

Curricular Knowledge Base of Nonnative English Language Teachers

Rafat Bagherzadeh

Ph.D. Candidate, Department of English Language, Science and Research Branch, Islamic Azad University, Tehran, Iran

Zia Tajeddin¹

Professor of Applied Linguistics, Tarbiat Modares University

Gholam-Reza Abbasian

Assistant professor of TEFL, Imam Ali University

Abstract

Curricular knowledge, as one of the key components of teacher knowledge base, has received scant attention in second language teacher education. To address this gap, this study was conducted to explore the curricular knowledge base of Iranian English language teachers. Data were collected using a questionnaire developed based on the components of curricular knowledge cited in Roberts' (1998) model. The results indicated that the teachers possessed an appropriate knowledge of a few components of curricular knowledge. For example, they were aware of materials suitability and the structures of the lessons, could judge the content of the materials and translate the instructions in teachers' manuals into practical activities, and were able to teach English as a Foreign Language textbooks. However, they showed a less developed knowledge base on half of the components of the curricular knowledge which comprised, inter alia, their cognizance of the content of the exams, cultural aspects of the textbooks, and learner-centered activities. These findings imply that measures should be taken to help teachers fill the existing gaps in their curricular knowledge through teacher education courses.

Keywords: Curricular knowledge base, English language teachers, Knowledge base

Received on July 14, 2018

Accepted on July 5, 2019

1. Introduction

An important subject in teacher education is to find out the constituents of the required knowledge base for teaching and its relationship with the content and practice of teacher education. Knowledge base refers to what language

¹ corresponding author: zia_tajeddin@yahoo.com

teachers should know to be effective and how that knowledge is included in both preparation programs and continuous professional development (Shulman, 1987; Tedick, 2005). The knowledge that prospective teachers acquire in teacher education programs provides a framework and foundation for how they teach (Milner, 2005). For a long time, the teaching profession has tried to identify the necessary teaching knowledge base for quality teaching. Many teachers, teacher educators, researchers, professional organizations, and government agencies work together to formulate standards which clarify the required knowledge for effective teaching and hence a framework for teacher education reform, professional development, curriculum, assessment, and evaluation (Farrell, 2004; Kahn, & Walsh, 2006; Khuanwang, Lawthong, & Suwanmonkha, 2016; Stoddart, Solis, Tolbert, & Bravo, 2010; Wu, 2014). With the definition of knowledge base for teaching comes the need to assess the curricular knowledge of teachers who must be provided with opportunities to acquire the necessary knowledge and skills to teach effectively and be successful teachers (Farrell, 2004; Shulman, 1987).

Tamir (1988) defined *curricular knowledge* as the knowledge of teachers about the organization of topics and skills taught to students through curricula presented in the form of textbooks, films, syllabi, software, and sets of materials of various sorts. Similarly, curricular knowledge for Ball and Bass (2009) consists of educational goals, standards, assessments, and grade levels where specific topics are taught. Angeli and Valanides (2009) considered curricular knowledge as an understanding of the materials, alternative texts, and visual materials. A review of literature shows that studies on teacher knowledge base mostly adopted Shulman's (1987) category. However, they explored one or two components of the model and on small numbers of participants. For instance, Akbari and Tajik (2009) focused on differences between the pedagogic thoughts of eight experienced

and less experienced EFL teachers. In addition, Tsui (2003) conducted a case study on four English teachers in Hong Kong secondary school and emphasized teachers' practical and pedagogical content knowledge. However, these studies have ignored teachers' curricular knowledge base which according to Pineda (2002) refers to a knowledge of curricular choices and teaching accordingly. Pineda accentuated teachers' awareness of existing curricular materials and their familiarity with the curricular programs of their schools' system to be able to relate their own area of specialization to others. Drawing on the extant body of research in teachers' knowledge base, the present paper aimed to explore the curricular knowledge of nonnative teachers teaching in English language institutes.

2. Literature Review

2.1 Language Teachers' Knowledge Base

Traditional teacher education viewed teachers as passive consumers of the knowledge transmitted by others rather than active participants in constructing meaning (Crandall, 2000). Language teachers' knowledge base is limited when they have a poor knowledge of language teaching and learning and fail to develop competencies in EFL curriculum (König, Lammerding, Nold, Rohde, Strauß, & Tachtsoglou, 2016). This is in line with the statement of Calderhead and Robson (1991), who considered the enhancement of teachers' knowledge and understanding of subject matter, students, teaching strategies, and curriculum as important purposes of teacher education because the teachers attending these programs are better teachers in comparison with other teachers (Ravich, 2010). The quest for a proper description of the components of teachers' knowledge base has been a focal point for researchers and educators (Pineda, 2002). For Manzano Vázquez (2017), teacher knowledge includes knowledge of the subject, the context, the curriculum, and the learners' personal development which will lead to learner

autonomy. When learners develop autonomy, they can communicate their own meanings and define who they are as learners or as individuals (Benson, 2012).

In their classifications of knowledge base, Shulman (1987) and Roberts (1998) both referred to Content Knowledge, General Pedagogical Knowledge, Pedagogical Content Knowledge, and Curricular Knowledge; however, they differed in other components of knowledge base. Knowledge base for Tedick (2005) is what teachers should know and how that knowledge is included in teacher preparation and Continuous Professional Development programs. According to Golombek (1998), teachers' personal practical knowledge refers to teachers' knowledge of factors affecting students' learning like teachers, assessment, as well as lesson plans which as a guide map depicts the teachers' process of thinking and provides a meticulous and organized account of teachers' manner in teaching and interacting with their students (e.g., Neeraja, 2003; Savage, 2014; Woodward, 2009).

