

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

TRANSLATOR TRAINING IN LIGHT OF BLOOM'S TAXONOMY OF LEARNING OBJECTIVES: DESIGN OF A MODULAR CURRICULUM IN THE IRANIAN CONTEXT

Saleh Sanatifar
Universiti Sains Malaysia

Leelany Ayob
Universiti Sains Malaysia

Abstract

In many countries, translation training is provided in the form of certificate and degree programs. Those who do not choose to pursue a degree (but are interested in translation as a source of income) enroll in certificate programs and acquire the fundamentals of translation in a rather shorter amount of time. Compared to degree programs, certificate programs have the great advantage of meeting market needs where an unlimited number of pages are waiting to be translated by a limited number of (human) translators. Iran is a country that, despite its great potential to recruit many translators, lacks such certificate programs. To fill the gap, a modular curriculum for translation training in Iran was designed. As learning and translation are intertwined cognitive

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

processes, the researchers chose to link Bloom's learning objectives with Chesterman's domains of translation skill development. Finally, a modular curriculum was proposed to be tested in the context of Iran. The researchers believe that, with a few adaptations, this curriculum can be used in different contexts.

Keywords: translation, training, Bloom, curriculum, competence, Iran

1. INTRODUCTION

The potential needs of the multi-billion-dollar market of translation have already evoked many candidates with proficiency in at least two languages to seek professional translator training courses (rather than the ones offering a degree in translation) to learn translation with market-driven income purposes in mind. The difference between such short-term training courses and the long-term degree ones is that in the former the candidates focus more on the market-driven practice of translation while the latter engages them with a detailed curriculum which "tends to be dominated by the subtle skills, such as language training and area studies, rather than imminent skills like translation practice in the working environment" (Yan, 2004, p. 9). In many countries, the path to an accredited professional translator is organized in the form of modular intensive certificate courses (e.g.,

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Denmark, England, the United States, and Australia) but in many others, it is organized through degree programs before finding a chance to translate for the market (examples are ASEAN countries). This rather lengthy process often dissuades prospective candidates from registering. The lack of such professional courses has some consequences: either the candidates withdraw and the needs of the market are overflowed, or the market is overflowed with translators who have the least knowledge and skills of translation and produce awkward translations relying only on their language proficiency skills. This is the status quo in the second group of countries including Iran.

Every professional course should be catered to by a curriculum. The translator training certificate course, as suggested in this article, is not an exception. Getting ideas from several certificate courses¹, the present article aimed at proposing a modular certificate course, guided by Bloom's cognitive framework of learning objectives targeting the candidates who are already trained in the lower cognitive levels (remembering and understanding) and are proficient users of language (a C2 certificate in the CEFR chart). Higher cognitive levels are specifically handled in the curriculum. Bloom's cognitive approach

¹ <https://www.tomedes.com/translator-hub/translation-certification-courses>

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

was adopted as the general goal of every translator training course is all about changing the cognitive behavior of the candidates from novice (blank) to expertise (full). Also, Bloom's taxonomy is one of the most inspiring cognitive frameworks used in education and curriculum design which builds upon the hierarchical levels of human learning (Anderson et al. 2001). Some studies have applied Bloom's taxonomy to evaluate the translation curriculum in Iran (Divsar, 2019; Pourdana & Rajeski, 2013; Rezvani & Zamani, 2012) but almost no studies have, to date (September 2022), addressed applying it to design a curriculum, especially for a professional modular course.

2. LITERATURE REVIEW

2.1 Contextualizing the Research

Translator training in Iran is a four-year bachelor's program. Candidates need to take several courses including language proficiency (about 70 hours), core and field-specific (about 400 hours), and practice (about 570 hours). They have to go through a bulk of proficiency and theoretical courses during the first three years and only get involved with translation practice during the fourth year, what they truly need most for being a competent translator. However, researchers have addressed several challenges with the Iranian translator

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

training course. Kafi, et al. (2018) referred to many challenges regarding translator training in Iran including the outdated syllabi and neglecting the role of experienced translators. Salari and Khazaei Farid (2015) remarked that when graduated students step into the translation market, they lack the required translation skills. Khoshsaligheh, et al. (2019) revealed through a needs analysis that the courses related to translation practice in the Iranian translator training curriculum were ranked as the most important component of the curriculum, highlighting that the candidates favor practice-oriented courses the most.

Another challenge in the Iranian translator training system is the lack of certificate courses to cater to the candidates reluctant to register for a degree course (due to lack of time, age, availability, etc). This is an almost neglected area and hence came to be the main concern of the present article. Of course, translation workshops are sporadically held in Iran but they are not curriculum-based courses offered regularly or in affiliation with accredited institutes. The authors of this article assume that this and the aforementioned problems have caused the current problematic situation and overflow of novice inexperienced translators into the Iranian translation market. In Iran, anyone with an average knowledge of a foreign language may claim to be a translator (Kafi, et

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/ctt120223>

al., 2018). They remarked that there are no specific criteria for entering the field of professional translation. Designing a modular translator training course with a certificate attained through a systematic examination would act as the minimum requirement for anyone who wants to claim the title of 'translator' in Iran and help this group of candidates both meet their goal and deliver more quality services to the market. Although a so-called translation modular course is annually offered to those interested in working in the translation market in Iran², a modular comprehensive course designed in light of established course- and curriculum-design frameworks, such as Bloom's learning objectives, is significantly absent and highly demanded in Iran.

