The Representation of Multiple Intelligences in ESP Textbooks; a Content Analysis of Technical High School Course Books Regarding Language Learners' MI Profile

99

The Representation of Multiple Intelligences in ESP Textbooks; a Content Analysis of Technical High School Course Books Regarding Language Learners' MI Profile

Saadatfar, Elham

Department of English Language and Literature ,
Farhangiyan University
Kerman, Iran .
englishliterature768@gmail.com

Abstract

In this study we try to investigate the extent to which Multiple Intelligences Theory (MI) ,is reflected in the designed ESP textbooks for high school students of Accounting, Physical education, Network and Software , Architecture, Agricultural affairs ,Animation, Furniture Industries and Electronic, published by Iran's Ministry of Education; are in accordance with MI profile of students. For this aim, a Multiple Intelligences checklist developed by Razmjoo and Jozhaghi (2010), was used to calculate the frequencies and percentages of occurrence of each type of intelligences reflected through various activities in these selected ESP textbooks. And also Christison's (1996, 1999) young adults' questionnaire was chosen for determining MI profile of 12th grade ESP learners who, those textbooks that are going to be studied in this research ,were determined for them at school . The results of careful analysis of these textbooks' tasks and activities revealed that they mostly provided activities in the light of verbal/linguistic and visual/spatial intelligences. The least dominant intelligences were intrapersonal and naturalist intelligence types and no example of the naturalist intelligence was found in these course books' activities. The results of the study also revealed variation of students' and course books'MI profiles. As contrasted with the course books' MI profile, a balanced distribution of all types of intelligences with varying degrees, were perceived among the students.

Verbal intelligence was represented in most activities which is the least preferred by the students, which is followed by logical intelligence. While Bodily/Kinesthetic, Natural and Musical intelligence were neglected that are the most favorable in the MI profiles of students. The findings of the study highlight the fact that, ESP curriculum designers, for high school students, need to consider the necessity of applying all intelligence types, also regarding the field of study , in designing the ESP textbooks.

Key words:

Course book Evaluation, Multiple Intelligence (MI) Theory, Intelligence Profile, ESP Course books.

Introduction

Textbook is an important part of any English Language teaching program. (Sheldon, 1988): cited in Kirkgoz, 2009: pp.79), therefore it plays a very crucial role in language teaching and learning (Riazi, 2003, p. 52). Hutchinson and Torres (1994) refer to textbook as a universal element in the language teaching/ learning process and claim that no teaching-learning context is complete until it has its relevant course book. Textbooks in general and ESP text books in particular as the most essential resources used by the teachers in language classrooms play a significant role in conveying curriculum objectives to students (Ebadi & Ashtarian , 2015).

Since the importance of textbooks, it seems a careful evaluation and analysis; as a procedure involving measuring the value of the instructional materials (Tomlinson, 2001, 2003) is very significant. So before choosing the right course book for language learners, it is vital to evaluate those books based on some criterion that, our success in teaching can be warrantied and also it helps students to learn better.

Many researchers propose different criterion for evaluating the English language learning course books. One of these criterion that many researches shed lights on its importance is; according to multiple intelligence possess by language learners ; suggested by Gardener (1983); who revolutionized the traditional view of intelligence and IQ tests for viewing intelligence as a single construct and individuals as having a single quantifiable intelligence (Campbell & Dickinson, 1996, cited ,in Estaji & Nafisi, 2014). He argued that, "we should spend less time ranking children and more time helping them to identify their natural competencies and gifts and cultivate these. There are hundreds and hundreds of ways to succeed and many, many different abilities that will help you getting there" (Gardener, 1983).

So he proposed the theory of "multiple intelligences" (MI) that make a shift of paradigm in education and challenged the way society viewed intelligence, and it challenged teachers' attitudes with regard to their teaching (Razmjoo & farmer, 2012).

Then he concluded that there are Verbal-Linguistic Intelligence, Logical-Mathematical Intelligence, Visual-Spatial Intelligence, Musical Intelligence, Bodily–Kinesthetic Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence, Naturalistic Intelligence (Gardner & Hatch, 1989, p. 84).

So the one-size-fits-all curriculum which the educational world had become accustomed to ; did not appear so appropriate; after the scholars of this field understood that MI theory suggested that all human beings have different and unique intelligences with strengths and weaknesses (Gilman, 2001).

Thinking that all students learn in the same way is contrary to modern research in the field of education and as well as language teaching. Also Results of scientific studies have shown that MI Theory can be applied to classroom and schools situations (Gardner & Moran, 2006).

As Chapman, (1993) : cited in Ebadi & Ashtarian , 2015) also argues the heterogeneous individual and diverse classrooms atmosphere with diversely intelligent students demand teachers to adapt their teaching and select the appropriate materials to meet the needs of students .Therefore, it's necessary that English language learning textbooks should consider the different intelligences in their designs.