In the case of second language teachers, the knowledge base refers to the requirements of being effective teachers (Tedick, 2005); nonetheless, the knowledge base of Second Language Teacher Education (SLTE) is often confused with the Knowledge Base of Language Teaching. The former refers to what language teacher education includes and what language teacher educators should know and do to educate language teachers effectively, while the latter refers to what language teaching involves and what language teacher educators should know and be able to do to educate language teachers (Graves, 2009). The knowledge base of SLTE programs, as stated by Johnson (2009), includes three areas: (a) the content of SLTE programs; (b) the instructions of these programs; and (c) the formal ways of conveying knowledge. Therefore, the knowledge base of SLTE is the basis for making decisions about preparing L2 teachers to teach. From this perspective,

Nguyen (2013) emphasized the attendance of teachers in SLTE programs which represent the knowledge base (i.e., what teachers need to know).

2.2 Language Teachers' Curricular Knowledge Base

There is no agreement on the extent and essence of curricular knowledge. Shulman and Sykes (1986, cited in Ariav, 1991) provided a narrow definition of curricular knowledge referring to teachers' ability to replace the existing curriculum and apply it in a variety of texts and materials. However, Zumwalt (1989) offered a broad definition of beginning teachers' curricular knowledge, that is to say, teachers' perception of various views concerning curriculum and the role of teachers, their familiarity with the process of curricular planning, and the required knowledge to carry it out (Ariav, 1991).

The curricular knowledge, according to Tomašević and Trivić (2015), facilitates the organization, presentation, and adjustment of the content of the curriculum, teaching topics, and subjects pertinent to diverse interests and capabilities of students. As they stated, the knowledge of the curricula and training teachers to interpret them are important elements of teachers' knowledge and are emphasized in different models. Likewise, Zhou, Wang, and Ng (1996) defined the curricular knowledge about a subject as a type of meta-level knowledge about the objectives and the organization of the subject materials, and the way the subjects are to be presented to and discussed with the students. The knowledge of curriculum, for Ball and Bass (2009), is composed of educational goals, standards, state assessments, and grade levels where specific topics are taught to students. Curriculum, as Shulman (1986) pointed out, consists of programs designed for the teaching of specific subjects and topics for which some instructional materials are introduced. Shulman considered three dimensions for curricular knowledge: (a) the alternative curricular knowledge: the knowledge of supplementary materials for instructing a specific subject or content within a grade; (b) the lateral

curricular knowledge: the ability to connect the content of a specific subject with other subjects studied simultaneously by students; and (c) the vertical curricular knowledge: the awareness of the topics which students studied before or will study later.

Given the importance of curricular knowledge, Calderhead (1996) considered it as teachers' understanding of the materials relevant to their discipline. In other words, curricular knowledge refers to teachers' consciousness of the topics included in materials, their underlying organization, development, and coherence. Later on, Roberts (1998) defined curricular knowledge as teachers' awareness of teaching materials and the nature of examinations. He believed that teachers should be aware of the relationship between the English curriculum and other aspects of the curriculum followed by learners (e.g., higher education) and the use of cross-curricular activities. He considered curricular knowledge as teachers' ability to select and edit, as necessary, appropriate authentic materials which, according to Berardo (2006), are highly motivating and give students a sense of achievement.

Grossman (1989) considered curricular knowledge as the knowledge about choosing and organizing the content of teaching. According to her, when planning instruction, teachers think of what their students know or may have problems concerning a particular subject matter. In her case study of six beginning English teachers, Grossman focused on the differences in the teachers' knowledge about the purposes for teaching English, curricular knowledge, and knowledge of student. The findings indicated that teachers differed in their ideas about the appropriate content and organization of the material. In a study on three teachers, Choppin (2009) conceptualized and documented the formation of curriculum context knowledge, that is the knowledge of how curriculum materials engage students in a particular

context. Choppin found that teachers developed a greater understanding of the resources in the respective units because of the repeated performance. Tomašević and Trivić (2015) used a questionnaire to investigate chemistry teachers' general curricular knowledge, knowledge of chemistry curriculum, and their views about changes in the curricula. The teachers considered the goals and operative tasks/outcomes as the most important components of the curriculum for their work. The results revealed a statistically significant difference between the views of the teachers with different working experience, that is, teachers with suitable teacher training programs could better apply information in the curriculum while teaching.

As the preceding review shows, curricular knowledge is an essential component of teacher knowledge base. Van Driel, Bulte, and Verloop (2007) believed that teachers equipped with curricular knowledge could teach accordingly and make any changes needed to transform and realize it in their classrooms. This is in line with Justi and Van Driel's (2005) statement that teachers' curricular knowledge refers to teachers' abilities to improve and/or change the curricular models related to the topics they should teach in their classes. Nevertheless, curricular knowledge has not been explored as extensively as other components of knowledge base, such as teacher content knowledge and pedagogical knowledge. Consequently, due to the importance of curricular knowledge in the success of teachers and students and paucity of research on this component, the current study aimed to explore the curricular knowledge of nonnative Iranian EFL teachers teaching in English language institutes. Therefore, the following research question was proposed:

What is the curricular knowledge of nonnative English language teachers?

3. Method

3.1 Participants

The participants in the pilot phase consisted of 80 English language teachers, 55 females and 24 males, with an average of nine years of teaching experience (from 6 months to 25 years). In the main phase, the population comprised of 436 teachers, including 129 male and 307 female EFL teachers, with an average of 8 years of teaching experience. They were nonnative Iranian teachers and taught English at numerous institutes across the country. The teachers were invited personally or through e-mail, friends, colleagues, and chain/snowball sampling method (Dörnyei & Csizér, 2012).

3.2 Instrumentation

To explore the teachers' curricular knowledge base, a questionnaire was developed based on the existing literature, the theoretical foundation of the curricular knowledge base, and the components of curricular knowledge in Roberts' (1998) model. These components included the abilities to recognize the basis for the design of a syllabus or textbook materials, being aware of the connection between ELT curricula and contextual variations (that is, learners' needs, culture, social function of English), and understanding the nature of the national education system as it affects learners, such as examinations.