2.2 Translation/Translator Competence Models and Translation Curricula

This article was mainly concerned with the design of a modular translation curriculum. As Dastyar (2019) stated, curriculum design follows several stages, one of which is acquiring 'competence' as "a learning outcome to student profiles" (Dastyar, 2019, p. 79). In the translator training context, Li (2022) also discussed the

² This is a 36-hour interactive, project-based course on "Basics of Translation" that is offered in three modules: 1) ABC and strategies of translation, 2) Translating general texts, and 3) translating advanced texts. (<https://www.farzanehfarahzad.com/product/ogtc/>)

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

implications of translation competences (including linguistic, psycho-physiological, interpersonal, extra-linguistic, and instrumental) in the evaluation, and modification of classroom learning, pedagogical innovation, curriculum renewal, and admission interviews. Thus, before reviewing translation curricula, some views regarding translation/translator competence are reviewed.

Jiménez-Crespo defined translation competence as “the learning objective of translation training” (Jiménez-Crespo, 2013, p. 40). PACTE, a leading group in empirical studies on translation competence, defines it as “the underlying knowledge system needed to translate” (PACTE, 2005, p. 610). Bell described it as “the knowledge and skills the translator must possess to carry out translation” (Bell, 1991, p. 43). As the present study anchors around designing a curriculum for translator training, a brief review of translation and translator competence models is necessary.

Translation is not merely a linguistic operation but is also the result of the cognitive processing in a translator's mind (Alves & Hurtado Albir, 2010; Chesterman, 2000; Hurtado Albir, 2001, 2011; Hurtado Albir & Alves,

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

2009). Gaining 'translation competence'³ and being a competent translator is the goal of any trainee. As such, to investigate success in translating, one has to consider the mental processes (the way to gain competences) and the mental abilities and skills that translators need to possess to do a translation task adequately. Such requirements are enlisted in the curriculum. Coban declares "translation [...] requires some skills such as language acquisition, text competence, research competence, cultural competence, transfer competence and abilities such as decision-making, creativity, [...]" (Coban, 2015, p. 708). For example, due to technological developments, translators need to know how to apply technology (such as translation software, memories, corpora, translation machines such as Google translator, electronic dictionaries and encyclopedias, etc.) to quickly choose among many alternatives and make decisions (Pym, 2012b).

Research on TC began in the 1980s and became prominent in the 1990s when the first competence-based models were proposed. The early models were componential, i.e., breaking TC down into various components (Hurtado Albir, 2015). Since 2000, research on TC has been carried out from a range of perspectives

³ Other labels have also been used for translation competence such as translation ability, skill, or expertise.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

(Hurtado Albir, 2015). For example, the PACTE group (2003, 2005) proposed a holistic and the most empirical model. The PACTE group (2003) defined TC as the underlying system of knowledge, abilities, and attitudes required to be able to translate; an overall competence which they broke down into six interrelated sub-competences including *bilingual*; *extra-linguistic*; *instrumental*; *knowledge of translation*; *psycho-physiological* and *strategic sub-competences*. They believed that the empirical attempt to investigate the acquisition of TC and to know more about how TC functions and how it is acquired is to result in better curricular designs for training professional translators and this was their ultimate goal (PACTE, 2003). Elsewhere, they believed that TC acquisition is: (1) A dynamic, spiral process that, like all learning processes, evolves from novice knowledge (pre-translation competence) to expert knowledge (translation competence); it requires learning competence (learning strategies) and during the process, both declarative and procedural types of knowledge are integrated, developed and restructured. (2) A process in which the development of procedural knowledge and, consequently, of the strategic sub-competence is essential, (3) A process in which the TC sub-competencies are developed and restructured (PACTE, 2005).

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Research on TC acquisition has largely focused on employing constructivist education theories (Kelly, 2005; Tao, 2012), blended learning using Information and Communications Technologies (ICTs) (Liu, 2015), or fostering teleworking and collaborative working environment (Olvera-Lobo et al., 2009). As Calvo claims, “understanding the original perspective adopted by each competence model can help analyze its usability within curriculum contexts” (Calvo, 2011, p. 6). She further declares that “TC as an object of theoretical study has already been widely used to inform curriculum processes in the field” (Calvo, 2011, p. 7). As Schäffner and Adab (2000) put it, for planning a course to develop TC (as something more complex than simply improving performance), the overall structure of the curriculum, the stages of progression and development of different sub-competences, the choice and timing of specific modules, components and courses, all need to be taken into account. Given this fact, the main task of translation teachers in the curriculum is to create conditions under which this progressive internalization can take place. These conditions are practice-oriented courses or practicum.

Inspired by Dreyfus and Dreyfus (1980), Kiraly (2013) and Chesterman (1997) proposed their models of translator competence and translator training for that

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

purpose. In his four-dimensional emergence model, Kiraly (2013, p. 211) believes that translator competence is progress from novice to expert and a process of learning translation is a complex interplay of emergent processes of progressively incorporating experience and learning into the emerging sub-systems and not a direct result of teaching. In his five-stage translator training model, Chesterman (1997) has also proposed a hierarchical translator training model in which he believes the candidates progress from the 'novice' stage to the 'expertise' stage. He defined five stages including *Novice translator* (getting acquainted with translation, s/he tries to learn the basic rules and his/her perception of the subject is mainly atomistic, because s/he "...operates in terms of particular, separate activities"; *Advanced beginner* (starts to be able to "think outside" the concepts that were introduced in the first stage and connect them, his/her behavior becomes less atomistic); *Competence stage* (trainees gain the ability to prioritize among various "situational features" of the task and perceive it as a goal-oriented problem-solving activity. They become aware of the responsibility this particular task involves, which in turn leads to greater emotional involvement in the process); *Proficiency* (intuition and personal experience are introduced into the equation, however, they both rest on the rules and concepts introduced in the previous three stages), and *Expertise*