As It has been claimed by educators and teachers that the application of MI Theory in education and classrooms will result in learners' increasing level of interest, motivation, and success (Ebadi & Ashtarian, 2015); there is a great deal of research into the analyses of different

English textbooks to investigate the distribution of MI theory in the textbooks (Abbasian & Khajavi, 2012; Mirzaei, Mohebbi & Taaseh, 2014).

Most of the researches in this area showed an imbalance in the distribution of intelligences through the content of these books. In such English textbooks certain intelligences are dominant, some others are less so and there are others that are completely absent (Taase, 2012; Estaji and Nafisi, 2014).

Taking into the account the importance of textbooks in general and ESP textbooks in particular and the significance of multiple intelligences in enhancing students' language learning performance; this study tries to analyze ESP textbooks of high school students in Iran regarding their MI profile: to examine whether if they are in consistency with each other; considering the theory of multiple intelligences.

Therefore, the researchers analyze the content of the ESP textbooks for high school students of Accounting, Physical education, Network and Software, Architecture, Animation , Agricultural affairs, Furniture Industries and Electronic, regarding the students' MI profile ,with the following questions:

1. To what extent multiple intelligences are present in these textbooks?

2. What are the most and the least dominant intelligences in them?

3. What are the MI profiles of the ESP high school students?

4. To what extent the MI profiles of the ESP course books are related to the MI profiles of the students?

This study can be significant in several ways: evaluating the high school ESP textbooks based on MI Theory which is neglected in the previous studies .Although it seems that the high school ESP course books can be the basis for higher level of education, the former researchers, more taking into account the ESP course books of university level. And also in this research we will show the correlation between MI profile of students' and their ESP course books'. In this way the strength and weaknesses and suitability of these books under investigation of MI Theory will revealed. And also, generally analyzing the textbooks in terms of the MI theory and the extent to which, various kinds of intelligences are reflected in the tasks and activities of these books , would be as a guideline for giving detailed information to the syllabus designers that be careful about the application of MI theory in selecting the materials in the area of high school English for Specific Purposes (ESP) textbooks development.

Review of the Related Literature

Traditionally intelligence is considered as a static trait that is single, measurable, inborn and unchangeable over time (Ebadi & Ashorian 2015).This traditional view of intelligence and IQ tests have been criticized for viewing intelligence as a single construct and individuals as having a single quantifiable intelligence (Campbell & Dickinson, 1996, cited in Estaji & Nafisi, 2014). Some scholars try to introduce intelligence as multidimensional. In 1983, one of these scholars that challenge this traditional view about intelligence was Gardner who takes into account the many as possible as range of learners' mental abilities. He indicated that there are several independent intelligences rather that one dimensional intelligence. He defines intelligence as "the ability to solve problems and create products, that are valued in one or more cultural or community settings" (Gardener, 1983, p. 7). According to the theory of Multiple Intelligences proposed by Gardner (1985), human intelligence consists of different categories namely logical, linguistic, spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal,

each of which is possessed by individuals to some extent. After that he added three other intelligences; naturalistic, spiritual and existential to the previous proposed list of intelligences. These intelligences are not separated from each other, but in the interaction that exists among them, they can be developed if encouraged, enriched, and instructed (Armstrong, 2000; Williams, 1983).

Different types of intelligences are described as follows:

1- Verbal- Linguistic intelligence is the ability to use language in oral and written forms.

2- Logical - mathematical intelligence is the process of problem solving and the ability to use numbers.

3- Visual- spatial intelligence shows the ability to visualize things and ideas in space, color, form and shapes.

4- Musical intelligence is represent the sensitivity to rhythm, pitch by using of music to express emotions, feelings and thoughts.

5- Bodily- kinesthetic intelligence is the ability to use movement and gesture to express thoughts, emotions and ideas or for solving the problems by whole body effectively.

6- Interpersonal intelligence is the ability to interact with others and to understand their feelings, motivations, and to respond to them.

7- Intrapersonal intelligence is the ability to understand one's own emotion and feelings, and how they are the same or differ from others.

8- Naturalistic intelligence is the capacity to perceive the natural world and environment effectively and ability to distinguish patterns in nature (Armstrong, 2000). It is also claimed that people with more intelligence usually function in more complicated ways, and each intelligence type can be expressed in a variety of ways and activities (Mindy, 1995 cited in Taaseh, Mohebi , & Mirzaei, 2014).

As Gardner declared before just one curriculums for the language learners with different learning styles and variety of intelligences; seems doesn't meet the needs of them.

What these claims imply is that schools and teachers and who are responsible in educational system specially curriculum designers should consider the individual differences, to provide as many intelligence types as possible tasks and activities and also provide more opportunities for language learners to express themselves in their more dominant intelligence that they possess and also create a situation for improving all other types of intelligences.

