Iranian Journal of Applied Linguistics (*IJAL*)

Vol. 23, No. 1, March 2020, 29-55

Do Official Curricula Reflect Critical Thinking? The Educational Objectives of the English Literature Curricula in Iran in the Light of Bloom's Revised Taxonomy

Hoda Divsar*, Manoochehr Jafarigohar

Department of TEFL and English Literature, Payame Noor University, Tehran, Iran

Abstract

The present study investigated the educational objectives of the English literature curricula at the undergraduate and graduate levels at Iranian universities based on Bloom's revised taxonomy. Using a detailed checklist based on Bloom's revised taxonomy and the respective classifications, the educational objectives associated with knowledge (*factual*, *conceptual*, *procedural*, and *metacognitive*) and cognitive (*remember*, *understand*, *apply*, *analyze*, *evaluate*, and *create)* dimensions were analyzed. The results of the content analysis revealed the dominance of the lower-order thinking skills in the undergraduate curriculum and the prevalence of the higher-order thinking skills in the graduate curriculum. The results showed that the most frequent objective in terms of the knowledge domain was *understand* in both curricula. Regarding the knowledge dimension, *conceptual* and *procedural* knowledge occurred most often at both curricula, confirming that acquiring the knowledge of concepts and the processes safeguards the commended quality for the curriculum designers. Moreover, it was found that the metacognitive-related categories were almost missing from the categories. The results of the cross-tabulation revealed the superiority *understand*/*conceptual* in BA and the supremacy of *understand/procedural* in MA objectives. The findings entail the revisions of the educational objectives to accommodate critical thinking. The findings have pedagogical implications for EFL teachers, the curriculum developers, and policy makers.

Keywords: Bloom's Revised Taxonomy; Critical Thinking; Curriculum; Educational Objective; English Literature; Iran

Article Information:

Received: 1 January 2020 **Revised:** 20 February 2020 **Accepted:** 27 February 2020

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Corresponding author: Assistant Professor, Department of TEFL and English Literature, Payame Noor University, Tehran, Iran **Email:** hodadivsar@gmail.com

1. Introduction

Numerous researchers have emphasized the significance of critical thinking (CT) and its incorporation as one of the major required educational outcomes (Anderson & Krathwohl, 2001; Razmjou & Madani, 2013; Roohani, Taheri & Poorzangeneh, 2014). In fact, one of the commended claims of the educational systems is developing CT (Liu, Frankel, & Roohr, 2014), without which the acquired knowledge and literacy amount to a "hodgepodge of concepts and facts" (Gardner, 1999, p. 118). As Uribe Enciso, Uribe Enciso and Daza (2017) stated, "critical thinking development must be inherent in education as societies need citizens who facilitate their progress" (p.78).

Although critical thinking emerged as an "essential higher education learning outcome for both external audiences focused on issues of accountability and for colleges and universities themselves," (Stassen, Herrington, & Henderson, 2011, p. 126), it has not been well established in the educational system. One of the results of this situation is the paucity of critical thinkers and theoreticians inside the country (Alavimoghaddam & Kheirabadi, 2012; Riahipour, Tavakoli, & Eslami Rasekh, 2019). Using the Bloom's revised taxonomy (BRT), the present study examined the Iranian English Literature curricula at the undergraduate and graduate levels to discover their strengths and weaknesses in terms of CT and to ascertain the extent to which relevant cognitive/knowledge dimensions are reflected in the existing curricula.

1.1. Literature review

As one of the existing models on the educational objectives, Anderson and Krathwohl's (2001) revised Bloom's taxonomy is considered among the inclusive models by redefining the cognitive domain as the intersection of the knowledge and the cognitive process dimension. The knowledge dimension is divided into *factual, conceptual, procedural,* and *metacognitive* knowledge ranging

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

from concrete to abstract. The cognitive dimension consists of *remember*, *understand*, *apply*, *analyze*, *evaluate*, and *create*. Bloom and his colleagues (1956) outlined a hierarchy of six thinking skills from the lowest to the highest: remembering, understanding, and applying (called lower-order thinking skills or LOTS) and analyzing, evaluating, and creating (also known as higher-order thinking skills or HOTS) which was kept the same in the revised one. Anderson and Krathwohl's taxonomy reflects two parts of objectives: (1) nouns describing the content (knowledge) to be learned, and (2) verbs describing what students will learn to do with that content, that is, the processes they use in producing or working with knowledge.

Developing critical thinking, as Reed and Kromrey (2001) stated, empowers the individuals to analyze complex issues, evaluate the assumptions according to sound criteria, make logical inferences, and transfer insights to new contexts. Lack of due attention to the role of critical thinking might lead to educating outstanding accumulators of knowledge and passive receivers of information rather than critical intellectuals and competent professionals.

Although one of the main aims of higher education is to develop students' "analytical and critical thinking in order for graduates to function as competent professionals," (Lodge, O'Connor, Shaw, & Burton, 2015, p. 391), the review of the existing literature reveals that the educational system has not been successful in the development of the CT skills (Jafari Sani, Alavi Langrodi, & Pakmehr, 2016). The fundamental problem, as Stassen et al. (2011) stated, lies in the priority given to the development of the lower order learning. Employing Bloom's revised taxonomy, Yousofi and Zmmani (2016) assessed Iran's BA state TEFL and English translation curricula at BA level comparatively. Applying a detailed checklist developed based on the pertinent classification of cognitive objectives, they evaluated the educational objectives in the aforementioned documents. The results indicated that there were minor differences between the two analyzed documents in terms of critical thinking manifestation and that both curricula accentuated the expansion of lower order thinking skills. In another study, Divsar and Jafarigohar (2014) studied the TEFL curricula and found the superiority of lower order thinking skills rather than the higher ones in almost all of the analyzed objectives. The findings revealed that the most rampant objectives were related to *understand* and *conceptual* knowledge.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Halim, Epçaçan, and Koçak (2012) examined the overall organization and the content of the second grade Turkish language teaching program at the primary education in the light of critical thinking paradigm. The results unveiled that the paramount attention was on attaining the basic knowledge and requirements regarding reading, listening, speaking, writing, and grammar while critical thinking development was partially neglected.