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

(the expert is driven predominantly by intuition and although s/he is capable of critical self-reflection, intuition is the main mode of operation; "...for real experts, things that might be problems for others are merely routine matters".) Chesterman (1997) relates this hierarchy to translator trainees' internalization of concepts and becoming experts in applying them appropriately. As Chesterman states, "the overall process of skill acquisition is thus one of gradual automatization: it goes from atomistic to holistic recognition, from conscious to unconscious responses, from analytical to intuitive decision making, from calculative to deliberative rationality, from detached to involved commitment" (Chesterman, 1997, p. 150). He states that stage by stage, translator trainees have 1) recognition of predefined features and rules; 2) recognition of non-defined relevant features; 3) hierarchical and goal-oriented decision-making; 4) intuitive understanding plus deliberative action, and 5) fluid performance plus deliberative rationality. The latter model was adopted as the underlying model of translator training in the present article.

In translator training courses, little research has been devoted to systematic curriculum design processes and the inadequacy of the courses to prepare students for the

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

market (Kelly, 2010) as well as the curricula of professional translator training (Pym, 2012a).

Many TC models have roots in two polarized declarative and procedural knowledge that translators need to possess: through procedural knowledge, they know *how* to translate (theory of translating) and through declarative knowledge, they set their skill and expertise within a systematic framework (translation theory) (Bell, 1991; PACTE, 2003, 2005; Shreve, 1997, 2006; Wilss, 2009). These two basic types of knowledge are complementary. As Shreve (2006) stated, with practice, declarative knowledge changes to procedural knowledge. Together, they enable translators to tackle the problem-solving processes that constitute the mainstay of any translator-training course. Academic courses predominantly call for a declarative curriculum and translator training courses for a procedural curriculum. As Neubert (2003) explains, of primary importance in designing a curriculum is not just the way these competencies supplement or enrich each other, but the skills that dominate the rest. It is the practical aspect that brings about expertise. Therefore, TC development needs enough practice which, in turn, makes specific demands on the cognitive system of the students. Given that gaining expertise in translation requires practice, any attempt at defining competence must take into account

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

the sheer complexity of the demands that are made on the cognitive skills of the students.

Kelly (2005) took a participant-oriented approach to translation curriculum development in which a logical link is made between different dimensions of the curriculum including objectives, content, methods, and the assessment. For Kelly, curriculum development involves identifying social needs, formulating outcomes, identifying students' profiles and needs, designing course content, identifying resources, designing activities, designing assessments, designing course evaluations, implementing the curriculum, and enhancing the quality. Kelly maintained that many contextual factors influence the curriculum structure such as "social needs, professional standards, industry's needs and views, institutional policy, institutional constraints, disciplinary considerations, and student/trainee profiles" (Kelly, 2005, p. 22). She suggested a list of areas of competence desirable for purposes of curricular design. Her list includes 1) Communicative and textual competence in at least two languages; 2) Cultural and intercultural competence; 3) Subject area competence; 4) Professional and instrumental competence; 5) Attitudinal or psychophysiological competence; 6) Interpersonal competence, and 7) Strategic competence. Her list is subject to modifications, as she states, depending on how general

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

or specific the goals, objectives, and outcomes of the curriculum need to be (Kelly, 2005, p. 32).

Kearns (2006) remarked that translation curricula are either vocational (which tend to respond to what translators should know or be able to do to be competent professionals in a specific industry) or academic (which rather focus on descriptive, more theoretical translational conceptions of language, intercultural transfer, (literary) translation analysis, linguistics, etc.). Inspired by the task-based approach to translator training, Delisle (1980) identified four major essential competences: linguistic, encyclopedic, comprehension, and re-expression. Hurtado (1996) offered a model with five sub-competences: linguistic competence in two languages; extra-linguistic competence; analysis and synthesis; translational competence, and professional competence.

3. METHOD

3.1 Bloom's Taxonomy of Learning Objectives

Bloom's taxonomy is a framework for classifying statements of what we expect students to learn and know at the end of an instructional program (learning objectives). It has three domains: cognitive, affective, and psychomotor. Benjamin S. Bloom, the Associate Director of the Board of Examinations of the University

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

of Chicago, initiated the idea. He enlisted a group of measurement specialists from across the United States to meet twice a year beginning in 1949 to consider progress, make revisions, and plan the steps. Their final draft, which consisted of six hierarchical categories along with 24 specific processes, was published in 1956 (since then it has been called the original taxonomy). The categories and their specific processes elevated from lower-order thinking skills to higher-order thinking skills. Bloom believed that the taxonomy could serve as,

- a common language about learning goals to facilitate communication among persons, subject matter, and grade levels;
- the basis for determining for a particular course or curriculum the specific meaning of broad educational goals, such as those found in the currently prevalent national, state, and local standards;
- means for determining the congruence of educational objectives, activities, and assessments in a unit, course, or curriculum;
- panorama of the range of educational possibilities with which the limited breadth and depth of any particular educational course or curriculum could be contrasted. (Krathwohl, 2002, p. 212).