Consequently, analyzing textbooks through MI Theory is very useful since textbooks are the main source used by teachers at Iran' schools, to transfer the course objectives.

Some researchers investigated MI Theory in language course books, in Iran and internationally.The studies in this series more dealt with EFL and some with ESP settings (see Alghazo et al., 2009; Bass, 2008; Botelho, 2003; Kirkgoz, 2010; Palmberg, 2001), all pointing to the fact that MI theory should be consider as a criterion for involving all types of intelligences in language learning tasks and activities. In the Iranian context, some studies have taken place in the area of ELT (see Abbasian & Khajavi, 2012; Bagherzadeh, &Talebi, 2013; Estaji & Nafisi 2014; Gholampour & Tasseh, 2014; Nasiri, Ketabi, & Dastjerdi, 2012; Razmjoo & Farmer 2012; Razmjoo & Jorzaghi, 2010). In all of these studies, an attempt has been made to investigate the extent to which locally and internationally designed English textbooks for foreign language learners reflect multiple intelligence types.

Some of studies that have been conducted in the domain of investigating the representation of multiple intelligences in the SAMT ESP textbooks are touched upon here. Using Botelho's (2003) checklist,

Abbasian and Khajavi (2011) tried to investigate the content of ESP textbooks published by SAMT represented multiple intelligences. They selected, Persian Literature, Accounting, Theology and Islamic Studies, Agriculture, Civil Engineering, Medicine, and many other ESP textbooks excluding English for the Students of Nursing for the purpose of this study included. They attempted to find the percentage of all multiple intelligences in these textbooks .The results of the study revealed that these ESP textbooks published by SAMT, contains mostly verbal/linguistics intelligence. And other intelligence have very low frequency percentage or were missing in the tasks and exercises.

In a similar vein, Rezvani and Amiri's (2012) selected eight ESP textbooks randomly from among 34 ESP textbooks published by SAMT ; English for the Students of Engineering, Chemistry, Sociology, Educational Administration and Supervision, Agricultural Economics, History, and Plant Science (Botany). They evaluated the Activities by using a MI checklist. They conclude that SAMT ESP textbooks were not responsive to the diversity in intelligence types of the language learners and activities were dealing with four types of intelligences: verbal/linguistic, intrapersonal, logical/mathematical and visual/ spatial. They also argued that regardless of different academic field of study, the curriculum designer consider no difference in activities of these books, regarding various intelligence types.

Ebadi and Ashtarian, (2015) also in their findings came to the result that 90.9% of activities in the SAMT Nursing book involve verbal/ linguistics intelligence which is in line with the findings of most studies in the field of ELT/ ESP.

As it could clearly be seen, in the area of multiple intelligences and textbooks evaluation at national and international level, studies embarking on the evaluation of ESP textbooks for the university students and although the ESP textbooks for high school students is basic in this field; no evaluation have been conducted base on MI Theory in this area , especially in the field of Accounting, Physical education, Network and Software , Architecture, Agricultural affairs ,Animation, Furniture Industries and Electronic, published by Iran's Ministry of Education.

In this study the researchers tries to considering the existing gap in this area of ESP text books' evaluation in terms of multiple intelligences , by analyzing the new version of English for Specific Purposes published by Iran's Ministry of Education , under the titles of Technical Knowledge for Accounting, Physical education, Network and Software ,Architecture, Agricultural affairs ,Animation , Furniture Industries and Electronic students , which are currently being used in Iranian Technical high schools ;and also to what extent these books are matchup with dominant MI profiles of students who have chosen those field as their favorite area of study .

Methodology
1.Participants
In total, 142 EFL learners who were studying at four technical high schools in Yazd participated in this study. Last year averages of English score (15 to 20), at school was used as a criterion for choosing the participants of this study. Of these 142 students, 31 Accounting students were chosen, 45 students from Network and software, 12 from Physical education, 17 Architecture, 26 Electronic, 6 Agricultural Affairs and 11 from Furniture Industries students.

The participants' age range from 17 to 18 years old who are in 12th grade at technical high schools. In this study gender of the participant is not taking into account.

Table 1 .Distribution of percentages of the students regarding their field of study in this research

Field of study	Frequency	Percentage
Accounting	31	21.8%
Network and software	45	31.6%
Physical education	12	8.4%
Architecture	17	11.9%
Electronic	26	18.3%
Agricultural Affairs	6	4.2%
Furniture Industries	11	7.7%
Total	142	100%

2. Materials
The course books chosen for this research were 8 new version of English for Specific Purposes' textbooks published by Iran's Ministry of Education , taught at technical schools ; under the titles of Technical Knowledge for Accounting, Physical education, Network and Software ,Architecture, Agricultural affairs ,Animation , Furniture Industries and Electronic students .