The first draft of the questionnaire, containing 40 items, was submitted to four content experts for content validity (Rattray & Jones, 2007), and modifications were made based on their recommendations. The questionnaire was then given to six teachers chosen from the target population to read the items aloud and verbalize every thought they had concerning the wording, grammar, content, and the length of the items. The finalized questionnaire was distributed to different institutes and academic groups. Because some institutes did not cooperate or the number of participants was not considerable, the respondents were required to distribute the questionnaire

among friends and groups with the required criteria. Teachers were asked to mark their answers on a five-point Likert scale: (1) Untrue of me, (2) Somewhat untrue of me, (3) Neutral, (4) Somewhat true of me, (5) True of me. Based on the statistical results, three items were deleted. Following the initial pilot work and item deletion, the questionnaire, with 37 items, was handed or emailed to English language teachers nationwide.

3.3 Data Collection and Analysis

Data collection procedure was similar in both the pilot and the main phases of the study. The questionnaire was administered among English language teachers. In the invitation, the required qualification (teaching in English language institutes) was highlighted. In both phases, a reminder was sent within three weeks to those who had not returned the questionnaire. Upon receiving each questionnaire, the researcher checked the items and if there were any missing items, the respondents were contacted to provide the correct answers. Similarly, there were no missing data on the electronic version since all items were marked as *required*, so the respondents had to answer one item to be allowed to go to the next one. At the pilot phase 80, and at the main phase 436 questionnaires were returned.

In the pilot phase, after data collection and data entry, the statistical analyses including reliability analysis, mean, standard deviation (SD), standard error (se), skewness, and kurtosis, item-total correlation, and Kolmogorow-Smirnov normality test were calculated by IBM SPSS 22.0 software. Cronbach's alpha, as a means of internal consistency for the whole questionnaire in both phases, was .96, which is well above the acceptable level stated by Dörnyei (2003). Skewness and kurtosis for item 6 were -2.15 and 4.95, respectively. The same statistical results for item 18 were -1.99 and 4.267 and for item 24 were -1.78 and 4.51, in that order. Therefore, these

three items were excluded from the questionnaire due to high skewness and kurtosis.

Principal components analysis (PCA) and Exploratory factor analysis (EFA) were used to explore the interrelationship among variables and remove any unnecessary items. In order to assess the factorability of the data, determinant of the correlation matrix was used. Moreover, Bartlett's Test of Sphericity and the Kaiser-Meyer Olkin Test of Sampling Adequacy (KMO) were used to assess the strength of the relationships and factorability of the variables. Following the PCA and EFA, the data were analyzed based on the research question. The curricular knowledge of teachers was identified by using descriptive statistics.

4. Results

This study aimed to explore the curricular knowledge of nonnative Iranian EFL teachers. In what follows, the results pertinent to factor analysis and other relevant data are reported. Table 1 illustrates the measures of factorability for the correlation Matrix. As it is shown, the determinant is about zero, and KMO measure of sampling adequacy is 0.96, which is well above the minimum required level stated by Beavers, Lounsbury, Richards, Huck, Skolits, and Esquivel (2013). The Bartlett's test of Sphericity was significant at $p < .001$ supporting the factorability of the data.

Table 1
Measures for Correlation Matrix

| Measure | Value |
|---|------------|
| Determinant | 3.73E-010 |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | 0.961 |
| Bartlett's Test of Sphericity | |
| Approx. Chi-Square | 9157.5 |
| df | 666 |
| Sig. | $p < .001$ |

After the tests confirmed the suitability of data for factor analysis, EFA using PCA with Varimax rotation was run to detect the latent structures underlying the variables in the data set. It should be noted that the sample size for factor analysis was sufficient enough to allow exploratory techniques to be calculated (Ratray & Jones, 2007). At this stage, factor loading of .4 and above was chosen. To determine the number of factors, based on Kaiser's criterion, eigenvalues of more than 1 were chosen. PCA revealed the presence of five factors (F) with eigenvalues exceeding 1 (Table 2). The factors were (1) Awareness of the materials' suitability, (2) Ability for and awareness of lesson plans and lesson structures, (3) Awareness of the aims of exams and teaching materials in the institute, (4) Awareness of language tests and teaching programs, and (5) Awareness of available ELT textbooks and ability to teach them. These factors explained 42.61%, 5.14%, 3.64%, 3.04, and 2.85% of the variance, respectively. Totally, these components explained 57.29% of the variance. Based on the results of PCA, three items (12, 16, 19) were discarded because they failed to load significantly on any of the factors.

Table 2

Factors and Related Items of Teacher Curricular Knowledge

| Factor | Component | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|--------|---|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | Awareness of materials' suitability | 15.76 | 42.61 | 42.61 | 5.76 | 15.57 | 15.57 |
| 2 | Ability for & awareness of lesson plans and structures | 1.9 | 5.14 | 47.75 | 4.54 | 12.28 | 27.85 |
| 3 | Awareness of the aims of exams & materials in the institute | 1.35 | 3.64 | 51.39 | 3.95 | 10.68 | 38.54 |

| | | | | | | | |
|---|--|------|------|-------|------|------|-------|
| 4 | Awareness of language tests and teaching programs | 1.13 | 3.04 | 54.43 | 3.56 | 9.63 | 48.16 |
| 5 | Awareness of available ELT textbooks and ability to teach them | 1.06 | 2.86 | 57.29 | 3.38 | 9.13 | 57.29 |