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

In the revised framework (called Revised Taxonomy), which was developed 45 years later in much the same manner, the original number of hierarchical categories, six, was retained, but with important changes. Three categories were renamed, the order of two was interchanged, and those category names retained were changed to *verb* form to fit the way they are used in objectives (Anderson et al., 2001; Krathwohl, 2002).

The specific cognitive processes were also reduced to 19. Indeed, the nature of the revision's six major categories emerges most clearly from the descriptions given for the specific cognitive processes. Together, these processes characterize each category's breadth and depth. The bottom-up structure of the cognitive process dimension of the Revised Taxonomy is as follows (Anderson et al. 2001; Krathwohl 2002, p. 215):

1. *Remembering* – Retrieving relevant knowledge from long-term memory
2. *Understanding* – Determining the meaning of instructional messages, including oral, written, and graphic communication
3. *Applying* – Carrying out or using a procedure in a given situation

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

4. *Analyzing* – Breaking material into its constituent parts and detecting how the parts relate to one another and an overall structure or purpose

5. *Evaluating* – Making judgments based on criteria and standards

6. *Creating* – Putting elements together to form a novel, coherent whole or make an original product

Bloom's taxonomy has been successfully applied for designing curricula and learning objectives, material development, and also assessment and evaluation in a variety of disciplines including teaching and learning English, mathematics, music, online education, etc. (examples are Anthony, 2007; Chyung & Stepich, 2003; Crews, 2010; Garekwe, 2010; Gegen, 2006; Hawks, 2010; Larkin & Burton, 2008; Plack et al., 2007; Valcke, et al., 2009). Not only Bloom's Taxonomy but his Revised Taxonomy has been used in different fields (examples are Canon & Feinstein, 2005; Hanna, 2007; Pickard, 2007; Wheeler, 2007). Almost all these studies have proved the applicability and efficiency of Bloom's Taxonomy in different fields. This taxonomy has not so far been applied to translator training, although Pourdana and Rajeski (2013) applied it to present a model for quality assessment and grading of texts. They concluded that Bloom's taxonomy of educational objectives was a

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

breakthrough in grading English texts, except for texts of synthesis which they attributed to the misinterpreting, narrowing down, or delimiting the number of behavioral objectives listed in Bloom's while selecting the synthesis text.

3.2 Conceptualizing and Designing the Curriculum

In this section, the modular translator training (M-TrT) course is conceptualized, i.e., the content is rationalized and determined based on a tentative integration of Chesterman's (1997) translator training procedural model and Bloom's taxonomy. The rationale behind drawing Chesterman's model is the pedagogical orientation of the model that makes it appropriate for our purpose (designing the–*M-TrT*– curriculum).

Designing an effective curriculum with achievable objectives is the first essential step to run a translator training course. An effective curriculum needs to follow the principles of human learning. For this reason, most authors employ Bloom's taxonomy as it models human learning. In this section, first, the theoretical adequacy of Bloom's taxonomy is justified. This will be the basis of curriculum design, learning objectives, and course contents in this article. What rationalizes the integration of Bloom's taxonomy and translator training is the cognitive essence of both in that they develop in stages

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

hierarchically. Kiraly (1995, p. 111) explains this phenomenon:

As the translation student moves further along the evolutionary path from [novice] translator to high-quality professional translator, the skills that are required are (a) less likely to be acquired by repeated practice, (b) less likely to develop naturally without specific training and pedagogical intervention, and c) more likely to involve translation quality at levels beyond that of mere semantic and syntactic correctness.

To reach the goal (which is acquiring skills and expertise in translating different types of texts accurately and properly), objectives and levels must be defined and determined. Therefore, different levels of Bloom's taxonomy are assumed to match translation stages and contribute to them. It is also assumed that Bloom's taxonomy would justify the nature and sequence of translation practice in the curriculum besides the selection and gradation of texts. In other words, based on Bloom's taxonomy, decisions could be made as what translation practical activities should be assigned to trainees (and in what sequence) in their initial stages of competence development and what activities (and in what sequence) should be preserved for later stages when they are competent and expert enough in translation (Table 1).

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Table 1. Chesterman’s skill domains aligned with Bloom’s learning objectives

Domains of translation skills development (Chesterman’s stages)	Stages of competence development (Bloom’s taxonomy)
-----	The candidates are assumed to have acquired the first two levels (remembering and understanding). These should work as pre-requisite to the course.
<i>Novice translator</i> – is getting acquainted with translation, s/he tries to learn the basic rules and his/her perception of the subject is mainly atomistic because s/he “...operates in terms of particular, separate activities”	1. Applying (basics of ST/TT morphology, syntax, semantics, discourse analysis) (translation theories, methods, and techniques of translation to make decisions at this mediatory ‘transfer’ stage) (basics of using technology in translation (e.g., CAT tools, TMs, MTs, etc.)
<i>Advanced Beginner</i> –	

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

<p>is starting to be able to “think outside” the concepts that were introduced in the first stage and connect them, his/her behavior becomes less atomistic</p>	
<p><i>Competence stage</i> – trainee gains the ability to prioritize among various “situational features” of the task and perceive it as a goal-oriented problem-solving activity. S/he becomes aware of the responsibility this particular task involves, which in turn leads to greater emotional involvement in the process.</p>	<p>2. Analyzing (implicit and explicit meanings of ST/TT based on textual, contextual, and paratextual information) 3. Evaluating (ST/TT in terms of style, register, voice, ... and justifying, revising, and defending the decisions to be made for similar features in TT).</p>
<p><i>Proficiency</i> – intuition and personal experience are introduced into the</p>	<p>4. Creating (developing and constructing a new text in</p>