3.Data   Collection   Instruments
MI checklist developed by Razmjoo and Jozaghi (2010) was used in the present study to analyze an English section in the course books titled technical knowledge for Physical education ,Accounting ,Network and Software ,Architecture, Agricultural affairs , Furniture Industries and Electronic ESP high school students textbooks; in terms of multiple intelligence types (see Appendix A).

Christison's (1996, 1999) Multiple Intelligence Questionnaire was used to assess students' MI profile (Appendix B). This questionnaire contains eight sections; each section including six statements. The Persian version of the MI questionnaire was used to ensure that the items understood by all the participants (Appendix B).

Procedures
Based on description of each intelligence type in the checklist, in this study, the researchers analyzed and counted the frequency and the percentages of each tasks and activities which contained different types of Multiple Intelligences to show the extent to which they are reflecting MI Theory. After collecting the data from MI profile questionnaires of the students who were using those books; the researchers calculate the correlation between them and that of exercises.

Results   and   Discussion
The purpose of present study was to evaluate a section as English for Specific Purposes in domestically - designed ESP high school students' textbook, under the Technical Knowledge, title for Accounting, Physical education, Network and Software ,Architecture, Agricultural affairs ,Animation, Furniture Industries and Electronic students; published by Ministry of education, to see to what extent MI theory regarding MI profile of students; has been implemented in these books which is currently taught in Iranian Technical high schools. To this

The Representation of Multiple Intelligences in ESP Textbooks; a Content Analysis of Technical High School Course Books Regarding Language Learners' MI Profile

105

end, a checklist developed by Razmjoo et al (2010) was used. The frequency and percentage of each intelligence type in tasks and exercises of the text book were counted.

In what follows, answer for the study questions will be provided. 1.What type(s) of intelligence(s) is/are presented in these textbooks? Table 1 illustrates the percentage of occurrence of each intelligence type in 7 textbooks for ESP high school students, published by Ministry of education.

Table2. Frequency of different Intelligence types in 8 high school ESP textbooks

Frequency and percentages of activities in different ESP text books																
Multiple Intelligence	Accounting		Physical education		Animation		Agricultural Affairs		Architecture		Network and Software		Electronic		Furniture Industries	
Verbal / Linguistic	29	47%	17	57%	28	70%	28	23%	29	32%	142	64%	154	87%	179	40%
Logical/ Mathematics	33	53%	4	13%	5	12%	30	25%	24	26%	34	15%	10	6%	34	7%
Visual/spatial	0	0	0	0	4	10%	63	52%	38	42%	32	14%	12	7%	126	28%
Bodily/ Kinesthetic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Musical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intrapersonal	0	0	5	17%	2	5%	0	0	0	0	15	7%	0	0	105	23%
Interpersonal	0	0	4	13%	1	2.5%	0	0	0	0	0	0	0	0	0	0
Naturalistic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	62	100%	30	100%	40	100%	121	100%	91	100%	223	100%	176	100%	444	100%

As it is clear, based on the intelligence profile of all 62 activities of English for Accounting students, (47%) belonging to verbal/linguistic intelligence and 53% to Logical/Mathematical. no activity were found catered to other types of intelligences. This table also shows the same results for the dominant intelligence in Physical education textbook ; As 53% of activities are in the light of verbal/linguistic intelligence, but the next prominent intelligence in this course book is Intrapersonal(17%) which follows by (13%)Logical/Mathematical and with the same percent ,Interpersonal intelligence among all activities . and also in English for Animation , Network and Software , Electronic , Furniture industries high school students , as listed in order, 70% , 64%, 87%, 40% of all activities are associated with verbal/linguistic intelligence which primarily found in these text books . the next most frequent intelligence in the Animation and Network ESP textbooks is Logical/mathematics by 12% for the former and ٣٢٪ for the later. But in the activities of Electronic and Furniture industries, visual/spatial is the next predominant intelligence by 7% and 28% of whole activities. The percentage of occurrence of spatial/visual intelligence in activities of Agricultural affair and Architecture is vice versa for other textbooks in this study; this intelligence is the main one by 52% and 42% which follows by verbal/linguistic in Architecture by 32% and logical/mathematic in Agricultural by 25%. Interpersonal intelligence was seen for 13% in Physical education textbooks' activities and for 2.5% in Animation one. Musical, Bodily/kinesthetic and Natural intelligence observed in no activities.

Table3. Chi-Square Test for eight ESP Course Books in Terms of MI Theory

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3192.000[a]	16	.000

As table3. displays, Chi-square test gives us a significant result (Sig=.000) for all eight ESP course books. This shows that the distribution of the intelligence types was not equal in these textbooks. In other words, the eight intelligences are not distributed equally among the children's course books.