Alavimoghaddam and Kheirabadi (2012) also investigated the national curriculum of Islamic Republic of Iran in the field of TEFL from critical thinking perspective to find the adequacy of the document in conceptualizing the objectives declared in "the higher level documents such as the 20- year national vision, the comprehensive scientific road map and the national document of education of the Islamic Republic of Iran" (p. 27). The results revealed the inadequacy of the outcomes across the aforementioned documents. They concluded that "the successful application of its elements in area of teaching foreign languages requires preparation of some prerequisites such as fostering critical thinking skills" (p.39). At higher level of education, it is expected to develop higher order thinking skills; however, the paucity of critical thinkers and theoreticians inside the country divulge the deficiency in Iran's educational system which mainly focuses on imparting information or stuffing knowledge into students. Therefore, ameliorating students' meta-knowing knowledge which is mostly ignored in most of the objectives stated in the national curricula (Atai, Babaii, & Mazlum, 2013; Divsar, 2020; Divsar & Jafarigohar, 2014; Jafari Sani et al. (2016) should be a focal point in the curriculum in order to enable these individuals to work on the development of critical thinking skills.

To round up, any curriculum re-alignment, as Stassen et al. (2011) stated, requires reviewing the philosophy of education, designing precise goals, reevaluating the stated standards and the unquestioned objectives, revising assessment and evaluation, and offering instructional examples that underline the essential stand of thinking in the acquisition of knowledge. This study addressed the following research questions:

1. To what extent do the objectives of the BA and MA English literature curricula reflect higher-order and lower-order thinking skills?

2. Which level of the cognitive/knowledge dimension is prevalent among the objectives of the English literature curricula at BA and MA levels?

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

2. Method

2.1. Design of the study

To gather the necessary data, mixed methods design consisting of deductive qualitative and quantitative content analyses were employed. Through qualitative content analysis, the codes were first operationalized based on BRT "to examine meanings, themes and patterns that may be manifest or latent in a particular text" (Zhang & Wildemuth, 2009, p. 308) and through deductive quantitative content analysis the objectives pertinent to the hierarchal levels in Bloom's revised taxonomy were presented in the form of descriptive statistical manifestations. According to Dörnyei (2007), there are two types of content analysis, namely, qualitative and quantitative content analysis. Qualitative content analysis, compared to quantitative content analysis, is often referred to as "latent level analysis, because it concerns a second-level, interpretative analysis of the underlying deeper meaning of the data" (Dörnyei, 2007, p. 246) whilst the latter is usually described as "manifest level analysis", providing an objective and descriptive overview of the surface meaning of the data" (p. 246). Quantitative content analysis is considered to be deductive, aiming at testing hypotheses or finding answers to questions based upon theories or previous empirical research. On the contrary, qualitative content analysis is mainly inductive, as it draws inferences from the examination of topics and themes and data. In other words, quantitative analysis caters for statistical methods and numerical results, whereas the qualitative approach brings descriptions. In addition, it draws attention to unique themes that depict the variety of the perceptions of the phenomenon, rather than the statistical importance of the frequency of particular concepts.

2.2. Materials and instrument

The sampling of English literature curriculum at the BA level was based upon the curricula officially confirmed in 2009 by Supreme Council for Planning. English literature courses are divided into four categories: general courses with 18 credits; main courses with 76 credits. The rest belongs to specialized courses as well as the trainee project with 45 credits. The sampling of

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

English literature curriculum at the MA level was based upon the curricula officially confirmed in 1992 by Supreme council for planning. The curriculum consists of 38 specialized credits from which 12 credits belong to basic courses, 16 credits to specialized ones and six credits are optional while four credits belong to the MA thesis.

A detailed checklist-like coding scheme was developed according to Anderson and Krathwohl's (2001) taxonomy in which the horizontal cells represented the cognitive dimension with six categories while the vertical column denoted the four-category knowledge dimension (See Appendix A).

2.3. Data collection procedures

To make valid inferences from the documents, following the doctrines of deductive qualitative content analysis, at first, all the objectives in the English literature MA and BA official curricula were examined for the latent level analysis and consequently were analyzed to fit the emerging themes to uncover the deeper meaning of the data. Going beyond merely counting or extracting the underlined objectives from the documents, the researchers examined the emerging meanings, themes and patterns that may be patent or latent. Subsequently, the quantitative content analysis was carried out aiming at finding the patent and latent objectives conjunct with the hierarchal levels in Bloom's revised taxonomy in the form of descriptive statistical manifestations. They were sorted and placed in the coding scheme to unveil the "manifest level" and to depict a descriptive overview of the surface meaning of the analyzed data (Dörnyei, 2007, p. 246). The collected data though both qualitative and quantitative content analyses unmasked the cognitive and knowledge dimensions operationalized in the learning objectives of both MA and BA official curricula based on BRT. SPSS, version 22, was utilized to analyze the coded data in the checklist quantitatively. Chi-square tests including Fisher's Exact Test were also run to check the statistical significance of the differences across the frequencies of the categories.

2.4. Coding a sample course of English Literature curriculum

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

In order to clarify how coding was done in this study, a sample from graduate English literature curriculum is codified below:



نمایشنامه معاصر انگلیسی

تعداد واحد: ۲ کنفرس (۰۹)

نوع واحد: نظری

پیشنیاز: ندارد

هدف: بررسی و تحلیل نمایشنامه های معاصر انگلیسی و آمریکائی

سرفصل دروس: (۳۴ ساعت)

الف- مروری بر تحول درنمایشنامه نویسی از طریق بررسی اجمالی مکتبها و نگاههای

ناتورالیستی، رئالیستی، سمبولیک، اکسپرسیونیستیک، حماسی، حماسی-رئالیستی

پوچی. " درام میانه" ، " آف برادوی " ، درام سیاهان آمریکا و عصر حاضر

مروری کوتاه بر تحول صحنه و تکنیک های تئاتر در قرن بیستم.

ب- بررسی تحلیلی با نقادی نمونه هائی از آثار نمایشنامه نویسان بزرگ انگلیسی زبان مانند:

جرج برنارد شاو، جان آزبورن، هارولد پینتر، دیوید استوری، تی. اس. الیوت،

یوجین اونیل، تنسی ویلیامز، توماس وولف، کلایفورد اودتس، ادوارد آلبی، سیمون گری،

فیلیپ بری، آرتور میلر، ادوارد الهی، اسکار هامرستین.