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

<p>equation, however, they both rest on the rules and concepts introduced in the previous three stages.</p>	<p>TT)</p>
<p><i>Expertise</i> – the expert is driven predominantly by intuition and although s/he is capable of critical self-reflection, intuition is the main mode of operation; “...for real experts, things that might be problems, for others are merely routine matters”.</p>	

In Table 1, Chesterman’s five stages of TC development are aligned with Bloom’s multi-level framework of learning objectives. It is noticeable that in this alignment, the initial two cognitive levels of ‘remembering’ and ‘understanding’ are considered as pre-requisite of the curriculum. In other words, in this curriculum, candidates are expected to carry on advanced proficiency

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

in the language pair with which they are going to work. Candidates with low language proficiency are considered illegible to register for the course. To tackle this issue, an entry or admission examination like TOEFL (focusing on the written aspects of languages) or the like could be designed to let the candidates register and sit for the course. As such, the alignment begins with Bloom's third level of 'application' that jointly conceptualizes the 'novice' and 'advanced beginner' stages of Chesterman's translator training model. These stages are assumed to help the candidates learn how they should apply basic linguistic features of the pair of languages including the predefined and non-defined morphological, syntactic, semantic, and discursive rules of the source and target languages (assigned to module 1) and translational methods, techniques and the basics of using technology in translation (e.g. CAT tools, TMs, MTs, etc.) to bridge source and target languages at this mediatory 'transfer' stage and link them to the concepts they acquired in the 'novice' stage (assigned to module 2).

Bloom's levels of 'analysis' and 'evaluation' jointly conceptualize the 'competence' stage of Chesterman's model. Trainees have to analyze and evaluate ST and TT to induce and interpret the meanings. Due to the dual-bound nature of translation (bound to ST and its norms on the one side and the TT and its norms on the other

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

side), both ST and TT need to be analyzed and evaluated in terms of discourse, register, purpose, style, register, voice, readership, intertextuality, formality, implicit and explicit meanings, and other communicative functions based on textual, contextual, and paratextual information. These two cognitive levels pave the way for the last goal-oriented hierarchical decision-making stages, i.e., creation.

'Creation' as the highest level in Bloom's taxonomy conceptualizes the 'proficiency' and 'expertise' stages in Chesterman's model. This is because both stages closely focus on intuition-driven skills of translation (the latter slightly more). This is the point where candidates are assumed to be competent and expert enough to put into practice what they have acquired in the previous stages of their TC development. Importantly, this stage applies well to translator training because translation is after all an act of creation. These cognitive levels are associated with intuitive understanding and deliberative translation action (proficiency) and fluid performance in translation as well as deliberative rationality (expertise). The alignment shows that Bloom's learning objectives (applying, analyzing, evaluating, and creation) are more or less applicable to the multi-stage process of TC development. Therefore, in the translation curriculum the translator trainees are expected to:

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

- *apply* the predefined and non-defined lexical, syntactic, semantic, and pragmatic meanings of both the source and target languages particular translational strategies/methods/techniques/procedures for solving problems and making decisions.
- *analyze and evaluate* ST and TT in terms of purpose, style, register, voice, readership, intertextuality, and formality and the implicit and explicit meanings and other communicative functions based on textual, contextual, and paratextual information.
- *create* a text based on the target language codes and context.

Researchers have viewed translation curricula in different ways. Some described it, from an educational perspective, as an expert activity, similar to those adopted by curriculum planners in other fields, i.e., declarative and procedural curricula. It was quoted earlier that in translator training courses, the procedural curriculum should train the candidates for the needs of the market and the working environment (Pym, 2012a), and help them develop the (mostly linguistic) skills they need to produce an acceptable translation and professional practice in future. Others described a curriculum specifically in terms of TC models and from a cognitive perspective. They suggested TC models for

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

curriculum design purposes, each engaged with competences or sub-competences appropriate for market-driven curricula. One such model is Delisle’s (1980) curricular model which includes linguistic, encyclopedic, comprehension, and re-expression competences. Therefore, the overall aim of designing the *M-TrT* course in this article follows:

“Upon completion of the modules, the candidates (with a C2 level on CEFR) are expected to have acquired the basic translation skills (basic linguistic features of languages, methods, and techniques of translation, applying CAT tools, as well as editing and post-editing) to be able to translate general texts and join the market translation as a profession.”

As such, the *M-TrT* course necessitates 100 hours of study, practice, and accreditation. This is the researchers’ suggestion for the *M-TrT* course in the context of Iran; the course contents and duration could be extended from a few weeks to a few months depending on the trainees’ and trainers’ schedules. In the following, the four modules are explained with the specific objectives for each:

Module 1 - Novice:

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

In module 1, candidates should study courses that help them apply basic rules of morphological, syntactic, and semantic contrastive analysis and the most relevant topics useful for translation from both the source and target language perspective. It is important that in this module, the candidates are exposed to the translation practice at a sentence level.

Module 2 - Advanced beginner:

In module 2, candidates are further expected to learn about translational methods and techniques (human or CAT-based) and apply them to tackle particular problems in translating and making decisions. Although candidates learn translational strategies in practice, it is recommended that they translate at a sentence level. This module is expected to prepare candidates for the next two modules through dynamic 'transfer' skills.

