56–57). The instructor observed group interactions, supported problem-solving efforts, and provided immediate feedback throughout the tasks, with key observations focused on collaboration quality, problem-solving strategies, and responsiveness to instructional cues. The assessments were recorded in Jahrom University's Student Educational Support System (SESS), accessible at <https://sess.jahromu.ac.ir>. Through SESS, students could view their performance data, instructor feedback, and track their progress over time, promoting self-reflection and enabling them to take an active role in their educational development.

Data Collection and Instruments

To assess metacognitive awareness, the MAI developed by Schraw and Dennison (1994, p. 461) was administered at the beginning and end of the semester.

For this study, the MAI was modified to align with the specific needs of English Translation students, incorporating language-switching, contextual interpretation, and accuracy maintenance. The adapted MAI is provided in Appendix 2, ensuring its relevance in measuring metacognitive awareness within this context.

The MAI consists of 52 "True" or "False" items divided into two components: Metacognitive knowledge (17 items), including declarative, procedural, and conditional knowledge, and Metacognitive regulation (35 items), covering planning, information management, comprehension monitoring, debugging, and evaluation. The MAI has a Cronbach's alpha of 0.94, indicating high reliability in assessing metacognitive awareness (Harrison & Vallin, 2018, p. 25). At the start of the semester (February 6, 2024), the initial MAI assessment was conducted to establish baseline metacognitive awareness. To maintain confidentiality, each student used an anonymous ID on all assessments. During the first session, the completed questionnaires were collected within a 20-minute timeframe, and scores were calculated for each metacognitive subcategory. The final MAI assessment was administered in the last session, allowing for comparative analysis of pre- and post-treatment scores.

Observational data were systematically collected across seven selected sessions (1, 3, 4, 7, 9, 12, and 14) to track students' metacognitive development. The instructor focused on three key aspects: how students interpreted activities and planned their approaches, monitored their comprehension and strategy effectiveness during tasks, and applied feedback to adjust their problem-solving methods. These observations, recorded shortly after each session, facilitated targeted feedback to enhance students' learning awareness and self-regulation. Additionally, brief video and photo documentation (totaling 15 minutes across two sessions) provided supplementary visual evidence of collaborative interactions and metacognitive strategy implementation in practice.

Data Analysis

Participants completed the MAI by marking statements "True" (1 point) or "False" (0 points). For each of the eight subcategories, raw scores were calculated by summing item points. These raw scores were then converted to percentage scores (participant's raw score / max subcategory score × 100) for both pre- and post-treatment responses. This percentage conversion allowed for standardized comparison across subcategories (which varied in item count) and quantified growth in metacognitive awareness. Higher percentages indicated stronger awareness, while lower percentages signaled areas needing improvement.

To analyse gender-based variations in improvement, the change in percentage scores (post-treatment percentage minus pre-treatment percentage for each subcategory) was calculated for each participant. Independent samples t-tests were then used to compare these mean change scores between male and female participants for each metacognitive subcategory, to identify potential differences in metacognitive skill development. Paired-sample t-tests were used to assess the statistical significance of changes in the mean percentage scores from pre- to post-treatment across the eight metacognitive subcategories for the entire cohort, offering insights into the efficacy of task-based instruction in enhancing translation-specific metacognitive skills.

The study analyzed observational notes, videos, and photos from seven sessions to identify patterns in students' metacognitive engagement. The instructor tracked changes across three key variables, examining how students interpreted tasks, planned collaboratively, discussed understanding, identified challenges, questioned methods, responded to guidance, and adjusted problem-solving strategies. Documented behaviors and student discussions were thematically organized to reveal trends in metacognitive development, with visual materials supplementing notes and confirming observed interactions and strategy use.

Result

The findings demonstrate that task-based instruction significantly enhanced students' metacognitive knowledge across all subcomponents. As Table 1 illustrates, the overall mean score increased substantially from 41.21% (pre-treatment) to 66.16% (post-treatment), reflecting a 24.95 percentage point improvement. The most notable gains occurred in procedural knowledge (+27.23 points), indicating students' enhanced ability to effectively apply translation strategies. Declarative knowledge showed a 25-point increase, while conditional knowledge improved by 22.61 points, collectively demonstrating the treatment's positive impact on students' understanding of when and how to employ different cognitive strategies in translation tasks.