Figure1. Summarizes the number of occurrences and percentages of each intelligence Type in the 8 selected ESP high school textbooks.
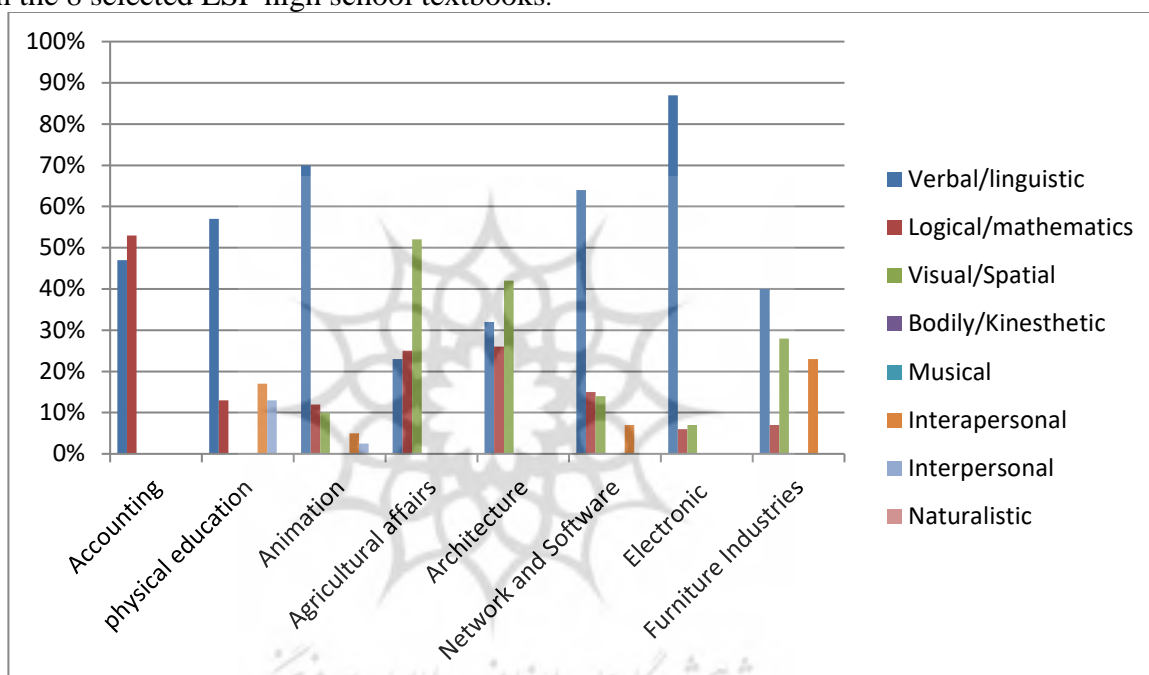

Figure.1

The figure above gives us an insight to the point that the different intelligence types were not

equally distributed in the activities of these textbooks.

Table4. Descriptive Statistics (average) of MI Profile of ESP students of different fields of study

fields MI	Accounting	Animation	electronic	Physical education	Agricultural affair	furniture industry	Architecture	Network	Mean
Intrapersonal	13 %	14%	12 %	13 %	13%	14%	13%	12%	13%
Bodily/ Kinesthetic	11%	12%	14 %	16%	14%	14%	14%	14%	13.6%
Verbal/ Linguistic	10%	10%	9%	8%	8%	10%	9%	9%	9.12%
Spatial/Visual	13%	14%	14 %	13%	13%	12%	13%	12%	13%
Musical	14%	13%	13 %	14%	13%	13%	15%	16%	14.8%

The Representation of Multiple Intelligences in ESP Textbooks; a Content Analysis of Technical High School Course Books Regarding Language Learners' MI Profile