Figure 1. A sample of course objectives of English Literature curriculum

The purpose of 'Short Story' is to examine and evaluate the contemporary English and American plays. Initially, the stated objectives (expressed through verbs/gerunds) were documented and codified based on the BRT. For example, 'examining' is codified as B4 (*Analyze/conceptual*) since the students are expected to find out the overall structure and the purpose of the contemporary trends and to distinguish among the different emerging aspects through comparing, contrasting, organizing, differentiating, and structuring. The next adjacent stated objective, evaluating, is classified as B5 (*Evaluate/conceptual*) since it calls for more elaborated critical analyses and deals with appraising, defending, judging, supporting, criticizing, and evaluating the plays. In both cases, the examined and evaluated materials were related to

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

'understanding' since they deal with the knowledge of principles, the knowledge of theories and the structures. 'Reviewing,' the next objective, is categorized as B2 (*Understanding/conceptual*) because the students are supposed to examine the plays through interpreting, representing, illustrating, categorizing, summarizing, mapping, explaining, and extrapolating. The other objectives are again the repetition of the same emerging categories, namely, examining, evaluating and reviewing.

2.5. Reliability of the coding procedure

The problem in the reliability of the results obtained from the content analyses lies in the "ambiguity of word meanings, category definitions, or other coding rules" (Weber, 1990, p. 118). In order to make valid conclusions, the procedure of deductive and inductive content coding must be reliable, which couples with stability, reproducibility, and accuracy in content analysis (Dörnyei, 2007). Intra-coder and inter-coder reliability were run to ensure the reliability of the coding432. To determine intra-rater reliability, 20% of the randomly selected observations were coded twice by the researcher after a two-week time interval and the Cohen's Kappa (κ) reliability was found to be 87.9%, indicating high intra-coder reliability (see Table 1).

Table 1**.** *Cohen's Kappa Intra-rater Reliability Symmetric Measures Symmetric Measures*

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	.874	.019	38.913	.000
N of Valid Cases		352			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Cohen's kappa *(κ)* was also run to determine if there was agreement between two raters' judgment on the 20% of the randomly selected recorded observations. There was strong agreement between the two raters' judgments, $\kappa = .501$ (80.3% CI, .300 to .886), $p < .05$ (see Table 2).

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Table 2. *Cohen's Kappa Inter-rater Reliability Symmetric Measures*

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Measure of Agreement	Kappa	.803	.063	12.535	.000
N of Valid Cases		.501			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

3. Results

3.1. The results of deductive qualitative content analysis

Following deductive qualitative content analysis, the analysis of the objectives was carried out based on the pre-existing themes of the revised taxonomy at both cognitive and knowledge dimensions. The dichotomous matrix themes were remembering, understanding, applying, analyzing, evaluating, and creating at factual, conceptual, procedural, and metacognitive knowledge dimension. The coded segments of the stated objectives in the national literature curriculum were sorted in the aforementioned themes deductively.

The first theme, *understand/conceptual (B2)*, included objectives such as familiarizing students with the basic elements of literary works, explaining themes, kinds of plot, types of characterization, pints of views, and irony in *Introduction to literature 1*; familiarizing students with the concepts and terminologies in translation; familiarizing students with the complications in translation; translating texts, and discussing the solutions to translation problems in *Principles and methodology of translation;* explaining types of paragraphs, explaining the importance of various kinds of paragraphs at advance level, explaining the elements in writing a paragraph, explaining process paragraph, explaining chronological order in paragraphs, explain compare and contrast paragraphs, familiarizing students with enumeration, familiarizing students with the importance of cohesion and coherence, summarizing, rewriting, explain the importance of punctuation in writing in *Advance writing;* explaining phonemes, explaining the content related

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

to phonology, speech organ and apparatus, in *Phonology*; familiarizing students with the basic elements and explaining elements of short story, points of views, theme, plot, conflict, narrating stories orally to others in *Oral reproduction of stories*; familiarizing students with plays and drama; explaining what drama is, explaining various types of drama as well as the elements of drama in *Introduction to literature 2.*

Explaining theories of translation and translating simple stories, poems, short plays and other genres, explaining the difficulties in the way of translating literary works in *Translating simple literary works;* explaining the key concepts and general perspectives in literature in *Simple prose;* explaining the key concepts in *Linguistics1;* explaining the concepts and the principles of research, explaining the concept of plagiarism in *Research Methodology;* explaining the key concepts, literary figures and poetry in *Simple Poetry;* explaining the characteristics and features of press, explaining the challenges in understanding press in *Reading journalistic texts in English;* explaining the key concepts in understanding Greek and Roman myths, explaining the features and characteristics of Greek and Roman myths in *Greek and Roman Methodology;* explaining the key concepts, theories, and teaching methodologies in *Language teaching methodology;* explaining the key concepts in the world literary masterpieces, reviewing some of the world's literary works in *World Literature;* explaining the key concepts and types of tests in *Testing;* explaining the key concepts and current approaches in *Contemporary literature;* explaining the general approaches and schools in American Literature; explaining literary terms and figures in *Literary terms;* explaining the historical trajectory and developments of English and American short story as well as explaining the key terminologies such as plot, conflicts, plot, types of character in *Short story*; reviewing the history of English literature and various historical periods such as Romantic period, Victorian period, and else in *Anthology of English Literature 1 and 2;* explaining the key concepts as well as the difficulties in translating poems, plays, and short stories in *Literary translation 1;* familiarizing students with some translated literary works, difficulties in literary translation, and translating some literary works from Persian to English in *Literary translation 2;* introducing some famous English poems and figures of speech from Renaissance up to 20th century in *English poetry;* explaining the key approaches in criticism in *Approaches to literary criticism;* explaining and reviewing the historical trajectory of theatre from classic period, explaining different types of plays, elements, and the pertinent terminologies in *Classic and*

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Renaissance Plays; explaining the key features of 17th up to 20th century plays in *17th up to 20th century plays;* explaining and reviewing the historical trajectory of 18th and 19th century novels 18th and 19th century novel are also laced in the first emerging theme, namely, *understand/conceptual (B2).*