Table 1: Pre- and Post-Treatment Mean Percentage Scores for Metacognitive knowledge Subcomponents

Subcomponent	Pre-Treatment (%)	Post-Treatment (%)	Difference (Percentage Points)
Declarative Knowledge	38.04%	63.04%	+25%
Procedural Knowledge	36.9%	64.13%	+27.23%
Conditional Knowledge	48.69%	71.30%	+22.61%
Total	41.21%	66.16%	+24.95%

The analysis revealed statistically significant improvements across all metacognitive knowledge components ($p < 0.05$), with substantial effect sizes (Cohen's d) - largest for procedural knowledge ($d = 1.01$), followed by declarative ($d = 0.93$) and conditional knowledge ($d = 0.88$). Normality was confirmed via Shapiro-Wilk test. Regarding metacognitive regulation, overall scores increased by 38.67 percentage points (19.5% to 58.57%), with planning showing the greatest improvement (+52.17 points). Significant gains also occurred in information management (+37.8), debugging (+37.4), and evaluation (+35.5), demonstrating

task-based instruction's effectiveness in developing self-regulation and problem-solving skills.

Table 2: Pre- and Post-Treatment Mean Percentage Scores for Metacognitive regulation Subcomponents

Subcomponent	Pre-Treatment (%)	Post-Treatment (%)	Difference (Percentage Points)
Planning	24.22%	76.39%	+52.17%
Information Management	19.5%	57.3%	+37.8%
Debugging	34.7%	72.1%	+37.4%
Evaluation	7.2%	42.7%	+35.5%
Monitoring	9.4%	42.7%	+33.3%
Total	19.5%	58.57%	+38.67%

Paired-sample t-tests confirmed significant gains in the mean percentage score for each subcomponent of Metacognitive regulation ($p < 0.05$). Effect size calculations showed high practical significance, particularly in planning ($d = 1.15$) and information management ($d = 1.02$), which had the largest improvements. Debugging ($d = 0.89$) and Evaluation ($d = 0.87$) also demonstrated significant gains, underscoring the treatment's positive impact on students' self-regulation and cognitive monitoring.

The third research question investigated gender-based differences in metacognitive development. Change scores (post- minus pre-treatment percentages) were calculated for each MAI subcomponent per participant. Table 3 shows mean pre- and post-treatment scores and the average improvement for male and female students across all subcomponents. Descriptively, females showed greater mean gains in Procedural and Conditional Knowledge, while males showed higher mean improvements in Planning and Debugging. However, independent samples t-tests

comparing these mean change scores revealed no statistically significant differences in the magnitude of improvement between genders for any subcategory (all $p > 0.05$).

Table 3: Mean Percentage Scores and Improvements for MAI Subcomponents by Gender

No	MAI Component	Male Pre-treatment	Male post-treatment	Male Mean Improvement	Female Pre-treatment	Female post-treatment	Female Mean Improvement
1	Metacognitive knowledge	41.7%	60.1%	+18.3%	41%	68.9%	+27.9%
	- Procedural Knowledge	33.3%	50%	+16.6%	38.2%	69.11%	+30.8%
	- Declarative Knowledge	35.4%	60.4%	+24.9%	38.9%	63.9%	+24.9%
	- Conditional Knowledge	56.6%	70%	+13.4%	45.8%	71.7%	+25.9%
2	Regulation of Cognition	16.4%	57.07%	+40.61%	19.84%	57.51%	+37.67%
	- Planning	23.8%	78.5%	+54.7%	24.3%	75.6%	+51.3%
	- Information Management	18.3%	58.3%	+40%	20%	57.0%	+37.05%
	- Debugging	30%	73.3%	+43.3%	36.4%	71.7%	+35.3%
	- Evaluation	5.5%	38.8%	+33.3%	7.8%	44.1%	+36.3%
	-Monitoring	4.7%	40.47%	+35.77%	10.7%	41.1%	+30.4%

Instructor observations supported and contextualized the findings, showing parallel growth in students' metacognitive engagement during collaborative activities. Initially, students needed direct support for objectives and strategies. As the intervention progressed, they became more autonomous in discussions: actively interpreting tasks, planning collaboratively, and questioning their strategies. By later sessions, students frequently monitored their understanding, openly addressed difficulties, and evaluated their methods for cultural complexity. They also became more responsive to instructor feedback, reflecting on decisions and adjusting

strategies in real-time. These behavioral shifts provided contextual insight into the MAI's measured improvements in metacognitive awareness.