107

Natural	14%	12%	14%	15%	17%	13%	13%	13%	14.8%
Interpersonal	12%	13%	13%	14%	13%	14%	13%	13%	13.1%
Logical/ Mathematical	13%	12%	11%	9%	9%	10%	10%	11%	**10.6%**
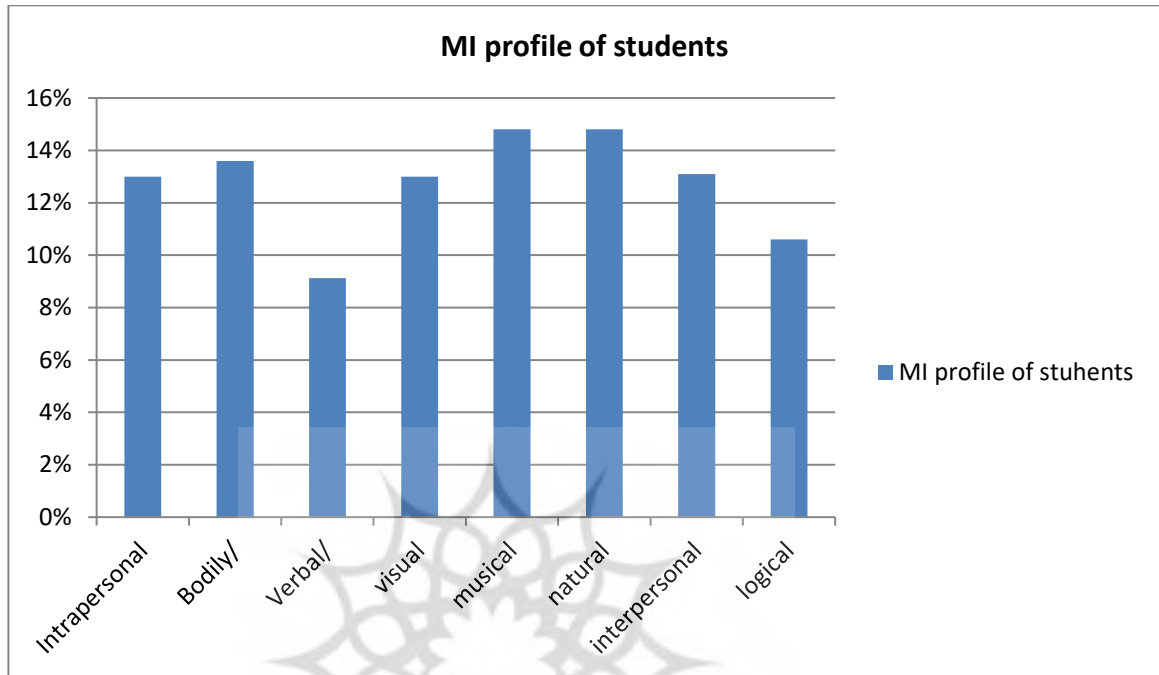
Figure.2

Based on table.4 and figure.2 which demonstrate multiple intelligence mean scores of 8 different fields of study's students; among the most preferred intelligences are Musical, Natural, Bodily/kinesthetic with the mean score of 14.8, 14.8 and 13.6%, which are completely ignored in the textbooks activities. since The most dominant intelligence among the activities of these course books was Verbal/Linguistic intelligence with the mean score of 52.5% which is the least preferred one by the students with the mean score of 9.10% , Findings of this study in this respect are somehow in line with the findings of most studies in the field of ELT/ ESP (Abbasian & Khajavi, 2012; Bagherzadeh, &Talebi, 2013; Estaji & Nafisi 2014; Gholampour &Tasseh, 2014; Nasiri, Ketabi, &Dastjerdi, 2012; Razmjoo& Farmer 2012; Razmjoo & Jozaghi, 2010; Rezvani & Amiri , 2012).

In this study the second dominant intelligence type presented in School ESP textbooks preceded by verbal Logical/mathematical intelligence is logical/ mathematical intelligence with the mean scores of 19.62, followed by visual/spatial intelligence by 19.12% as mean score. But in the MI profiles of students Musical, Natural and Bodily/kinesthetic were ranked first which are followed by interpersonal, intrapersonal and visual/spatial intelligences, with the same mean scores of 13. And logical and verbal intelligences with the mean scores of 10.6 and 9.12 are ranked last. This finding is also very close to that of ESP textbook evaluations by the researchers mentioned before.

All in all, it might be argued that new version of ESP textbooks for high school students published by Ministry of education, didn't consider the diversity intelligence of the heterogeneous population of ESP learners , especially regarding the nature of the field of studies. for example not just Agricultural students preferred Natural intelligence and Physical education students ,preferred Bodily/kinesthetic intelligence most but also they were favorable by all different fields of study's students ; but the statistic findings of the study shows that no activities related to these two intelligences are applied in the textbooks. Although the essence of language learning seems mostly related to the Verbal/Linguistic intelligence and They mostly

focused on definition of technical words, encourage students to memorize them , through different activities such as match words with pictures , translation ,reading comprehension questions , summarization of long texts , trying to find definition of new technical vocabularies in dictionary; but if curriculum designers pay more attention to preferred intelligences by the students , and providing more tasks and activities related to them , we will witness more success in language learning specially in ESP domain.

Conclusion

the present study reported on the Multiple Intelligence evaluation of the eight high school ESP text books ; Accounting, Physical education , Animation , Furniture industry ,Network and Software ,Agricultural affairs ,Electronic ,Architecture textbook designed and published nationally by Ministry of Education for ESP high school students.

The results suggested that the activities in the analyzed textbook are around verbal /linguistic followed by logical/ mathematical intelligence type. The role of other type of intelligences was almost neglected even in this new version. The general conclusion from this study is that national textbook writers should find ways to challenge all of the intelligence types to meet the needs of the learners. And also in this study the researchers by using a questionnaire collect the MI profiles of students which shows that Different individuals enjoy all types of intelligences with different strengths but unfortunately in their ESP textbooks just some of the intelligences were paid to. therefore, in English language classes in general and ESP classes in particular, instructors should consider this diversity which lead to a need for accommodating for all types of intelligences through using the more representative textbooks .Thus, it is highly recommended that curriculum developers of ESP text books tries to consider this issue from high school level and develop a curriculum/ textbook that caters for the undeveloped intelligences.