The second most frequently used theme, *understand/procedural (C2),* covered objectives such as familiarizing students with the principles and rules of translation *Principles and methodology of translation;* explaining how to detect irrelevant sentences, explaining how to use supporting sentences, anecdote, and details in *Advance writing;* explaining the procedure of evaluation *in Phonology;* familiarizing students with the procedures in techniques and strategies of writing in *Essay writing;* explain how to use dictionaries in *Practical use of idioms and expression in translation;* explaining the rules and the principles of translating literary works, working on how to translate simple literary works, and explaining the ways and the procedures to overcomes the difficulties in translating literary works in *Translating simple literary works;* extending the skill of how to read simple literary prose in *Simple prose;* explaining how language originates in *Linguistics1;* explaining the procedures in conducting a research, explaining how to write a research paper, explaining how to avoid plagiarism, explaining APA and MLA rules in *Research Methodology;* explaining the ways and procedures of reading a poem in *Simple Poetry;* explaining how to use dictionary in reading press in *Reading journalistic texts in English;* explaining how to read and understand Greek and Roman myths in *Greek and Roman Methodology;* explaining the process and methods in teaching English, explaining how to deal with individual differences in *Language teaching methodology;* explaining the process of understanding world literary works, explaining the procedures of literary criticism in *World Literature;* explaining the procedures of designing valid and reliable tests in *Testing;* explaining how to approach contemporary literary works in *Contemporary literature;* explaining how plot, conflicts, symbols, plot, types of character in famous English and American short story in *Short story;* explaining the key procedures and principles in literary translations from English to Persian in *Literary translation 1;* explaining how to read and analyze some famous English poems from Renaissance up to 20th century in *English poetry;* explaining how to approach criticism in *Approaches to literary criticism;* explaining how to read 17th up to 20th century plays in *17th up to*

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

20th century plays; explaining how to read 18th and 19th century novels in *18th and 19th century novel.*

Objectives such as evaluating and examining the famous papers regarding how techniques and strategies are applied in *Essay writing;* evaluating the procedures in understanding a poem in *Simple Poetry;* evaluating how first and second language are acquired *Linguistics2;* evaluating how to understand and analyze the myths, evaluating how myths are used in literature and philosophy in *Greek and Roman Methodology;* evaluating the techniques and procedures in understanding literary works in *World literature;* evaluating the techniques and procedures in understanding literary works in *Contemporary literature;* evaluating how literary figures and literary techniques are used in the literary texts and poems, evaluating how symbols and metaphoric devices are used inside the poems in *Literary terms;* evaluating how plot, conflicts, symbols, plot, types of character, atmosphere, irony, sarcasm, and anecdotes are manipulated in The black cat, Young Goodman Brown, and other short stories in *Short story;* evaluation of the methods, techniques, and procedures of translating literary works in *Literary translation 2;* evaluating how literary proses are translated in *Selected literary prose;* evaluating some famous English poems in terms of how literary figures, personification, simile and metaphor are used from Renaissance up to 20th century in *English poetry;* evaluating the approaches to read classical pays in *Classic and Renaissance Plays* were sorted under the theme of *evaluate/procedural (C5).*

Examining and discussing the literary genres, themes, kinds of plot, types of characterization, pints of views, and irony critically in 8 stories *Introduction to literature 1;* examining children's literary works, language and literature in society, language and literature in art, sociology and philosophy, in *Research Methodology;* evaluating elements of stories in *Oral reproduction of stories ;* evaluation of 7 plays in *Introduction to literature 2;* examining types of literary essays in *Essay writing;* discourse and culture evaluation in *Linguistics2;* evaluating myths from social, theological, and literary points of view, evaluating the roles of myths in literature and philosophy in *Greek and Roman Methodology;* evaluating features of world literary works, evaluating some of the famous world literary works in *World Literature;* evaluating contemporary literary works in *Contemporary literature;* evaluating literary texts and poems in *Literary terms;* evaluating the literary translations in *Literary translation 2;* evaluating the translated literary

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

proses in Selected literary prose; evaluating some famous classic plays in *Classic and Renaissance Plays*, emerged as the fourth theme, *evaluate/conceptual (B5).*

Objectives such as applying techniques and strategies through procedures in writing in *Essay writing;* practicing how to translate idioms in various fields in *Practical use of idioms and expression in translation;* applying the procedures to take notes in *Research Methodology;* practicing how to translate literary texts from English to Persian in *Translating literary text 1;* practicing how to approach reading criticism of literary texts such as Young Goodman Brown, Oedipus complex, The Raven, Hamlet, and Adventures of Huckleberry *Finn* in *Approaches to literary criticism ;* practicing how to read The Collar, Kubla khan, She walks in beauty , Preface to Lyrical Ballade, Araby, the second coming, and the love song of Alfred Prufrock in *Literary schools* appeared *apply/procedural (C3)* as the fifth theme.

The sixth theme, *remember/factual (A1),* embraced recalling the of paragraph, supporting sentences, recalling definition of planning, retrieving definition of cause effect essay, recalling the definition of persuasive essay, recalling definition of compare and contrast essay in *Essay writing;* recalling the history of some literary writers and figures in *World literature;* recalling the history of some literary writers and figures in recalling the history of some literary writers and figures in *Contemporary literature;* recalling the names of some famous writers, poets, and playwriters in *Approaches to literary criticism;* recalling the names of literary schools such as romanticism, realism, decadences, Surrealism, and symbolism in Literary schools.

Practicing how to write paragraphs in *Advance writing;* practicing how to write a research paper, writing library-based paper based on the explained procedures, writing references based on APA rules in *Research Methodology;* writing syllabus based on the procedures of syllabus design in *Language teaching methodology;* practicing how to write grammar, reading comprehension, listening, writing, and speaking tests in *Testing* were grouped in *create/procedural (C 6)* as the seventh theme.

The eighth theme, *analyze/conceptual (B 4),* embodied analyzing English phonemes, analyzing vowels, consonants, diphthongs, intonation, and phonological homogeneity in

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Phonology; analyzing 6 plays in *Introduction to literature 2;* analyzing literary language in art, sociology, and philosophy in *Research Methodology;* analyzing the translation of some suras from Quan in *Survey of Islamic text in translation 1;* analyzing the linguistic concepts Linguistics 2; analyzing the literary schools in *Literary schools;* analyzing the elements of plays in *Classic and Renaissance Plays*.

Reviewing the definitions of idioms and expressions, reviewing types of dictionaries in *Practical use of idioms and expression in translation;* reviewing facts about the history of language in *Linguistics 1;* reviewing punctuations in *Research Methodology;* reviewing the definitions of the critical approaches in *Approached to Criticism* were assorted in *(understand/factual A2)* as the ninth theme. The tenth theme, *apply/conceptual (B3),* integrated applying the language skills and content literature knowledge to one of the areas required by the society *Research Methodology;* practicing correct pronunciation in Phonology; developing skills in the finding equivalences *Practical use of idioms and expression in translation*; editing the research papers in *Research Methodology*. The eleventh theme, *understand/metacognitive (D 2),* enclosed explaining the concepts to reach to metacognitive understanding about linguistic questions in *Linguistics 1.* The twelfth theme, *analyzing/procedural (c 4)* included analyzing the process and stages of writing in *Essay writing;* analyzing how languages were generated in *Linguistics2.*

3.2. Lower-order and higher-order thinking skills in the undergraduate and graduate curricula

The frequency and percentage of LOTS and HOTS for the both BA and MA levels are given in Table 3.