Discussion

The substantial overall growth observed in self-reported metacognitive awareness, particularly in the domain of regulation of cognition, suggests that the intervention's emphasis on active engagement, collaborative problem-solving, and reflective practice effectively cultivated students' abilities to plan, manage, monitor, and evaluate their learning processes when dealing with the course content. This aligns with the social constructivist principles underpinning the intervention (Vygotsky, 1978, p. 86) and resonates with a body of literature suggesting that active learning environments promote deeper cognitive engagement (Freeman et al., 2014, p. 8411; Prince, 2004, p. 225). Crucially, instructor observations of in-class interactions corroborated these MAI findings, revealing a parallel development in students' engagement: as the semester progressed, students demonstrated an increasing capacity to autonomously articulate their understanding of activities, collaboratively devise strategic plans, actively monitor their comprehension and strategy effectiveness, and adapt their approaches in response to feedback.

The most pronounced improvement was observed in 'planning'. This remarkable gain suggests that participants became considerably more adept at setting goals, organizing their approach, and selecting appropriate strategies prior to and during translation activities related to culturally specific items. This finding is consistent with and extends research by Biswas et al. (2014, p. 195) and Mohammadipour & Rashid (2015, p. 118), who also highlighted the efficacy of task-based approaches in developing learners' strategic planning abilities in complex cognitive domains. While their studies focused on open-ended problem-solving in STEM education (Biswas et al., 2014, p. 192) and ESL speaking proficiency development through task-based instruction (Mohammadipour & Rashid, 2015, p.

115), the current study specifically demonstrates this benefit within the nuanced context of translation students tackling culturally specific items, a domain requiring significant foresight and strategic organization. The activities likely contributed to this by consistently requiring students to collaboratively define activity parameters for culturally nuanced translations, outline steps, and anticipate challenges before execution. For instance, activities such as Activity 5 ('Selecting and Researching a Cultural Theme'), especially Step 1 ('Instructor Introduction and Group Brainstorming'), explicitly scaffolded these pre-task organizational skills. The observed increase in students' proactive discussions around task interpretation and outlining collaborative steps during later class sessions further supports the development of these planning capabilities.

Significant gains were also noted in procedural knowledge, reflecting an enhanced understanding of how to apply translation strategies to the culturally embedded material. This improvement can likely be attributed to the hands-on nature of the task-based instruction, where students repeatedly practiced applying different translation techniques to authentic cultural materials. This aligns with broader principles of task-based language teaching (TBLT), which emphasize learning through doing and the application of knowledge in meaningful contexts (Guangwei, 2003, p. 126; Long, 2014, Chapter 4). The present study demonstrates the applicability of these principles to the specific procedural aspects of metacognition in translator training. The iterative nature of the activities, often involving drafting, peer feedback, and revision (as seen in Activity 6, involving collaborative translation, structuring, and refinement of cultural content), likely solidified this procedural understanding. Instructor notes documenting groups refining their translations based on peer suggestions and more adeptly applying specific strategies in later activities provide further evidence of this strengthened procedural skill.

Other key components of metacognitive regulation, including information management, debugging, and evaluation, also showed substantial improvements. The collaborative nature of the tasks, where students discussed sources, evaluated information quality, and provided feedback, likely nurtured these skills. The debugging improvements suggest that activities encouraging error identification and correction within a supportive peer environment are effective. This finding is supported by research in collaborative learning which indicates that peer interaction can improve error detection and correction processes (M. Li & Zhu, 2013, p. 70; Storch, 2005, p. 160), and is further specifically echoed by Bhat et al. (2022, p. 26) in the context of collaborative learning. The observed increase in students openly addressing comprehension difficulties and collectively evaluating their methods during later sessions aligns with these MAI gains in debugging and evaluation. The development of these self-regulatory skills through task-based instruction in a translation context is an important finding, as such skills are crucial for professional competence (Angelone, 2010, p. 25; Shreve, 2006, p. 30).

The absence of statistically significant gender differences in the magnitude of improvement across all MAI subcategories suggests that the task-based instruction approach employed in this study was equitably received by both male and female students in this particular setting, indicating that its core elements benefited all participants in developing their metacognitive skills for the specific tasks undertaken. This contrasts with some studies in other domains that have found gender differences in specific metacognitive components (Gutierrez de Blume & Montoya, 2023, para. 15), suggesting that the collaborative and task-oriented nature of this intervention may mitigate such differences within this specific educational context.