In what follows, the results obtained from the analysis of data pertinent to the research question are reported based on the five factors. For the convenience of interpretation, the *True* and *somewhat true of me* responses were combined to form one response point (positive). Factor 1 consisted of 38% (N=13) of questionnaire items probing the teachers' knowledge of the suitability of materials and of materials which help students' personal development and facilitate language learning, among others. Teachers' attentiveness to the emotional suitability of materials and their knowledge about factors increasing the success of language teaching programs obtained the highest and the lowest loading, respectively. As highlighted in Table 3, the teachers' positive responses ranged from 71% (item 28) to a high of 85% (items 13 & 19). The table demonstrates that two items obtained the highest percentage (85%) of the positive responses, that is, teachers' awareness of factors which increase the success of a language teaching program (item 13) and of teaching materials which increase learners' personal engagement in learning (item 19). About 84% of the teachers were cognizant of the topical suitability of teaching materials (item 25), and 81% stated that they were familiar with materials which both provide opportunities for learners to practice language at home (item 21) and suit learners at different proficiency levels (item 22). Teachers' familiarity with cultural suitability (item 26), linguistic suitability (item 23) and the authenticity of the materials (item 17)

was 84%, 80% and 78%, respectively. Items 20, familiarity with materials which help the personal development of learners and 27, awareness of learner-centered activities, each obtained 75% of the positive responses. The results indicated that a great majority of the teachers (72%) could evaluate the suitability of the textbooks from an emotional perspective (item 24), 71% knew if teaching materials were sensitive to individual differences among learners (item 34), and the same percentage of teachers were aware of the activities helping learners evaluate their own learning progress (item 28).

Table 3
Factor 1: Awareness of the Materials' Suitability

| Item | Item loading | Likert Scale | | | | | Mean |
|---|--------------|--------------|-----|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | |
| | | % | % | % | % | % | |
| 24. I am aware of suitability of materials in terms of their emotional content | 0.72 | 2.1 | 5.5 | 20.6 | 40.1 | 31.7 | 3.94 |
| 26. I am aware of suitability of materials in terms of their cultural content | 0.68 | 0.7 | 3.2 | 11.7 | 36.5 | 47.9 | 4.06 |
| 20. I am aware of materials which help the personal development of learners as members of society | 0.64 | 1.1 | 6.4 | 17.4 | 42.7 | 32.3 | 3.99 |
| 25. I am aware of suitability of teaching materials in terms of their topics | 0.62 | 0.7 | 3.2 | 11.7 | 36.5 | 47.9 | 4.28 |
| 21. I am aware of materials which provide opportunities for learners to practice language at home | 0.58 | 1.1 | 4.6 | 12.8 | 35.8 | 45.6 | 4.20 |
| 22. I know if materials are suitable for learners at different proficiency levels | 0.54 | 0.7 | 4.1 | 13.8 | 36.2 | 45.2 | 4.21 |
| 23. I am aware of suitability of materials in terms of their language complexity level. | 0.53 | 1.1 | 4.6 | 14 | 44 | 36.2 | 4.10 |

| | | | | | | | |
|--|------|-----|-----|------|------|------|------|
| 27. I know the degree to which teaching activities are learner-centered | 0.53 | 0.7 | 5.5 | 18.8 | 33.3 | 41.7 | 4.10 |
| 19. I am aware of materials which increase learners' personal engagement in learning | 0.51 | 0.5 | 4.8 | 10.1 | 42 | 42.7 | 4.22 |
| 28. I am aware of the activities which help learners evaluate their own learning progress | 0.49 | 1.1 | 6.4 | 21.6 | 32.3 | 38.5 | 4.01 |
| 17. I am aware of the degree to which teaching texts and tasks are authentic and real-life | 0.48 | 0.9 | 4.1 | 17 | 35.6 | 42.4 | 4.14 |
| 34. I know if materials are sensitive to individual differences among learners | 0.47 | 2.5 | 6.4 | 20 | 40.6 | 30.5 | 3.90 |
| 13. I am aware of the factors which increase the success of a language teaching program | 0.42 | 1.1 | 2.3 | 11.2 | 39.2 | 46.1 | 4.27 |

Factor 2 represented teachers' ability for and awareness of lesson plans and lesson structures. It accounted for 23% (N=8) of items scrutinizing teachers' perceptions of lesson plans, structures of lessons and activities, and the purpose of EFL materials. Table 4 illustrates that the highest and lowest loading factors belonged to teachers' ability to use the instructions in teachers' manual and their knowledge of developing lesson plans, in that order. The results demonstrated that the positive responses by the teachers ranged from 79% (item 7) to a high of 91% (item 12). The majority of the teachers (91%) were familiar with the process of developing lesson plans (item 12), and 84% expressed their awareness of the purposes of EFL materials used in their institutes. Items 15, the use of teacher's manual in teaching, and 16, the arrangement and interrelation of the lessons and units, each obtained 83% of the positive responses. Regarding item 3, 82% of the teachers claimed to be

able to make connections between materials covered in previous levels and their present materials. As for the materials stimulating interaction among learners (item 18), it was found that 82% of the teachers stated to be aware of those kinds of materials. Moreover, teachers' awareness of the suitability of EFL textbooks for learners (item 1), and of the materials taught at different proficiency levels in their institutes (item 7), obtained 80% and 79% of the positive responses, respectively.

Table 4

Factor 2: Ability for and Awareness of Lesson Plans and Lesson Structures

| Item | Item loading | Likert Scale | | | | | Mean |
|--|--------------|--------------|-----|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | |
| | | % | % | % | % | % | |
| 15. I can use instructions given in the teacher's manual in my practical teaching activities | 0.65 | 0.9 | 3.7 | 12.4 | 30.7 | 52.3 | 4.30 |
| 16. I am aware of the way the materials I teach are arranged and interrelated across lessons and units | 0.60 | 1.4 | 3 | 12.8 | 35.1 | 47.7 | 4.25 |
| 18. I know which materials stimulate interaction among learners | 0.59 | 0.5 | 6 | 12.6 | 33 | 47.9 | 4.22 |
| 3. I make connections between language materials learners have learned in previous levels and their present teaching materials | 0.58 | 1.4 | 4.4 | 12.4 | 32.3 | 49.5 | 4.24 |
| 4. I am aware of the purposes of EFL materials used in my institute | 0.52 | 1.4 | 5.3 | 9.4 | 26.4 | 57.6 | 4.33 |
| 7. I am aware of materials used at different proficiency levels in my institute | 0.49 | 0.9 | 7.3 | 12.6 | 33.5 | 45.6 | 4.16 |
| 1. I know whether or not EFL textbooks used in my institute are suitable for learners | 0.47 | 3 | 5.7 | 11.5 | 32.8 | 47 | 4.15 |

| | | | | | | | |
|--|------|-----|-----|------|------|------|------|
| 12. I know how to develop a lesson plan for my classes | 0.43 | 2.8 | 5.7 | 12.8 | 29.4 | 49.3 | 4.17 |
|--|------|-----|-----|------|------|------|------|