Table 3. *Frequency and Percentage of Lower-order and Higher-order in the Graduate and Undergraduate Curricula*

		Frequency	Percent
BA	LOTS	189	68.0
	HOTS	85	31.3
	Total	274	100
MA	LOTS	65	49.2
	HOTS	67	50.7
	Total	132	100

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

About 68% of the objectives address LOTS whereas only 31.3% are related to HOTS at the BA level. At the MA level, 49.2% of the objectives address LOTS whereas 50.7% of them are pertinent to HOTS. Although the difference is not significant, the curriculum of MA yields an improvement to that of the BA. In fact, lower-order cognitive skills were found to be more frequently referred to in BA curriculum.

3.3. Cognitive dimension in the graduate and undergraduate curricula

Table 4 presents the frequencies and percentages of the distribution of different levels of cognitive dimension.

Table 4. *Frequency and Percentage of Cognitive Dimension in the Graduate and Undergraduate Curricula*

		Frequency	Percentage
BA	Remember	13	4.7
	Understand	160	58.4
	Apply	16	5.8
	Analyze	6	2.2
	Evaluate	71	25.9
	Create	8	2.9
	TOTAL	274	100
MA	Remember	5	3.7
	Understand	53	40.1
	Apply	7	5.3
	Analyze	10	7.5
	Evaluate	49	37.1
	Create	8	6.0
	TOTAL	132	100

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

With respect to cognitive dimension, the order of the cognitive levels is as follows for the BA curriculum: *understand* (58.4%), *evaluate* (25.9%), *apply* (5.8%), and *remember* (4.7%), *create* (2.9%), and *analyze* (2.2%). For the MA level, the order of the categories is as follows: *understand* (40.1%), *evaluate* (37.1%), *analyze* (7.5%), *create* (6.0%), *apply* (5.3%), and *remember* (3.7%). *Apply*, *analyze* and *create* do not receive due attention in this curriculum.

As Table 4 shows, *understand* is the most frequent level of thinking in the both BA and MA curricula of English literature (58.4% and 40.1% respectively). The least frequent levels of thinking in the BA curricula are related to *analyze* and *create and* in MA curricula, they were associated with *remember* and *apply*. The highest level of cognitive domain, i. e., *create* was found to be almost ignored in both BA and MA curriculum of literature.

3.4. Knowledge dimension in the graduate and undergraduate curricula

Table 5 display the knowledge dimension of the BA and MA curricula of literature, respectively.

Table 5. *Frequency and Percentage of Knowledge Dimension in the Graduate and Undergraduate Curricula*

		Frequency	Percentage
BA	Factual	17	6.2
	Conceptual	135	49.3
	Procedural	121	44.2
	Metacognitive	1	0.4
	TOTAL	274	100
MA	Factual	5	3.7
	Conceptual	56	42.4
	Procedural	68	51.5
	Metacognitive	3	2.2
	TOTAL	132	100

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

As Table 5 shows, the order of the levels is as follows for the BA curriculum: conceptual (49.3%), procedural (44.2%), factual (6.2%) and metacognitive (0.4%) and for the MA curriculum, the order of the levels is as follows: Procedural (51.7%), Conceptual (42.4%), factual (3.7%) and Metacognitive (2.2%).

In terms of the knowledge dimension, while the conceptual knowledge supersedes the other categories in BA curriculum, in MA curriculum the procedural knowledge surpasses the rest. Although the number of the courses and the pertinent objectives are more in BA curriculum, the portion devoted to the procedural knowledge is higher in MA. It means that, more objectives were dedicated to the development of the procedural knowledge in MA than in BA. The metacognitive knowledge is the least frequent one at the BA and MA levels (0.4% and 2.2% respectively). Although not significant, the state of the metacognitive category is amended in MA curriculum.

3.5. Cross-tabulation and Chi-Square Tests (cognitive/knowledge dimension in the undergraduate curriculum of Literature)

Cross-tabulation and Chi Square test of knowledge were run to find out the in the objectives of the BA curriculum. Appendix B shows the results of cross-tabulation of both dimensions in the undergraduate curriculum. B2 (*understand/*conceptual) category was the most frequent one (31.8%) followed by C2 (*understand/*procedural) with the percentage of 24.8%, and C5 (*evaluate/*procedural) with the percentage of 16.1%. Other frequent codes were B5 (*evaluate/*conceptual) with the percentage of 9.9%, C3 (*apply/*procedural) with the percentage of 5.1%, A1 (*remember/*factual) with the percentage of 4.7%, C6 (*create/*procedural) with the percentage of 2.9%, B4 (*analyze/*conceptual) with the percentage of 1.8%, A2 (*understand/*factual) with the percentage of 1.5%, B3 (*apply/*conceptual) with the percentage of 0.7%, D2 (*understand/*metacognitive) and C4 (*analyze/*procedural) both with the similar percentage of 0.4%. The rest codes, B6 (*create/*procedural), D6 (create/metacognitive), B1 (*remember/*conceptual), D5 (*evaluate/*metacognitive), A6 (*create/*factual), A5 (*evaluate/*factual), C1 (*remember/*procedural), D1 (*remember/*metacognitive), A3 (*apply/*factual), D3 (*apply/*metacognitive), A4 (*analyze/*factual), and D4 (*analyze/*metacognitive) were totally absent in the coded data.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Chi-squares tests were carried out to determine the statistical significance of the differences across cognitive and knowledge dimensions in the BA curriculum. Table 6 presents the results of Chi-Square tests including Fisher's Exact Test.

Table 6. *Differences across Knowledge and Cognitive Domain of the Undergraduate Curriculum (Chi-Square Tests)*

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	234.667[a]	15	.000	.000[b]	.000	.000
Likelihood Ratio	120.835	15	.000	.000[b]	.000	.000
Fisher's Exact Test	111.134			.000[b]	.000	.000
Linear-by-Linear Association	28.826[c]	1	.000	.000[b]	.000	.000
N of Valid Cases	274					

a. 15 cells (62.5%) have expected count less than 5. The minimum expected count is .02.[a]

b. Based on 10000 sampled tables with starting seed 624387341.[b]

c. The standardized statistic is 5.369.[c]

As indicated in Table 6, it can be concluded that the observed differences were found to be statistically significant, F (15, N = 274) =111.13, p <.05. Since the significance level was less than the level of alpha (.05), the differences were considered to be significant.