Module 3 - Competence:

In module 3, candidates are exposed to real texts (above sentence level). Before any translation practice, they should learn to analyze the basic features of the source text for their genre analysis, style, register, etc., and evaluate target texts textually and contextually (communicative) as well as the implicit and explicit meanings. This module involves the candidates with

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

analysis and evaluation of short simple general texts before setting on translation. A project-based translation practice can enrich the module output.

Module 4 - Proficiency and expertise:

In module 4, translation is more dominantly practiced. Candidates are expected to activate their higher-ordered cognitive skills and creativity to translate; skills that call for a high degree of proficiency, fluency, and expertise. In this module, candidates are expected to put theory into practice, and intuitively translate longer, advanced, or specialized texts from different fields. It is further recommended that additional hours (if possible) be devoted to follow-up activities including editing, or post-editing in translation agencies. Project-based translation practice can enrich the module output.

Table 2. The proposed *M-TrT* course

Module	Training stages	Learning objectives	Contents / study hours*	Credit units

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

1	Novice	Applying	<ul style="list-style-type: none"> • applying basics of ST/TT morphology (6 hrs) in E-P translation • applying basics of ST/TT syntax (6 hrs) in E-P translation • applying basics of ST/TT semantics (6 hrs) in E-P translation • applying basics of ST/TT discourse analysis (6 hrs) in E-P translation 	12
2	Advanced Beginner	Applying	<ul style="list-style-type: none"> • applying theories of translation (6 hrs) • applying techniques and methods of translation (12 hrs) • applying the basics of using technology in translation (e.g., CAT tools, TMs, MTs, etc.) (6) 	12
3	Competence	Analyzing	<ul style="list-style-type: none"> • analyzing genre, style, and register of general simple STs (6 hrs) • translation project I (6 hrs) 	12

Sanatifar, Saleh & Leelany, Ayob (2022). ‘Translator training in the light of Bloom’s Taxonomy of learning objectives: design of a modular curriculum in Iranian context’. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

		Evaluating	<ul style="list-style-type: none"> • evaluating TT products (6 hrs) • translation project II (6 hrs) 	
4	Proficiency & expertise	Creating	<ul style="list-style-type: none"> • creating general advanced translation (12 hrs) • human and machine-aided editing and post-editing of translation (6 hrs) • translation project III (6 hrs) 	18
Certification				2
* The contents, duration, and distribution of study hours per week are open to change				100

4. FINAL REMARKS

Translation Studies scholars have been more dominantly concerned with TC development at a rather abstract level. Also, more attention has been paid to the curricula underlying degree programs. Little translation research has sporadically addressed professional translator training courses for eager but hectic candidates or those who are not motivated enough to go through degree

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

programs. This article was a theoretical attempt to design a curriculum for a modular translator training course (*M-TrT*). The researchers believe that, although the course curriculum needs to be tested, validated, and piloted, it would be highly welcomed by the interested candidates targeting the market and economic purposes.

In so doing, the researchers integrated Chesterman's (1997) multi-stage translator training framework with Bloom's (1956) multi-level cognitive theory of learning objectives and rationalized it. Chesterman's model was selected because it deals with different stages of translator competence development from 'novice' to 'expertise'. Bloom's theory was adopted because it models the sequence of human learning from the very early stages to the very complicated ones (applying, analysis, evaluation, and creation). It was shown that translation, like all types of skill learning, sequentially and cognitively develops through multiple stages. This conceptual integration is important because both models (Chesterman's translator training and Bloom's human learning) are cognitive in nature and largely support each other. The modular (*M-TrT*) curriculum as proposed in this article is a framework that can help the interested candidates reach their goals in a shorter period and more efficiently. It is important to mention that the proposed curriculum is only a prototypical one and is not without

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

pitfalls. However, with some modifications, it could be applied to other language pairs and contexts. Certainly, other researchers in the field of translation curriculum development and translator training could enrich the proposed modules and probe more deeply into the principles, design, and implementation of this or similar courses.

Given the particularities of this 54-credit course as well as the limited timing of the audience, the course runners must adopt or develop specialized materials and course contents to tailor the objectives of the course and the purposes for which the course was offered. A distinctive feature of the course is not to overload the candidates with lengthy materials, but rather provide them with brief and friendly content (authored specifically for this purpose) in the transfer stage of applying, competence stages of analyzing/evaluating, and proficiency/expertise stage of creating. Recently, in Iran, many extra-curricular books have been authored on the basics of linguistic aspects of language (for module 1), methods and techniques and application of CAT tools in translation (for module 2), and teaching practice, editing, and post-editing either manual or machine-based (for modules 3 and 4). These books could be adopted and taught for that purpose. As for the final stages of proficiency/expertise, it is recommended that the course instructors and

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

administrators start with simple texts and proceed to the more complicated ones, but keep it to general texts as the technical texts have their own principles and techniques of translation, and probably necessitate further modules of the same course. It is further advisable that academic instructors are recruited for teaching more theoretical courses (mostly modules 1 and 2) and professional instructors or well-known translators for more practical courses (in modules 3 and 4) or maybe a combination of both as in teaching specific courses such as the use of CAT tools in translation, either may fit (Mellinger, 2017).

Regarding accreditation and certification, it is suggested that the runners affiliate the course with academic institutes or universities where degree programs are offered and translation experts are available to assist with validating the acquired competency of the trainees as predefined in the curriculum and endorse the certificate awarded.