Factor 3 included 12% (N=4) of the items and focused on the teachers' awareness of the aims of the exams and teaching materials in their institutes. It is inferred from Table 5 that the teachers' perception of the purposes of examinations received the highest loading, whereas their awareness of the content of the exams obtained the lowest loading. The highest and lowest percentage of the positive responses belonged to items 8 and 11, in that order. In other words, 84% of the teachers were cognizant of the content of the teaching program (item 8), while only 79% were aware of the content of the examinations in their institutes (item 11). Approximately 83% of the teachers were aware of the aims of the language programs (item 9) and 81% knew about the purposes of the examinations in their institutes (item 10).

Table 5

Factor3: Awareness of the Aims of Exams and Materials in the Institute

| Item | Item loading | Likert Scale | | | | | Mean |
|--|--------------|--------------|-----|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | |
| | | % | % | % | % | % | |
| 10. I am aware of the purpose of examinations in my institute | 0.80 | 2.3 | 6.2 | 10.3 | 25.5 | 55.7 | 4.26 |
| 9. I am aware of the aims of the language program in my institute | 0.72 | 1.1 | 5.7 | 10.6 | 23.2 | 59.4 | 4.34 |
| 11. I am aware of the content of examinations in my institute | 0.65 | 2.8 | 5.7 | 12.8 | 29.4 | 49.3 | 4.17 |
| 8. I am aware of the content of the language program in my institute | 0.58 | 1.1 | 4.6 | 10.6 | 31.4 | 52.3 | 4.29 |

Factor 4 comprised 15% (N=5) of the items akin to the teachers' cognizance of language tests and teaching programs, the appropriateness of tests and their connection with the materials, and their familiarity with theories of language teaching programs (Table 6). As the table presents, the

highest and lowest loading belonged to teachers' awareness of appropriate tests for learners and their acquaintance with interesting and motivating teaching materials, respectively. The positive responses by the teachers ranged from 72% (item 33) to a high of 82% (item 32). The majority of the teachers (82%) stated their familiarity with the materials increasing students' motivation for learning (item 32); however, 72% were aware of theories and views about teaching programs (item 33). The positive responses to item 29, the connection between the content of the teaching materials and the tests, were provided by 78% of the teachers. Similarly, 76% of teachers' were able to perceive their students' achievements based on their test scores (item 31), and relatively the same percentage of teachers were aware of appropriate tests for their students (item 30).

Table 6

Factor4: Awareness of Language Tests and Teaching Programs

| Item | Item loading | Likert Scale | | | | | Mean |
|---|--------------|--------------|-----|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | |
| | | % | % | % | % | % | |
| 30. I am aware of appropriate tests for particular groups of learners | 0.64 | 2.8 | 6.4 | 14.9 | 36.5 | 39.4 | 4.03 |
| 31. I am aware of the degree to which tests scores show learners' achievements | 0.64 | 2.8 | 5.3 | 15.6 | 40.1 | 36.2 | 4.02 |
| 33. I am aware of different views and theories about language teaching programs | 0.57 | 1.6 | 9.4 | 16.7 | 38.3 | 33.9 | 3.94 |
| 29. I am aware of the connection between materials and test contents used in my institute | 0.55 | 1.8 | 6.2 | 14 | 33.3 | 44.7 | 4.13 |
| 32. I am aware of the materials which increase learners' motivation for learning | 0.4 | 2.1 | 3.4 | 12.4 | 35.8 | 46.3 | 4.21 |

Factor 5 entailed 12% (N=4) of items about the available EFL textbooks and teachers' abilities to teach them or choose appropriate materials according to their learners' proficiency. As demonstrated in Table 7, teachers' familiarity with EFL textbooks and their ability to skilfully teach them in their institutes obtained the highest and lowest loading, in that order. Regarding the awareness of available ELT textbooks and ability to teach, the positive responses ranged from 71% to 86%. The majority of the teachers (86%) could skillfully teach EFL textbooks in their institutes (item 14) and 82% could choose materials appropriate to learners' proficiency level (item 5). Teachers' familiarity with EFL textbooks (item 6), and their awareness of available EFL textbooks in the market (item 2) were 76% and 71%, respectively.

Table 7

Factor5: Awareness of Available ELT Textbooks and Ability to Teach Them

| Item | Item loading | Likert Scale | | | | | Mean |
|--|--------------|--------------|------|------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | |
| | | % | % | % | % | % | |
| 2. I am aware of main EFL textbooks on the market | 0.64 | 3.2 | 12.2 | 13.8 | 38.3 | 32.6 | 3.85 |
| 6. I am aware of other EFL materials which can be used in language teaching | 0.64 | 1.8 | 7.3 | 14.9 | 38.5 | 37.4 | 4.02 |
| 5. I know how to choose EFL materials appropriate to learners' proficiency level | 0.57 | 1.4 | 5.3 | 11.2 | 37.4 | 44.7 | 4.19 |
| 14. I can skillfully teach EFL textbooks used in my institute | 0.52 | 0.2 | 3.4 | 10.3 | 35.8 | 50.2 | 4.32 |

5. Discussion

This study was conducted to explore the nonnative English language teachers' curricular knowledge based on Roberts' (1998) model. The participants were recruited from English language institutes. The results, in general,

demonstrated variations in teachers' curricular knowledge. In this section, the results are discussed based on five factors. Regarding factor 1, the findings indicated that the teachers were more knowledgeable about factors contributing to the success of a language teaching program and materials enhancing learners' personal engagement in learning. This indicates that teachers enjoy appropriate level of curricular knowledge and know that learners can improve their learning if they are engaged in the process of their own learning. The results lend support to those of the study by Borg (1998) who investigated an EFL teacher's pedagogical knowledge of grammar and confirmed the importance of awareness raising, the knowledge and needs of the students, and the active engagement of students in their own learning process. The results are also in line with those reported by Liu, Liang, Wang, Chan, and Wei (2003) who focused on knowledge transfer from instructors to students and considered questioning and answering, informative feedback, and explanations to be influential in improving knowledge transfer as an aspect of interactivity in the classroom. The concept of interactivity is also introduced by Siau, Sheng, and Nah (2006) who underlined learners' engagement and attention as important factors in learning.