3.6. Cross-tabulation and Chi-Square Tests (cognitive/knowledge dimension in the graduate curriculum of Literature)

The results of cross tabulation (See Appendix C) reveals that C2 (*understand/*procedural) category is the most frequent one (21.2%) followed by C5 (*evaluate/*procedural) with the percentage of 18.9%, and B2 (*understand/*conceptual) with the percentage of 18.1%, B5 (*evaluate/*conceptual) with the percentage of 17.4%. Other frequent codes were C3 (*apply/*procedural) and B4

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

(analyze/conceptual) both with the percentage of 4.5%, C6 (*create/*procedural) with the percentage of 3.7%, and D6 (*create/*metacognitive) with the percentage of 2.2%. The other categories were B1 (remember/conceptual), C1 (remember/procedural), A4 (analyze/factual), and C4 (analyze/procedural) all with the percentage of 1.5%. The subsequent groups were A1 (remember/factual), A2 (*understand/*factual), B3 (*apply/*conceptual), and A5 (evaluate/factual) all with the percentage of 0.7%. There were also other codes which were absent in the data: D1 (remember/metacognitive), D2 (*understand/*metacognitive), A3 (*apply/*factual), D3 (*apply/*metacognitive), D4 (analyze/metacognitive), D5 (*evaluate/*metacognitive), B6 (*create/*conceptual), and A6 (*create/*factual).

Chi-squares tests including Fishers' Exact Test were also utilized to determine the statistical significance of the differences across cognitive and knowledge dimensions of the MA curriculum of literature. The results of the Chi-square tests are shown in Table 7 below.

Table 7. *Differences across Knowledge and Cognitive Domain of the Graduate Curriculum (Chi-Square Tests)*

	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	48.014[a]	9	.000	.011[b]	.008	.014
Likelihood Ratio	48.908	9	.000	.000[b]	.000	.000
Fisher's Exact Test	48.578			.000[b]	.000	.000
Linear-by-Linear Association	36.027[c]	1	.000	.000[b]	.000	.000
N of Valid Cases	132					

Based on Table 7, it can be concluded that the differences across knowledge and cognitive dimensions were statistically significant, F (10, N = 112) = 48.57, p <.05 as the significance level was less than that of alpha (.05).

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

4. Discussion

The major portion of English literature curriculum at the BA level is devoted to LOTS. The results are also confirmed by Divsar and Jafarigohar (2014) who found the supremacy of LOTS in most of the educational objectives of TEFL curricula. The present educational system does not cater for HOTS due to its concentration on acquiring the knowledge through memorization (Alavimoghaddam & Kheirabadi, 2012). The results are also in line with those of Yousofi and Zamani (2016) who acknowledged the dominance of LOTS over HOTS in BA English translation and TEFL curricula and announced that "lower order cognitive thinking skills are more frequently occurred in the official standards than higher order thinking skill" (p. 211). In other words, the educational system is mostly concerned with transferring knowledge in the form of theories, principles, structures, classification, and categories than learning how to turn them into higher cognitive levels. The emphasis on LOTS makes it "difficult for students to engage deeply with a complex concept, idea, or discipline in a higher education context" (Lodge et al., 2015). The priority given to the development of LOTS attested Anderson and Krathwohl's (200) claim that acquiring knowledge is frequently regarded as basic to all goals of education and that the formation of the higher-order skills cannot be executed in a vacuum but rather should be founded on the earlier obtained knowledge. This might be due to the fact that, in Iran educational system, accumulation of knowledge is very important and it is considered as one of the criteria of success. The findings are in line with Atai (2018) who commented that "the central focus of the content model, among the curriculum frameworks, is the transmission of well-established knowledge to learners as a prerequisite to improving their intellectuality" (p.2). Most examinations and assessments inside the country are based on checking whether the candidates are qualified enough in terms of the knowledge of skills, theories, principles, rules, terminologies, and concepts of the fields. The objectives of the curriculum, as Atai (2018) stated, reflect the underlying macro policies of the country and the dominant educational and socio-political values and beliefs of the stakeholders in local contexts that affect the directions of the education system and the formal instruction in the country.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

In line with the themes emerged from the qualitative content analysis, the objectives predominantly focused on acquiring the knowledge of the key concepts, literary characters, literary figures, and literary periods. The ascendency of B2 (*understand/*conceptual) at BA and C2 (*understand/*procedural) at MA levels in the objectives of the courses such as Anthology of English Literature, the Anthology of American Literature, English Poetry, English Renaissance, and Literary Schools unveiled the curriculum designers' criteria in determining the objectives focused mainly on explaining, acquiring, summarizing, interpreting, and receiving the major concepts and knowledge. The state is not significantly different in the objectives of the courses such as *English poetry, English novels, drama*, and *advance poetry* that are analytical and evaluative in nature. This might be due to the lack of enough knowledge of the curriculum developers about the theories in the field, lack of systematic attention to the development of higher-order thinking skills across undergraduate and graduate levels, and students' lack of significant prior background in their discipline which leads curriculum designers to consider it necessary to provide students with the required basic concepts and knowledge. At MA level, although it was promising, the emphasis just put a different mask and shifted from acquiring the knowledge of the concepts to acquiring the knowledge of the processes of how to read a poem, how to approach a navel, how to criticize a play, how to analyze a literary work. Obtaining the conceptual knowledge and restraining to paraphrasing, explaining, interpreting, summarizing, and comparing does not lead to training critical thinkers (Davari, Iranmehr, & Erfani, 2011) and as Yousofi and Zamani (2016) stated, the education system should emphasize the importance of educating intellectual talents rather than accumulating the accounts and records. As Maker and Nielson, (1996) stated, the emphasis should be shifted from a mere knowledge and acquisition of facts to the use of information.