It is hoped that the findings of this study and the similar ones will have an impact on revision of ESP curriculum.

References

Abbasian, R. & Khajavi, Y. (2012). English Language Teaching Program of Universities: Does it Cater for Multiple Intelligences of Students? PortaLinguarum, 17, 111-131.

Chen, J. Q., Moran, S., & Gardner, H. (Eds.). (2009). Multiple intelligences theory around the world. San Francisco, CA: Jossey-Bass Publishers.

Chan, D. W. (2003). Multiple intelligences and perceived self-efficacy among Chinese secondary school teachers in Hong Kong. Educational Psychology, 23 (5), 521-533. Association of Applied Linguistics, 16(1), 73-82.

Ebadi, S., & Ashtarian, S. (2015). On the Representation of Multiple Intelligences in ESP Text Books: The Case of English for the Students of Nursing Published by SAMT. *International Journal for Teachers of English*, *5*(2), 1-10.

Estaji, M., &Nafisi, M. (2014). Multiple intelligences and their representation in the EFL young learners' textbooks. International Journal of Research Studies in Language Learning, 3 (2), 61- 72.

Gardner, H. (1983). Frames of Mind: The theory of multiple intelligence. New York: Basic Books.

Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school: educational implications of the theory of multiple intelligences. Educational Researcher, 18, 84-89.

Gardner, H., & Moran, S. (2006). The Science of multiple intelligences theory: A response to Lynn Waterhouse. Educational Psychologists, 41(4), 227-232.

Gilman, L. (2001). Human intelligences: The theory of multiple intelligences. Retrieved February 9, 2010 from www. indiana. edu. com

Hutchinson, T., & Torres, E. (1994). The textbook as agent of change. ELT Journal, 48, 315-328.

Jozaghi, Z. &Razmjoo, S. A. (2010). The representation of multiple intelligences types in the Top-notch series: A textbook evaluation. Pan-Pacific Association of Applied Linguistics, 14(2), 59-84.

Kırkgöz, Y. (2009). Evaluating the English textbooks for young learners of English at Turkish primary education. Procardia-Social and Behavioral Sciences, 1(1), 79-83.

Mirzaei, F., Mohebbi, A., &Taaseh, Y. (2014). Intelligence profile of Iranian domestically designed and published ELT textbooks and students' multiple intelligences. International Journal of Language and Linguistics, 2(4), 24-31.

Razmjoo, S. A., & Farmer, Z. (2012). On the representation of multiple intelligence types in the ILI intermediate course books: A course book evaluation. *Iranian Journal of Applied Language Studies*, *4*(2), 153-188.

Riazi, A. M. (2003). What textbook evaluation schemes tell us? A study of the textbook evaluation schemes of three decades. In W. A. Renanda (Ed.), methodology and materials design in language teaching (pp. 52-68). Singapore: SEAMEO Regional Center.

Rezvani, R., & Amiri, T. (2012). Dominant intelligences in ESP textbooks: Multiple or single? The First Conference on Language Learning and Teaching: An Interdisciplinary Approach. Mashhad, Ferdowsi University

Sheldon, L. E. (1988). Evaluating ELT textbooks and materials. ELT Journal, 42(4), 237-246.

Tomlinson, B. (2003). Developing materials for language teaching. London: Continuum.

Tomlinson, B. (2001). ELT courses for adults. ELT Journal, 55(1), 80-101.

Appendix A: MI Checklist and Sample Activities Addressing Various Intelligences as Represented in the Course Books

Intelligence Type	Definition	List of activities	Sample Activities
Verbal/Linguistic	The ability to use words effectively both orally and in writing. Remembering information, convincing others to help and talking about language.	1.note taking 2.riddles 3.work sheets 4.listening to lectures 5.word play games 6.listening to talking books 7.reading books 8.discussions 9.story telling 10.journal keeping 11.databases 12.memorizing 13.writting	Let's talk. Let's write. Write the questions. You want to make a cake write what you need and what you don't need. Name the game pieces ,say what you do and what you don't Do yourself
Logical/ Mathematical	The ability to use numbers effectively and reason well. Ability to predict understands basic properties of numbers and principles of cause and effect. Recognizing abstract patterns, creating codes.	1. Science demonstrations and experiments. 2. Logical puzzles and games. 3. Story problems with numbers. 4.Logical/sequential presentation of subject matter 5.Logical argumentation 6.problem solving	Number the parts. Put the sentences in order. Do you know any words with two meanings in English? Do the puzzle. Unscramble the sentences. Choose the right answer. Recognize the beginning sound of each word.
Spatial/Visual	The capacity to think in images and pictures, to visualize accurately and abstractly.	1.illustration 2.Graphs 3.tables 4.using charts and grids 5.videos,slides and movies 6.using arts 7.maps 8.photos 9.using graphic organizers 10.imaginative story telling 11.painting/picture/collage 12.mind maps 13.telescope 14.visual awareness activities 15.students drawings	Draw gifts. Match the sentences. Join the dots to help the animal finds its home. Make the same picture and color. Listen and draw hands on the clock