The teachers were also asked about the suitability of the material they taught. It was interesting to find that the majority of the teachers were more cognizant of topical suitability; they knew that students' familiarity with a topic would help them better understand and enjoy the lesson. This is reinforced by Calderhead's (1996) assertion that curricular knowledge refers to teachers' awareness of the topics and their underlying organization, development, and coherence. The results are also in line with those reported by De Jong, Van Driel, and Verloop (2005) and Van Driel, De Jong, and Verloop (2002) who investigated the Pedagogical Content Knowledge (PCK) of preservice teachers and found that the more teachers are aware of specific

teaching strategies, the better they can understand the students' opinion about the topics. However, the teachers in this study, demonstrated relatively lower awareness of the linguistic, emotional, and cultural suitability of the materials which are other components of curricular knowledge and need to be considered by the teachers because, as Richards (1998) maintained, knowledge about language and the target culture are the components of knowledge base.

As for the materials, the teachers demonstrated a good understanding of suitable materials for studying at home and or appropriate for learners at different proficiency levels. The results indicated the teachers' consciousness of the fact that the materials for studying at home are beneficial to students who have achieved an appropriate level of autonomy and independence. This is in accord with Benson's (2012) claim that learners can communicate their own meanings and define who they are as learners or as individuals when they develop autonomy. The findings are also in line with Tamir's (1988) definition of curricular knowledge as teachers' knowledge about the curricula presented in the form of textbooks, films, syllabi, software, and sets of instructional materials. However, the teachers' familiarity with authentic materials was not very satisfactory, indicating that they need improvement in this area of curricular knowledge. This is in accordance with Roberts' (1998) description of curricular knowledge as teachers' ability to select appropriate authentic materials. As Berardo (2006) argued, authentic materials are highly motivating and give students a sense of achievement. Teachers' cognizance of teaching materials helping the personal development of learners was another component of Factor 1 which was picked by three-fourth of the teachers; however, it needs to be considered by all teachers since according to Cheung and Won's (2002), curriculum should provide each student with rewarding experiences that contribute to their personal development. Moreover,

Manzano Vázquez (2017) believes that teacher knowledge includes knowledge of the subject, the context, the curriculum, and the learners' personal development.

As for factor 2, the diversity of preferences and choices made by the teachers indicated different degrees of their awareness of the components of curricular knowledge. However, the majority of the teachers expressed their familiarity with the process of developing lesson plans and their crucial roles in teaching. It is consistent with Golombek's (1998) definition of knowledge of instruction as teachers' knowledge about the roles of factors affecting students' learning, such as teachers, students, and lesson plans. The finding also corresponds to Woodward's (2009) belief that the preparation of lesson plans assists teachers to have more effective and easier interaction with their students. Moreover, Savage (2014) believes that lesson plans reflect teachers' process of thinking, that is, the way they plan teaching to a group of students).

The next component in Factor 2 which probed into teachers' awareness of the purposes of EFL materials, another component of curricular knowledge, was picked by the majority of the teachers. This is consistent with Roberts' (1998) argument that the teachers' awareness of existing materials serves as a criterion for curricular knowledge. It is also in line with Angeli and Valanides' (2009) definition of curricular knowledge as an understanding of the materials for instruction. When asked about the teachers' manual and the organization of the materials, many teachers expressed their ability to effectively use teachers' guide in teaching and their awareness of the arrangement of the units across the textbooks. Also, the teachers manifested a satisfactory level of curricular knowledge and recognized the role of manuals in effective and successful teaching. The findings are consistent with the reports provided by Smith and Sendelbach (1979) and Horton (2013). In their

study, Smith and Sendelbach (1979) explored the ability of a science teacher to translate instructions in the teachers' manual into real teaching. They realized a decrease in the quality of instruction due to the teachers' divergence from the curriculum and attributed it to her limited subject matter knowledge and her difficulty in finding information in the manual (Clark & Peterson, 1984). Horton (2013) considers curricular knowledge as the teachers' understanding of the materials and their underlying organization. The provision of positive responses to the ability to connect the materials covered in previous terms and the present term was indicative of the teachers' curricular knowledge. It denotes vertical curricular knowledge defined by Shulman (1986) as the "familiarity with the topics and issues that have been and will be taught in the same subject area during the preceding and later years..." (p. 10).

The findings related to factor 3 indicated that the majority of the teachers were aware of the content and purpose of the examinations and language program, both of which are the components of curricular knowledge. This may be due to the institutes' policy to inform their teachers of their educational programs. In effect, teachers' familiarity with these issues is a requirement for curricular knowledge. The findings are supported by Roberts' (1998) description of curricular knowledge as teachers' cognizance of teaching materials and the nature of examinations. However, as it can be inferred from the findings, the teachers were less familiar with the purpose and content of the examinations held in their institutes compared with their knowledge about the teaching programs. This poor awareness runs counter to teachers' need to increase their understanding of assessment. As Cheung and Wong (2002) and Ball and Bass (2009) stated, curricular knowledge contains teachers' cognizance of not only educational goals but also instructional assessments.