5. Conclusion

In brief, the frequencies of the lower-order domain were found to be more eminent in both undergraduate and graduate English literature national curricula. This auspicates the inadequacy of the educational system in developing higher-order CT skills and educating critical thinkers and theoreticians. The importance of developing "this supposed generic skill is reflected in the ubiquitous of critical thinking as a graduate capability in universities" (Moore, 2011, p. 133). Despite the high premium placed on enhancing the critical thinking skills in educational policies,

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Iran reformed curricula failed to meet the requirements of developing critical thinking skills among the educational objectives (Alavimoghaddam & Kheirabadi, 2012; Atai & Mazlum, 2013). This is because the emphasis in the objectives of the content-based national curricula was on developing and expanding the learners' knowledge in their pertinent disciplines and fields to span the information gaps as "fundamental characteristics of the curriculum" (Alavimoghaddam & Kheirabadi, 2012, p. 42). To round up, as Lodge et al. (2015) stated "ensuring that graduates are capable of thinking beyond their tendency to take mental shortcuts poses a significant challenge for teaching critical thinking in higher education institutions" (p. 392). The findings provide implications for EFL teachers, the curriculum developers, and policy makers since as Atai (2018) stated "as a roadmap document, national curricula are prepared through a collaborative process involving boards of policy makers, educationalists, and stakeholders and are legislated by governments" (p. 4). The findings implied further attention to ameliorate the higher-order thinking skills to the optimal and to this end, all insiders and outsiders including the policy-makers, the instructors, and the learners are required to take part. EFL teachers can benefit from the results in order to develop higher-order thinking skills and provide learners with various activities and tasks based on various levels of CT. The breadth of skills and the knowledge incorporated in national curricula indicate the principles and educational values set by curriculum developers. The findings of the present study can provide curriculum developers with information to revise the content of the national curriculum standards in the light of Bloom's revised taxonomy to cover up all CT levels in the objectives defined for national curricula. As Davison and Cummins (as cited in Atai, 2018) stated, "the purposes and focus of ELT, therefore, should be seen as a dynamic issue which integrates theoretical insights, learners' needs, teachers' cognition, and the larger educational, social, and political context. It is important for the policy makers to keep abreast of the developments in the disciplines to incorporate them in academic programs so that the prospective graduates of such programs become critical in the way of their academic career. Other researches can make use of survey studies to interview EFL instructors and learners to see how the stated objectives are reflected in the language classes as well as instructors' syllabi. Moreover, the official curricula of the other major fields or at higher levels such as PhD can be among the impetus for further research.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

6. References

Alavimoghaddam, S., B., & Kheirabadi, R. (2012). Critical review of national curriculum in the field of foreign language teaching. *Journal of Curriculum Studies, 7*(25), 27-44.

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

Atai, M. R., (2018). National curriculum. In J. I. Liontas (Ed.), *The TESOL Encyclopedia of English Language (pp. 1-14).* Florida: John Wiley & Sons, Inc.

Atai, M.R., Babaii, E., & Mazlum, F. (2013). Mainstream ELT curriculum implementation in Iran: A micro analysis perspective. *Journal of Teaching English Language and Literature Society of Iran (TELLSI), 18(6), 1-23.*

Atai, M. R., & Mazlum, F. (2013). English Language Teaching Curriculum in Iran: Planning and Practice. *Curriculum Journal, 24*(3), 389-411.

Bloom, B.S. (Ed.), Engelhart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook 1: Cognitive domain.* New York: David McKay.

Davari, H., Iranmehr, A. & Erfani, S. M. (2011). A survey on the Iranian ELT community's attitudes to critical pedagogy, *English Language Teaching*, *5* (2), 101-111.

Divsar, H. (2020). Bloom's revised taxonomy across the learning objectives in English translation curricula. *Iranian Journal of English for Academic Purposes, 8* (4), 136-152.

Divsar, H., & Jafarigohar, M. (2014). The evaluation of TEFL curriculum at BA and MA levels based on BRT. *Pajuhesh va negaresh kotobe daneshgahi, 32*, 73-99.

Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.

Uribe Enciso, O.L., Uribe Enciso, D.S., & Daza, M. D. (2017). Critical Thinking and its Importance in Education: Some Reflections. *Rastros Rostros, 19*(34), 78-88.

Gardner, H. (1999). *The Disciplined Mind: Beyond Facts and Standardized Tests. The K-12 Education that Every Child Deserves*, New York, Penguin.

Halim, U., Epçaçan, C., & Koçak, B. (2010). Assessment of the curriculum of Turkish language teaching in the 2nd grade of primary education in terms of critical thinking skills. *Social and Behavioral Sciences, 3*(4), 369-375.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

English literature curriculum. (2009). Retrieved April 10, 2019 from http://www.gonabad.ac.ir/sarfasl/zaban.pdf

Jafari Sani, H., Alavi Langrodi, S., K., & Pakmehr, H. (2016). Determining portion of curriculum approaches prediction on students' critical thinking attitudes in humanities. *Quarterly Journal of Research in School and Virtual Learning, 3*(12), 37-48.

Liu, O.L., Frankel, L., & Roohr, K., C. (2014). Assessing Critical Thinking in Higher Education: Current State and Directions for Next Generation Assessment. *ETS Research Report Series, 1*(1), 1-23.

Lodge, J. M., O'Connor, E. L., Shaw, R., & Burton, L (2015). Applying the cognitive science of critical thinking to higher education. In M. Davies, R. Barnett and R. H. Ennis (Eds.), *Critical Thinking in Higher Education (pp. 391-407).* New York: Palgrave Macmillan.

Maker, C. J., & Nielson, A.B. (1996). *Curriculum development and teaching strategies for gifted learners*. (2nd ed.). Austin, TX: Pro-Ed.

Moore, T. (2011). Critical Thinking and Disciplinary Thinking: A Continuing Debate. *Higher Education Research and Development, 30* (3), 261–274.

Razmjou, S. A., & Madani, H. (2013). A content analysis of the English section of university entrance exams based on Bloom's revised taxonomy. *International Journal of Language Learning and Applied Linguistics World, 4*(3), 105-129.

Reed, J. H., & Kromrey, J. D. (2001). Teaching critical thinking in a community college history course: Empirical evidence from infusing Paul's model. *College Student Journal*, *35*(2), 7–18.

Riahipour, P., Tavakoli, M., & Eslami Rasekh, A. (2019). A change without change!! National curriculum reform and EFL teachers' motivation in Iran. *Journal of English Language Teaching and Learning, 11*(23), 293-325.

Roohani, A., Taheri, F., & Poorzangeneh, M (2014). "Evaluating four corners textbooks in terms of cognitive processes using Bloom's revised taxonomy". *Journal of Research in Applied Linguistics, 4*(2), 51-67.

Stassen, M. L. A., Herrington, A., & Henderson, L. (2011). Defining critical thinking in higher education: Determining assessment fit, in J. E. Miller and J. E. Groccia (eds.) *To Improve the Academy: Resources for Faculty, Instructional, and Organizational Development*, Vol. 30 (pp. 126–141). San Francisco, CA: Jossey-Bass.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

Weber, R. P. (1990). *Basic content analysis*. Thousand Oaks: Sage Publications.

Yousofi, N., & Zamani, G. (2016). A comparative study of TEFL and ET official standards in terms of Bloom's revised cognitive taxonomy. *Iranian Journal of Applied Language Studies, 8*(1), 195-219.