REFERENCES

Ahmadi Safa, M., & Amraii, A. (2011). An evaluation of undergraduate translation curriculum in terms of the development of translation competence. *Language and Translation Studies* 44(3), 22-50.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

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

Alves, F., & Hurtado Albir, A. (2010). Cognitive approaches. In Y. Gambier & L. C. Doorslaer (Eds.), *Handbook of translation studies (I)* (pp.28-35). John Benjamins.

<https://doi.org/10.1075/hts.1>

Bell, R. T. (1991). *Translation and translating: theory and practice*. Longman.

Bloom, B., Englehart, M., Furst, E., Hill, W., & David, Krathwohl. (1956). *The Taxonomy of educational objectives, Handbook I: the cognitive domain*. David McKay.

Calvo, E. (2011). Translation and/or translator skills as organizing principles for curriculum development practice. *Journal of Specialised Translation* 16.

Canon, H., & Feinstein, A. (2005). Bloom beyond Bloom: using the revised taxonomy to develop experiential learning strategies. *Developments in Business Simulations and Experiential Learning* 32, 348- 356.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Chesterman, A. (1997). *Memes of translation*. John Benjamins.

Chesterman, A. (2000). A causal model for translation studies. In M. Olohan (ed.), *Intercultural Faultlines* (pp. 123-136). St. Jerome Publishing.

<https://doi.org/10.1075/btl.132>

Chyung, S. Y., & Stepich, D. (2003). Applying the "congruence" principle of Bloom's taxonomy to designing online instruction. *The Quarterly Review of Distance Education* 4(1), 317-330.

<https://www.learntechlib.org/p/97585/>

Coban, F. (2015). Analysis and training of the required abilities and skills in translation in the light of translation models and general theories of translation studies. *Procedia-Social and Behavioral Sciences* 197, 707-714.

<https://doi.org/10.1016/j.sbspro.2015.07.074>

Crews, C. (2010). *The effects of using bloom's taxonomy to align reading instruction with the Virginia standards of learning framework for English* [Unpublished doctoral dissertation thesis]. Liberty University.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Dastyar, V. (2019). *Dictionary of education and assessment in translation and interpreting studies (TIS)*. Cambridge Scholars Publishing.

Dreyfus, S. E. & Dreyfus, H. L. (1980). *A Five-stage model of the mental activities involved in directed skill acquisition*. Storming Media.

Divsar, H. (2019). Bloom's revised taxonomy across the learning objectives in English translation curricula. *Iranian Journal of English for Academic Purposes* 8(4), 136-152.

http://journalscmu.sinaweb.net/article_103688.html

Gegen, S. (2006). *The effects of higher-level questioning in a high school mathematics classroom* [Unpublished doctoral dissertation thesis]. Wichita University.

Hanna, W. (2007). The new Bloom's taxonomy: implications for music education. *Arts Education Policy Review* 108(4), 7-16.

<https://doi.org/10.3200/AEPR.108.4.7-16>

Hawks, K. W. (2010). *The effects of implementing Bloom's taxonomy and utilizing the Virginia standards of learning curriculum framework to develop mathematics lessons for elementary students*

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

[Unpublished doctoral dissertation thesis]. Liberty University.

Hurtado Albir, A. (2007). Competence-based curriculum design for training translators. *The Interpreter and Translator Trainer* 1(2), 163-195.

<https://doi.org/10.1080/1750399X.2007.10798757>

Hurtado Albir, A. (2015). The acquisition of translation competence. Competences, tasks, and assessment in translator training. *Meta* 60(2), 256–280.

<https://id.erudit.org/iderudit/1032857ar>

Hurtado Albir, A., & Alves, F. (2009). Translation as a cognitive activity. In J. Munday (ed.), *The Routledge companion to translation studies* (pp. 54-73). Routledge.

Jiménez-Crespo, M. A. (2013). Building from the ground up: On the necessity of using translation competence models in planning and evaluating translation and interpreting programs. *Cuadernos de ALDEEU, Special Issue, Translation and Interpreting Training*, 11-42.

Kafi, M., Khoshsaligheh, M., & Hashemi, M. R. (2018). Translation profession in Iran: current challenges and future prospects. *Translator*

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

24(1), 89-103.

<https://doi.org/10.1080/13556509.2017.1297693>

Kearns, J. (2006). *Curriculum renewal in translator training: vocational challenges in academic environments with reference to needs and situation analysis and skills transferability from the contemporary experience of polish translator training culture* [Unpublished doctoral dissertation thesis]. Dublin City University.

Kelly, D. (2005). *A Handbook for translator trainers. Translation practices explained*. St. Jerome.

Kelly, D. (2010). Curriculum. In Y. Gambier, & L. V. Doorslaer (Eds.), *Handbook of translation studies* (pp. 87-94). John Benjamins.

Kiraly, D. (1995). *Pathways to translation: from process to pedagogy*. Kent State University Press.

Kiraly, D. (2013). Towards a view of translator competence as an emergent phenomenon: thinking outside the box(es) in translator education. In D. Kiraly, S. Hansen-Schirra, & K. Maksymski (Eds.), *New prospects and perspectives for educating language mediators* (pp. 197-224). Gunter Narr.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Khoshsaligheh, M., Moghaddas, M., & Ameri, S. (2019). English translator training curriculum revisited: Iranian trainees' perspectives. *Teaching English Language* 13(2), 181-212.

http://www.teljournal.org/article_96238.html

Krathwohl, D. R. (2001). A revision of Bloom's taxonomy: an overview. *Theory into Practice*, 41(4).

https://doi.org/10.1207/s15430421tip4104_2

Larkin, B., & Burton, K. (2008). Evaluating a case study using Bloom's taxonomy of education. *AORN Journal* 88(3), 390-402.