The findings, from self-reports and observations, highlight practical implications for translation pedagogy, especially in culturally complex tasks. Task-based instruction effectively enhanced planning and regulatory skills, showing the

value of pre-task organization and goal-setting activities. Improved procedural knowledge and debugging, seen in refined strategy use and peer-supported error correction, emphasize the need for authentic, culturally-rich tasks. The positive response suggests task-based instruction can develop both linguistic and metacognitive skills for complex translations.

However, limitations include a small sample ($n=23$) from one Iranian university, limiting generalizability. Future research should involve larger, diverse cohorts. The pre-post design lacked a control group, so other factors may have influenced results. While instructor observations provided context, metacognitive awareness relied on self-reports (MAI), which may not fully reflect actual skills. Future studies should use multiple measures (think-aloud protocols, performance assessments) and explore long-term effects and optimal task sequences for different translation challenges.

Conclusion

This study provides initial evidence suggesting that the implemented task-based instruction was associated with improved metacognitive awareness. Participants demonstrated notable improvements in self-reported metacognitive knowledge and, more substantially, in regulation of cognition, particularly in planning and procedural knowledge. These self-reported gains were complemented by instructor observations of increased student autonomy in strategic planning, active learning monitoring, and adaptive problem-solving during collaborative tasks. For this cohort and course context, the task-based instruction approach appeared to foster crucial cognitive strategies and self-regulatory capacities necessary for navigating complex translation tasks involving cultural nuances.

The intervention seemed to strengthen participants' abilities to apply task-specific strategies and engage more metacognitively in classroom activities, with comparable benefits observed for both male and female students within this group.

While these combined findings are encouraging for the specific context investigated, the study's inherent limitations—such as the small, context-specific sample, absence of a control group, and primary reliance on self-report measures—necessitate caution in generalizing these results more broadly.

The promising outcomes observed, particularly the gains related to tackling challenging idiomatic and cultural content, underscore the need for further investigation. Future research should aim to replicate these findings in diverse translation courses and contexts, with larger and more varied populations, and by employing a wider range of data collection methods to strengthen the evidence base. Longitudinal studies tracking the long-term impact on professional practice would also be invaluable. Such endeavors are crucial for more definitively validating the practical benefits of task-based instruction and its potential role in developing skilled, reflective translation professionals.

References:

- Angelone, E. (2010). Uncertainty, uncertainty management and metacognitive problem solving in the translation task. In *Translation and cognition* (pp. 17–40). John Benjamins.
- Avval, S. F. (2013). Teaching translation: A look at the way it is in Iranian universities and the way it should be. *Translation Journal*, 16(3), 21.
- Bhat, N., Gurung, S., Gupta, M., Dhungana, N., & Thapa, R. K. (2022). Enhancing collaborative learning through peer-assisted learning. *Journal of Physiological Society of Nepal*, 3(1), 4–9. <https://doi.org/10.3126/jpsn.v3i1.57762>
- Biswas, G., Kinnebrew, J. S., & Segedy, J. R. (2014). Using a cognitive/metacognitive task model to analyze students learning behaviors. *Foundations of Augmented Cognition. Advancing Human Performance and Decision-Making through Adaptive Systems: 8th International Conference, AC 2014, Held as Part of HCI International 2014, Heraklion, Crete, Greece, June 22–27, 2014. Proceedings 8*, 190–201.
- Chen, Y.-M. (2024). Integrating translation crowdsourcing into metacognitive translator training: Raising awareness of conditional knowledge and its monitoring functions. *The Interpreter and Translator Trainer*, 18(1), 19–39.
- Dewey, J. (2024). *Democracy and education*. Columbia University Press.