Zhang, Y., & Wildemuth, B. M. (2009). Unstructured interviews. In B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science* (pp.222-231). Westport, CT: Libraries Unlimited.

Appendix A

Knowledge Dimension / *Cognitive Dimension*	*Factual Knowledge*	*Conceptual Knowledge*	*Procedural Knowledge*	*Metacognitive Knowledge*
Remember	A1	B1	C1	D1
Understand	A2	B2	C2	D2
Apply	A3	B3	C3	D3
Analyze	A4	B4	C4	D4
Evaluate	A5	B5	C5	D5
Create	A6	B6	C6	D6

Appendix B

			Knowledge Dimension				Total
			Factual (A)	Conceptual (B)	Procedural (C)	Metacognitive (D)	
Cognitive Dimension	Remember (1)	Count	13	0	0	0	13
		Expected Count	.8	5.7	6.4	.0	13.0
		% within Cognitive	100.0%	0.0%	0.0%	0.0%	100.0%
		% within Knowledge	76.5%	0.0%	0.0%	0.0%	4.7%
		% of Total	4.7%	0.0%	0.0%	0.0%	4.7%
	Understand (2)	Count	4	87	68	1	160
		Expected Count	9.9	70.7	78.8	.6	160.0
		% within Cognitive	2.5%	54.4%	42.5%	0.6%	100.0%
		% within Knowledge	23.5%	71.9%	50.4%	100.0%	58.4%
		% of Total	1.5%	31.8%	24.8%	0.4%	58.4%
	Apply	Count	0	2	14	0	16

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

	(3)	Expected Count	1.0	7.1	7.9	.1	16.0
		% within Cognitive	0.0%	12.5%	87.5%	0.0%	100.0%
		% within Knowledge	0.0%	1.7%	10.4%	0.0%	5.8%
		% of Total	0.0%	0.7%	5.1%	0.0%	5.8%
	Analyze (4)	Count	0	5	1	0	6
		Expected Count	.4	2.6	3.0	.0	6.0
		% within Cognitive	0.0%	83.3%	16.7%	0.0%	100.0%
		% within Knowledge	0.0%	4.1%	0.7%	0.0%	2.2%
		% of Total	0.0%	1.8%	0.4%	0.0%	2.2%
	Evaluate (5)	Count	0	27	44	0	71
		Expected Count	4.4	31.4	35.0	.3	71.0
		% within Cognitive	0.0%	38.0%	62.0%	0.0%	100.0%
		% within Knowledge	0.0%	22.3%	32.6%	0.0%	25.9%
		% of Total	0.0%	9.9%	16.1%	0.0%	25.9%
	Create (6)	Count	0	0	8	0	8
		Expected Count	.5	3.5	3.9	.0	8.0
		% within Cognitive	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Knowledge	0.0%	0.0%	5.9%	0.0%	2.9%
		% of Total	0.0%	0.0%	2.9%	0.0%	2.9%
	Total	Count	17	121	135	1	274
		Expected Count	17.0	121.0	135.0	1.0	274.0
		% within Cognitive	6.2%	44.2%	49.3%	0.4%	100.0%
		% within Knowledge	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	6.2%	44.2%	49.3%	0.4%	100.0%

Appendix C

			Knowledge Dimension				Total
			Factual	Conceptual	Procedural	Metacognitive	
Cognitive Dimension	Remember	Count	1	2	2	0	5
		Expected Count	0.1	0.2	0.2	.0	0.5
		% within Cognitive	20.%	40.%	40.%	0.0%	100.0%
		% within Knowledge	20.%	3.5%	2.9%	0.0%	3.7%
		% of Total	0.7%	1.5%	1.5%	0.0%	4.7%
	Understand	Count	1	24	28	0	53
		Expected Count	1.4	0.7	43.3	.5	53.0
		% within Cognitive	1.8%	45.2%	52.8%	0.0%	100.0%
		% within Knowledge	20.%	42.8%	41.1%	0.0%	40.1%
		% of Total	0.7%	18.1%	21.2%	0.0%	47.3%
	Apply	Count	0	1	6	0	7
		Expected Count	.0	0.0	0.2	.0	0.7
		% within Cognitive	0.0%	14.28%	85.7%	0.0%	100.0%
		% within Knowledge	0.0%	1.7%	8.8%	0.0%	5.3%
		% of Total	0.0%	0.7%	4.5%	0.0%	0.9%
	Analyze	Count	2	6	2	0	10
		Expected Count	.4	3.0	2.6	.0	6.0
		% within Cognitive	20.0%	60.0%	20.0%	0.0%	100.0%

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]

	% within Knowledge	40.0%	10.7%	2.9%	0.0%	7.5%
	% of Total	1.5%	4.5%	1.5%	0.0%	2.2%
Evaluate	Count	1	23	25	0	49
	Expected Count	1.3	28.0	19.3	0.0	49.0
	% within Cognitive	2.0%	46.9%	51.0%	0.0%	100.0%
	% within Knowledge	20.%	41.0%	36.7%	0.0%	37.1%
	% of Total	0.7%	17.4%	18.9%	0.0%	43.8%
Create	Count	0	0	5	3	8
	Expected Count	.2	5.1	3.5	.1	8.0
	% within Cognitive	0.0%	0.0%	62.5%	37.5%	100.0%
	% within Knowledge	0.0%	0.0%	7.3%	100.0%	6.0%
	% of Total	0.0%	0.0%	3.7%	2.2%	8.0%
Total	Count	5	56	68	3	132
	Expected Count	5.0	56.0	68.0	3.0	132.0
	% within Cognitive	3.7%	42.4%	51.5%	2.2%	100.0%
	% within Knowledge	3.7%	42.4%	51.5%	2.2%	100.0%
	% of Total	2.7%	57.1%	39.3%	0.9%	100.0%

Notes on Contributors:

Manoochehr Jafarigohar is an associate professor in the TEFL department of Payame Noor University (PNU). He has authored over 20 textbooks and authored or coauthored over 70 papers. He has also presented numerous papers in international and national conferences. His areas of interest include TEFL in distance education, learner variables, and SLA.

Hoda Divsar is an assistant professor of TEFL department at Payame Noor University (PNU), Iran. She has taught numerous BA and MA courses of TEFL at PNU. Her areas of interest cover critical thinking, language learning strategies, multiple intelligences theory, and material development.

[Downloaded from c4i2016.khu.ac.ir on 2026-11-04]