Regarding factor 4, the teachers demonstrated to be greatly familiar with motivating materials which indicates their ability to suggest appropriate materials to their students. The teachers also demonstrated relatively great degrees of curricular knowledge on the other components in this factor. They stated that they had the knowledge to decide if the tests were based on the materials; they could also interpret test results and choose suitable tests. The findings are consistent with Cizek, Schmid, Germuth, and EvalWorks' (2013) belief that familiarity with different types of assessment is necessary for the teachers and should be considered in training courses. However, the teachers demonstrated to be far less familiar with the concepts and theories about language programs. This is in contrast with Mishra and Koehler's (2006) and Roberts' (1998) argument that teachers must know and understand the subjects they teach, and they should be aware of related concepts and theories.

The analysis of the data pertaining to factor 5 demonstrated that the majority of teachers could effectively teach EFL textbooks and choose suitable materials according to their students' proficiency level. These findings support Roberts' (1998) description of curricular knowledge as including, among others, teachers' awareness of teaching materials. The findings are also in line with Van Driel, Bulte, and Verloop's (2007) assertion that curricular knowledge assists teachers to teach according to the curriculum and make necessary changes while teaching students.

Based on the findings, the teachers manifested an awareness of other EFL textbooks and the available materials on the market, besides those used in their language institutes. This is consistent with Pineda's (2002) statement that curricular knowledge base entails teachers' understanding of curricular choices and their awareness of the existing curricular materials. The need for this knowledge was also accentuated by Calderhead's (1996) consideration of curricular knowledge as teachers' understanding of the materials relevant to their discipline.

6. Conclusions

This study explored English language teachers' curricular knowledge. According to the findings, although the teachers are competent in more than half of the components of curricular knowledge, they need to enhance their knowledge on the others. In general, from the responses provided by the teachers, it can be concluded that they have the curricular knowledge base about developing lesson plans, teaching EFL textbooks, identifying factors affecting the success of a language teaching program, and judging the suitability of the textbooks. However, their awareness of learner-centered activities, available and authentic materials, theories of language teaching, and aspects of testing constitutes the poor components of their curricular knowledge and needs improvement.

Differences in teachers' knowledge about the components of curriculum may be considered a further validation of the effect of relevant teacher education courses on the enhancement of teachers' curricular knowledge. It follows that these courses, either preservice or in-service, should be oriented towards a sustainable development of teachers' curricular knowledge, and at the same time be tailored to their needs to provide them with opportunities to continuously refresh and foster their curricular knowledge. It is through these courses and collaborative reflection sessions that teachers can improve their curricular knowledge for more effective teaching.

Finally, a number of important limitations need to be considered. First, the teachers participating in this study were recruited from different cities and language institutes with different training and experiences. In future studies, teachers' educational background and teaching experience can be considered in investigating teachers' curricular knowledge. Second, this study was limited to the content of the pre- and in-service training programs of English language institutes; therefore, the findings may be more relevant to these groups of teachers and cannot be generalized to others groups, such as school teachers. Third, the study was founded only on those aspects of curricular

knowledge proposed by Roberts (1998) and hence does not imply teachers' knowledge on other components of curricular knowledge specified in other models. Finally, the researchers acknowledge that although the study was conducted on a relatively large number of participants, one should be cautious about the generalizability of the results.

References

- Akbari, R., & Tajik, L. (2009). Teachers' pedagogic knowledge base: A comparison between experienced and less experienced practitioners. *Australian Journal of Teacher Education, 34*(6), 52-73.
- Angeli, C., & Valanides, N. (2009). Epistemological and methodological issues for the conceptualization, development, and assessment of ICT-TPCK: Advances in technological pedagogical content knowledge (TPCK). *Computers & Education, 52*(1), 154-168.
- Ariav, T. (1991). Growth in teachers' curriculum knowledge through the process of curriculum analysis. *Journal of Curriculum and Supervision, 6*(3), 183-200.
- Ball, D. L., & Bass, H. (2009). *With an eye on the mathematical horizon: Knowing mathematics for teaching to learners' mathematical futures*. Paper presented at the 43rd Jahrestagung für Didaktik der Mathematik. Oldenburg: Germany.
- Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G. J., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in educational research. *Practical Assessment, Research & Evaluation, 18*(6), 1-13.
- Benson, P. (2012). Autonomy in language learning, learning and life. *Synergies, 9*, 29-39
- Berardo, S. A. (2006). The use of authentic materials in the teaching of reading. *The Reading Matrix, 6*(2), 60-69.
- Borg, S. (1998). Teachers' pedagogical systems and grammar teaching: A qualitative study. *TESOL Quarterly, 32*(1), 9-38.
- Calderhead, J. & Robson, M. (1991) Images of teaching: student teachers' early conceptions of classroom practice. *Teaching and Teacher Education, 7*(1), 1-8.
- Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709-725). New York, NY: Simon & Schuster Macmillan.
- Cheung, D., & Wong, H.-W. (2002). Measuring teacher beliefs about alternative curriculum designs. *Curriculum Journal, 13*(2), 225-248.