Multiple Intelligence	Definition	List of activities	Sample activities

Bodily/ kinesthetic	The ability to use the body to express ideas and feelings and to solve problems. Skills: coordination, flexibility, speed and balance	1. Hands on activities 2.field trips 3.role plays 4.creative movement 5.mime 6.body language 7.classroom aerobic 8.cooperative group rotation 9. Cooking or other mess activities.	Clap once for each syllable. Give commands and does the action .lets act. Let's play; Walk, run. Jump
Musical	Sensitivity to rhythm, pitch and melody. Recognizing simple songs and being able to vary speed, tempo and rhythm in simple melodies.	1.Singing 2.Songs 3.playing recorded music 4.playing live music 5.jazz chants 6.music appreciation 7.student mode instruments 8.background music	Let's sing. Listen to the numbers and sing. chant
Interpersonal	The ability to understand another person's mood, feelings, motivations and intentions .skills: responding effectively to other people, problem solving and resolving conflict.	1.pair work 2.peer teaching 3.board games 4.Group brainstorming 5.project work 6.work cooperatively	Work in pairs. Ask and answer. Talk to your family members and write their opinions.do you know a riddle? Ask your friend. Interview your grandparents to find out more about them
Intrapersonal	The ability to understand yourself, your strength, weaknesses, moods, desires, and intentions. Skills: understanding how someone is similar to or different from others, reminding oneself to do something, knowing how to handle one's feeling, knowing about oneself as a language learner.	1.activities with a selfevaluation component 2.interest centers 3.options for homework 4.personal journal keeping 5. checklist 6.inventories 7.individualized projects 8.doing things by yourself	Write about what to be in future. Describe yourself (how do you look like?) write fruits and vegetables you like the most.
Naturalistic	The ability to recognize and classify plants, minerals and animals including rocks, glass and all variety of flora and fauna. Classifying and categorizing activities.	1.classifying plants 2.recognizing animals 3. Classifying and recognizing activities. 4. Recognizing minerals.	Look outside the classroom window, what is the weather like?

Appendix B: The English Version of Young Adults' MI Questionnaire
Direction: Rank each statement 0, 1 or 2. Write 0 if you disagree with the statement. Write 2 if you strongly agree with the statement. Write 1 if you are somewhere in between.

Part 1
……………. 1: I like to read books, magazines and newspapers.
…………….. 2: I consider myself a good writer.
…………….. .3: I like to tell jokes and stories.
………………4: I can remember people's names easily.
……………....5: I like to recite tongue twister.
………………6: I have a good vocabulary in my native language.

Part 2
……………...1: I can hum the tunes to many songs.
……………...2: I am a good singer.
……………...3: I play a musical instrument or sing in a choir.
……………...4: I can tell when music sounds off-key.
……………...5: I often tap rhythmically on the table or desk.
……………...6: I often sing songs.

Part 3
……………...1: I often do arithmetic in my head.
……………...2: I am good at chess and/or checkers.
……………...3: I like to put things into categories.
……………...4: I like to play number games.
……………...5: I love to figure out how my computer works.
……………...6: I ask many questions about how things work.

Part 4
……………..1: I can read maps easily.
....................2: I enjoy art activities.
……………..3: I draw well.
……………..4: movies and slides really help me learn new information.
……………..5: I love books with pictures.
……………..6: I enjoy putting puzzles together.

Part 5
……………..1: It is hard for me to sit quietly for a long time.
……………..2: It is easy for me to follow exactly what other people do.
……………..3: I am good at sewing, woodworking, building, or mechanics.
……………..4: I am good at sports.
……………..5: I enjoy working with clay.
……………..6: I enjoy running and jumping.

Part 6
....................1: I go to the movies alone.
……………..2: I go to the library alone to study.
…………….3: I can tell you some things I am good at doing.
…………….4: I like to spend time alone.
…………….5: My friends find some of my actions strange sometimes.
…………….6: I learn from my mistakes.

Part 7
……………1: I am often the leader in activities.
....................2: I enjoy talking to my friends.
……………3: I often help my friends.
....................4: My friends often talk to me about their problems.
……………5: I have many friends.
……………6: I am a member of several clubs.

Part 8
……………1: I like houseplants.
……………2: I have or would like to have a pet.

……………3: I know the names of many different flowers.
……………4: I know the names of many different wild animals.
……………5: I like to hike and to be outdoors.
……………6: I notice the trees and plants in my neighborhood.