Li, X. (2022) Identifying in-demand qualifications and competences for translation curriculum renewal: a content analysis of translation job ads. *The Interpreter and Translator Trainer* 16 (2), 177-202

<https://doi.org/10.1080/1750399X.2021.2017706>

Liu, B. (2015). A proposed curriculum roadmap for "marketable" undergraduate degrees in translation: it all begins with a digital sciences information session. *Current Trends in Translation Teaching and Learning E* 2, 31-71.

http://www.cttl.org/uploads/5/2/4/3/5243866/chapter_2_garantbiluinnov24.pdf

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Mellinger, C. D. (2017). Translators and machine translation: knowledge and skills gaps in translator pedagogy. *The Interpreter and Translator Trainer* 11(4), 280-293

<https://doi.org/10.1080/1750399X.2017.1359760>

Olvera-Lobo, M. D., Robinson, B., Senso, J. A., MuñozMartín, R., Muñoz-Raya, E., Murillo–Melero, M., Quero-Gervilla, E., Castro-Prieto, M. R., & CondeRuano, T. (2009). Teleworking and collaborative work environments in translation training. *Babel* 55(2), 165-180.

<https://doi.org/10.1075/babel.55.2.05olv>

Pickard, M. (2007). The new Bloom's taxonomy: an overview for family and consumer sciences. *Journal of Family and Consumer Sciences Education* 25(1), 45-55.

<https://www.natefacs.org/Pages/v25no1/v25no1Pickard.pdf>

PACTE. (2003). Building a translation competence model. In F. Alves (ed.), *Triangulating translation: perspectives in process-oriented research*. John Benjamins.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

PACTE. (2005). Investigating translation competence: conceptual and methodological issues. *Meta* 50(2), 609-618.

<https://doi.org/10.7202/011004ar>

Plack, M., Driscoll M., Marquez, M., Cuppernull, L., Maring, J., & Greenberg, L. (2007). Assessing reflective writing on a pediatric clerkship by using a modified Bloom's taxonomy. *Ambulatory Pediatrics* 7(4), 285-291.

<https://doi.org/10.106/j.ambp.2007.04.006>

Pym, A. (2012a). Translator training. In K. Malmkjær, & K. Windle (Eds.), *Oxford companion to translation studies*. Oxford University Press.

Pym, A. (2012b). Translation skill-sets in a machine-translation age, Intercultural Studies Group Universitat Rovira I Virgili, Tarragona, Spain

http://usuaris.tinet.cat/apym/online/training/2012_competence_pym.pdf

Pourdana, N., & Rajeski, J. C. (2013). Estimating the difficulty level of EFL texts: applying Bloom's taxonomy of educational objectives. *International Journal of Applied Linguistics and English Literature* 2(6), 202-211.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Rezvani, R., & Zamani, G. (2012). Creative thinking as generative: The cognitive taxonomy to examine translation thinking in Iran's official textbooks. *The Proceedings of TELLSI 10* (pp. 191-205). Tehran Research and Science Center.

Riazi, A., & Razmjoo, L. (2004). Developing some guidelines for a change in the program of English translation in Iranian universities. *Journal of Social Sciences and Humanities of Shiraz University* 21(1), 28-39.

<https://www.sid.ir/paper/13339/en>

Salari, Z., & Khazaei Farid, A. (2015). The necessity to update the undergraduate translation curriculum based on the market needs. *Language and Translation Studies* 51(1), 19-51.

<https://www.sid.ir/paper/359793/en>

Schäffner, C., & Adab, B. (2000). *Developing translation competence*. John Benjamins.

Shreve, G. M. (1997). Cognition and the evolution of translation competence. In Joseph F. Danks, & G. M. Shreve (Eds.), *Cognitive processes in translation and interpreting* (pp. 120-136). Thousand Oaks: Sage.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Shreve, G. M. (2006). The deliberate practice: translation and expertise. *Journal of Translation Studies* 9(1), 27-42.

https://cup.cuhk.edu.hk/chineseexpress/journal/JTS9.1/JTS9.1_27-42.pdf

Tao, Y. (2012). Towards a constructive model in training professional translators. *Babel*, 58(3), 289-308.

<https://doi.org/10.1075/babel.58.3.03tao>

Valcke, M., De Wever, B., Zhu, C., & Deed, C. (2009). Supporting active cognitive processing in collaborative groups: the potential of Bloom's taxonomy as a labeling tool. *Internet and Higher Education* 12, 165-172.

<https://doi.org/10.1016/j.iheduc.2009.08.003>

Wheeler, D. (2007). *Using a summative assessment alignment model and the revised Bloom's taxonomy to improve curriculum development, instruction and evaluation* [Unpublished doctoral dissertation thesis]. Syracuse University.

Wilss, W. (1976). Perspectives and limitations of a didactic framework for the teaching of translation. In R. Brislin (ed.), *Translation applications and research* (pp. 117-137). Gardner.

Sanatifar, Saleh & Leelany, Ayob (2022). 'Translator training in the light of Bloom's Taxonomy of learning objectives: design of a modular curriculum in Iranian context'. *Current Trends in Translation Teaching and Learning E*, 8, 76 – 120.

<https://doi.org/10.51287/cttl20223>

Yan, J. (2004). Attitudes towards a literature-oriented translation curriculum. *Babel* 50(1), 3-12.

<https://doi.org/10.1075/babel.50.1.03lun>