- Choppin, J. M. (2009). Curriculum-context knowledge : Teacher learning from successive enactments of a standards-based mathematics curriculum. *Curriculum Inquiry*, 39(2), 287-320.
- Cizek, G. J., Schmid, L. A., Germuth, A. A., & EvalWorks, L. (2013). *A checklist for evaluating K-12 assessment programs*. Kalamazoo, MI: The Evaluation Center, Western Michigan University.
- Clark, C. M., & Peterson, P. L. (1984). *Teachers' thought processes*. Occasional paper No. 72. Published by the Institute for Research on Teaching, Michigan State University.
- Crandall, J. (2000). Language teacher education. *Annual Review of Applied Linguistics*, 20, 34-58.
- De Jong, O., Van Driel, J. H., & Verloop, N. (2005). Preservice teachers' pedagogical content knowledge of using particle models in teaching chemistry. *Journal of Research in Science Teaching*, 42(8), 947.
- Dörnyei, Z., & Csizér, K. (2012). How to design and analyze surveys in second language acquisition research. In A. Mackey & S. M. Gass (Eds.), *Research methods in second language acquisition: A practical guide* (1st ed., pp. 74-94). Malden, MA: Wiley-Blackwell.
- Dörnyei, Z. (2003). *Questionnaires in second language research: construction, administering, and processing*. Mahwah, NJ: Lawrence Erlbaum.
- Farrell, E. A. (2004). *The knowledge base of pre-service foreign language teachers: Meeting the standards through Eportfolios*. Doctoral dissertation, The University of Iowa.
- Golombek, P. R. (1998). A study of language teachers' personal practical knowledge. *TESOL Quarterly*, 32(3), 447-464.
- Graves, K. (2009). The curriculum of second language teacher education. In A. Burns & J. C. Richards (Ed.), *The Cambridge guide to second language teacher education* (pp.115-124). New York, NY: Cambridge University Press.
- Grossman, P. L. (1989). A study in contrast: Sources of pedagogical content knowledge for secondary English. *Journal of Teacher Education* , 40(5), 24-31.
- Horton, J. L. (2013). *The impact of beliefs and curricular knowledge on planning for science: a multisite case study of four teachers*. Doctoral dissertation, University of Tennessee.
- Johnson, K. E. (2009). *Second language teacher education: A sociocultural perspective*. New York, NY: Routledge.
- Justi, R., & Van Driel, J. (2005). The development of science teachers' knowledge on models and modelling: promoting, characterizing, and

- understanding the process. *International Journal of Science Education*, 27(5), 549-573.
- Kahn, P. and Walsh, L., (2006). *Developing your teaching: Ideas, insight and action*. New York, NY: Routledge.
- Khuanwang, W., Lawthong, N., & Suwanmonkha, S. (2016). Development of evaluation standards for professional experiential training of student teachers. *Procedia-Social and Behavioral Sciences*, 217, 878-886.
- König, J., Lammerding, S., Nold, G., Rohde, A., Strauß, S., & Tachtsoglou, S. (2016). Teachers' professional knowledge for teaching English as a foreign language: Assessing the outcomes of teacher education. *Journal of Teacher Education*, 67(4), 320-337.
- Liu, T. C., Liang, J. K., Wang, H. Y., Chan, T. W., & Wei, L. H. (2003). *Embedding educlick in classroom to enhance interaction*. Paper presented at the Proceedings of international conference on computers in education (ICCE).
- Manzano Vázquez, B. (2017). *Teacher education for autonomy: A study of modern language student teachers' professional development* Doctoral dissertation, Universidad de Granada.
- Milner, H. R. (2005). Stability and change in US prospective teachers' beliefs and decisions about diversity and learning to teach. *Teaching and Teacher Education*, 21(7), 767-786.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- Neeraja, K. (2003). *Textbook of nursing education*. New Delhi: Jaypee Brothers Medical Publishers.
- Nguyen, M. H. (2013). The curriculum for english language teacher education in Australian and Vietnamese universities. *Australian Journal of Teacher Education*, 38(11), 33-53.
- Pineda, C. (2002). Knowledge base for EFL/ESL educators: what does it mean? *Profile Issues in Teachers' Professional Development*, 3(1), 9-14.
- Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of Clinical Nursing*, 16(2), 234-243.
- Ravich, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.
- Richards, J. C. (1998). *Beyond training*. Cambridge: Cambridge University Press.
- Roberts, J. (1998). *Language teacher education*. New York, NY: Routledge.
- Savage, J. (2014). *Lesson planning: Key concepts and skills for teachers*. New York: Routledge.

- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-23.
- Siau, K., Sheng, H., & Fui-Hoon Nah, F. (2006). Use of a classroom response system to enhance classroom interactivity. *IEEE Transactions on Education*, 49(3), 398-403
- Stoddart, T., Solis, J., Tolbert, S., & Bravo, M. (2010). A framework for the effective science teaching of English Language Learners in elementary schools. In D. Sunal, C. Sunal, & E. Wright (Eds.), *Teaching science with Hispanic ELLs in K-16 classrooms* (pp. 151-181). Charlotte, NC: Information Age Publishing.
- Tamir, P. (1988). Subject matter and related pedagogical knowledge in teacher education. *Teaching and Teacher Education*, 4(2), 99-110.
- Tedick, D. J. (2005). *Second language teacher education: International perspectives*. London: Lawrence Erlbaum.
- Tomašević, B., & Trivić, D. (2015). Chemistry curricular knowledge of secondary school teachers. *Journal of the Serbian Chemical Society*, 80(3), 435-452.
- Tsui, A. (2003). *Understanding expertise in teaching: Case studies of second language teachers*. Cambridge: Ernst Klett Sprachen.
- Van Driel, J. H, De Jong, O., & Verloop, N. (2002). The development of pre-service chemistry teachers' PCK. *Science Teacher Education*, 86, 572-590.
- Van Driel, J. H., Bulte, A. M., & Verloop, N. (2007). The relationships between teachers' general beliefs about teaching and learning and their domain specific curricular beliefs. *Learning and Instruction*, 17(2), 156-171.
- Woodward, T. (2009). *Planning lessons and courses: Designing sequences of work for the language classroom*. Cambridge: Cambridge University Press.
- Wu, N. (2014). The Implementation of the National Professional Standard for K-12 Teachers, 2012 (NPST) at Regional and Local Level in China: A Case Study of Regional Teacher Professional Development Standards Implementation in Qingyang District, Chengdu, China. *Higher Education of Social Science*, 7(3), 88-98.
- Zhou, G., Wang, J. L., & Ng, P. A. (1996). Curriculum knowledge representation and manipulation in knowledge-based tutoring systems. *IEEE Transactions in Knowledge Data Engineering*, 8(5), 679- 689.
- Zumwalt, K. (1998). Beginning professional teachers: The need for a curricular vision of teaching. In M. C. Reynolds (Ed.), *Knowledge base for the beginning teachers* (pp. 173-184). New York, NY: Penguin Press.