- Ebrahimi, N. A. (2013). Constructivist translation classroom environment survey (CTLES): Development, validation and application. *Translation & Interpreting*, 5(2), 163–186.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415.
- Gabr, M. (2001). Toward a model approach to translation curriculum development. *Translation Journal*, 5(2), 1–13.
- Ghazizadeh, K., & Jamalimanesh, A. (2010). A Glance at the Ailing System of Teaching Translation in Some Iranian Universities. *Iranian Journal of Translation Studies*, 8(30).
- González-Davies, M. (2004). *Multiple voices in the translation classroom*.
- Guangwei, H. U. (2003). Task-based Language Learning and Teaching. *Asian Journal of English Language Teaching*, 13, 125–129.
- Gutierrez de Blume, A. P., & Montoya, D. (2023). Exploring the Relation Between Metacognition, Gender, and Personality in Colombian University Students. *Psykhē*, 32(2).
- Hajmalek, M. M., & Aghamohammadi, J. (2023). Applying Task-based Language Teaching to Translation Instruction: Challenges and Prospects. *Language Related Research*, 13(6), 99–129.
- Harrison, G. M., & Vallin, L. M. (2018). Evaluating the metacognitive awareness inventory using empirical factor-structure evidence. *Metacognition and Learning*, 13, 15–38.
- Hosseini, R., Tajvidi, M., & Kerremans, K. (2019). Social constructivist principles in undergraduate translator training programs: Bridging the gap between market demands and students' needs in Iran. *Iranian Journal of Translation Studies*, 11(4), 35–50.
- Hurtado Albir, A. (2007). Competence-based curriculum design for training translators. *The Interpreter and Translator Trainer*, 1(1), 163–195. <https://doi.org/10.1080/1750399X.2007.10798757>
- Khoshsaligheh, M., Haroon, H., & Karimdadian, S. (2011). Social constructivism in English and Persian translation class. In *Seminar on translation of South East Asian languages, Universiti Sains Malaysia*. <http://profdoc.um.ac.ir/articles/a/1033645.pdf>
- Kiraly, D. (2000). *A social constructivist approach to translator education: Empowerment from theory to practice*. Routledge.
- Li, D. (2013). Teaching business translation: A task-based approach. *The Interpreter and Translator Trainer*, 7(1), 1–26. <https://doi.org/10.1080/13556509.2013.10798841>
- Li, M., & Zhu, W. (2013). Patterns of computer-mediated interaction in small writing groups using wikis. *Computer Assisted Language Learning*, 26(1), 61–82.

- Long, M. (2014). *Second language acquisition and task-based language teaching*. John Wiley & Sons.
- Matalu, K. Y. (2024). Effectiveness of task-based approach in teaching translation: A study of Tanzanian secondary EFL classrooms. *JELITA*, 5(2), 471–488.
- Mellinger, C. (2019). Metacognition and self-assessment in specialized translation education: Task awareness and metacognitive bundling. *Perspectives*, 27, 604–621.
- Melnichuk, M. V., & Osipova, V. M. (2017). Cooperative learning as a valuable approach to teaching translation. *XLinguae*, 10(1), 25–33.
- Mohammadipour, M., & Rashid, S. M. (2015). The impact of task-based instruction program on fostering ESL learners' speaking ability: A cognitive approach. *Advances in Language and Literary Studies*, 6(2), 113–126.
- Oliveira, C. (2004). Implementing task-based assessment in a TEFL environment. In B. L. Leaver & J. R. Willis (Eds.), *Task-based instruction in foreign language education: Practices and programs* (pp. 253–279). Georgetown University Press.
- Piaget, J. (1970). *Science of education and the psychology of the child* (D (Trans.). Orion. Coltman, Trans.).
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231.
- Rezvani, R., & Askari Bigdeli, R. (2013). Task-based teaching on translation: Departure from equivalence-based approach. *Translation Studies Quarterly*, 11(41), 67–84.
- Rodríguez-Inés, P., & Hurtado, A. (2012). Global trends in translator and interpreter training: Mediation and culture. In S. Hubscher-Davidson & M. Borodo (Eds.), *Assessing competence in using electronic corpora in translator training* (pp. 96–126). Continuum.
- Schraw, G., & Dennison, R. S. (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology*, 19(4), 460–475.
- Shreve, G. M. (2006). The deliberate practice: Translation and expertise. *Journal of Translation Studies*, 9(1), 27–42.
- Storch, N. (2005). Collaborative writing: Product, process, and students' reflections. *Journal of Second Language Writing*, 14(3), 153–173.
- Varney, J. (2009). From hermeneutics to the translation classroom: A social constructivist approach to effective learning. *Translation & Interpreting: The International Journal of Translation and Interpreting Research*, 1(1), 29–45.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wang, C. (2018). Efficient English translation teaching reform based on constructivism guidance. *International Conference on Educational Research, Economics, Management and Social Sciences*.

Appendix 1. Sample Activity

Activity (14): Recipes and Cultural Identity – Translating Food Across Cultures

Aims

- To explore how food reflects cultural identity and values.
- To develop students' critical thinking about the cultural elements embedded in food-related language.
- To prepare students for translation tasks involving culturally specific content.

Level: Intermediate to Advanced

Grouping: Groups of four students

Approximate Timing: 65 minutes

Step 1: Group Formation and Cultural Exploration (15 minutes)

- Students will form groups of three.
- Students will read and discuss the following questions: a. How does food reflect cultural identity in each context? b. What elements might be difficult to translate for a non-native audience?

Step 2: Translation of Sample Recipes (30 minutes)

- The instructor will introduce the context: an international restaurant in Tehran (Sky Lounge) is seeking Farsi translations of foreign recipes to expand its menu.
- Each group will:
 - Access the following English-language recipes online:
Scottish Oatmeal Rolls available at <https://www.tasteofhome.com/collection/travel-around-the-world-in-80-meals/>
 - Nikki's Perfect Pastitsio available at <https://www.tasteofhome.com/recipes/nikki-s-perfect-pastitsio/>
 - Use online sources and AI tools (if needed) to research difficult ingredients or cooking terms.
 - Each group Translate one recipe into fluent and culturally appropriate Farsi, paying attention to terminology, measurements, and cooking methods.

Step 3: Peer Review (20 minutes)

- Groups exchange their translated recipes with another group.
- Each group reads the other's translation and focuses on:
 - Accuracy of key culinary terms and instructions.
 - Clarity and fluency of language.
 - Cultural appropriateness and tone.
- Groups then meet briefly to discuss their feedback with each other.

- After discussion, each group finalizes their own translations based on peer suggestions and prepares a polished draft.

Appendix 2: Metacognitive Awareness Inventory: the Modified Version

Metacognitive Awareness Inventory (MAI)

The revised version for students majoring in Translation studies at the undergraduate level

	True	False
1. I regularly check if I am meeting my learning goals.		
2. Before answering, I consider several alternatives to a problem.		
3. I consciously employ translation strategies that have been effective in the past.		
4. I manage my time effectively while learning to ensure I have enough time.		
5. I have a clear understanding of my strengths and weaknesses in translation.		
6. I think about what I need to learn before starting a translation task.		
7. I assess my translation performance once I finish a translation assignment.		
8. I set specific goals before starting a task.		
9. I slow down when encountering important information.		
10. I am aware of what type of information is most crucial to learn.		
11. I ask myself if I have considered all options when solving a problem.		
12. I am skilled at organizing translation-related information.		
13. I consciously focus my attention on important translation-related information.		
14. I have a specific purpose for each translation strategy I use.		
15. I find learning more effective when I have prior knowledge about the topic.		
16. I am aware of the learning expectations set by my instructors.		
17. I am skilled at remembering translation-related information.		
18. I adapt my learning strategies based on different translation situations.		
19. I reflect on whether there was an easier way to translate something after completing a translation task.		
20. I feel in control of my learning process.		
21. I periodically review materials to understand important relationships.		
22. I ask myself questions about translation materials before beginning a task.		
23. I brainstorm several ways to translate a text and choose the best one.		
24. I summarize what I've learned from a translation task after completing it.		
25. I seek assistance from others when I don't understand certain translation concepts.		
26. I can motivate myself to learn when necessary.		
27. I am aware of the translation strategies I employ while studying.		
28. I analyze the effectiveness of translation strategies while studying.		
29. I utilize my strengths in translation to compensate for my weaknesses.		
30. I focus on the meaning and significance of new translation-related information.		

31. I create my own translation examples to enhance understanding.		
32. I am able to accurately judge my understanding of concepts.		
33. I automatically employ helpful translation strategies.		
34. I regularly pause to check my comprehension while studying.		
35. I am aware of when each translation strategy I use will be most effective.		
36. I assess how well I achieve my translation goals once I finish a task.		
37. I create visual aids such as diagrams or pictures to aid in understanding while learning.		
38. I ask myself if I have considered all translation options after solving a translation problem.		
39. I attempt to translate new information into my own words to aid understanding.		
40. I switch translation strategies when facing difficulties in understanding.		
41. I utilize the organizational structure of a text to aid in learning translation.		
42. I carefully read instructions before beginning a task.		
43. I question if what I'm translating is related to what I already know.		
44. I reassess my assumptions when I encounter confusion in translation.		
45. I effectively organize my time to accomplish my goals.		
46. I find myself more engaged in learning when interested in the topic.		
47. I break down studying into smaller manageable steps.		
48. I prioritize understanding overall meaning rather than specific details in translation.		
49. I regularly question my progress while learning.		
50. I assess if I have maximized my learning potential upon completing a translation task.		
51. I pause and revisit unclear information		
52. I stop and reread translation materials when I encounter confusion.		