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The Representation of Multiple Intelligences Types in the Top-notch Series: A Textbook Evaluation

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This study aims at evaluating Top-Notch series through a checklist devised by the researchers based on the elements of the Multiple Intelligences (MI) theory proposed by Gardner (1998). With the shift from teacher-centered classrooms to learner-centered one, more and more research is/is needed to be done in the realm of students' need analysis. One of the undeniable needs of the students to be fulfilled is for them to learn through the intelligence they are most capable at while the educational system mainly addresses students' verbal intelligence. This study has evaluated Top Notch series in terms of taking the nine intelligences into consideration through answering these two questions: 1. To what extent does Top-Notch series represent the MI features? 2. How frequently each of the eight intelligences is used in each book of the series? The results confirm that Top Notch is rich in addressing verbal intelligence followed by the visual, logical, musical, interpersonal, bodily, and intrapersonal one while to some extent poor in representing natural and existential intelligences. It also shows that there exists a pattern of some of the intelligences-addressing through different levels, for example unlike visual intelligence, verbal-intelligence-addressing enhances as the books grow in level. The comparison of the results with that of Interchange series evaluation illustrated that Top Notch is more representative of the intelligences and that it is a suitable alternative to the Interchange in terms of addressing the elements of MI principles or as Lezear (1991) puts it "Ways of Knowing".

Key Words: Multiple Intelligences, Textbook Evaluation, Coursebook, Checklist, Top Notch series

1 Introduction

No one can deny the vital role of textbook in the process of language learning and teaching. Once a book is written, there is the need for it to get evaluated,

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especially these days that a large bulk of text material is available in written form and on line. Therefore, there should be a framework to help teachers choose the best book to fulfill students' needs. An evaluated coursebook would help teachers regulate their time and give the students a pre-devised syllabus in the beginning of the course to reach particular objectives. There are various checklists designed which provide guidelines for textbook evaluation. However, the researchers believe that there is a need for a checklist to be prepared based on the heterogeneity of the students' capabilities. In the realm of textbook evaluation, there are two main factors which should be taken into consideration including material authenticity and audience authenticity. Material authenticity deals with those aspects related to the physical nature of the text like its accessibility, availability, size, and cost while audience authenticity is related to the extent to which a text is compatible with learners' needs and different capabilities. As Arikan (2009) reflects it "coursebooks are written for general audiences and thus cannot, in themselves, meet the needs of a particular second language class" (Savignon 1977, p.131). Therefore there should be a framework based on which one can survey students' capabilities.

Most of the researchers believe the capabilities of the students can be measured through the IQ test. However, Howard Gardner is the first linguist who has opposed this myth with his theory of Multiple Intelligences (MI). Gardner (2003) asserts:

> It is fundamentally misleading to think about a single mind, a single intelligence, a single problem-solving capacity. And so, along with many others, I tried to make the argument that the mind/brain consists of many modules/organs/intelligences, each of which operates according to its own rules in relative autonomy from the others (p.6).

The available texts are mostly evolved based on the myth of the learners' uniqueness while as Gardner proposes there is learner diversity in terms of eight intelligences degree including verbal, musical, interpersonal, intrapersonal, bodily, naturalistic, mathematical, and visual intelligences: however, as Eisner (2004) believes, "We are much more concerned with standardization and homogenization than with the cultivation of variance in a group's performance" (p.33).

Multiple Intelligences theory focuses on the individuality of the learners and their different capabilities. It helps students learn the way they are more skilled at. It highlights the need for a learner-centered textbook and classroom. According to Koskal (2007) "the MIT-based activities have been providing multiple approaches for individuals so that they may have opportunities for getting knowledge through ways that are sufficient for them". This part is best finished by a sentence from the 17th century poet, Thomas Trahern: "all men see the same objects, but do not equally

understand them; Intelligence is the tongue that discerns and tastes them" (p.232).

1.1 Statement of the problem

The importance and place of textbook in the process of learning is emphasized by different researchers namely Hutchinson and Torres (1994) who believe:

> The textbook is an almost universal element of [English language] teaching. Millions of copies are sold every year, and numerous aid projects have been set up to produce them in [various] countries…No teaching-learning situation, it seems, is complete until it has its relevant textbook (p.315).

Therefore, we as teachers should be careful while choosing the right textbook for a particular group of learners. While choosing the textbook, one should take different capabilities of the students into consideration so as to select a coursebook which can fulfill the need of different students and their ways of learning according to the MI theory. This research aims at investigating one of the English Language Teaching (ELT) materials which has recently been used all over the world and especially in Iran where it is taking the place of Interchange series and headway series in private language institutes.

1.2 Objective of the study

This study aims at evaluating Top-Notch series through a checklist devised based on the elements of the Multiple Intelligences theory and the studies on textbook evaluation brought up in the literature review. It aims at investigating the validity of this series in terms of the MI principles within different parts and activities of the book to answer these questions:

1. To what extent does Top-Notch series represent the MI features?
2. How frequently each of the eight intelligences is used in each book of the series?

1.3 Significance of the study

With the shift from teacher-centered classrooms to learner-centered one, more and more research is done in the area of students' need analysis. One of the undeniable needs of the students to be fulfilled is for them to learn through the intelligence they are most capable at while the educational

system mainly addresses students' verbal intelligence. To reach this purpose, the coursebooks should be carefully examined to contain a wide range of activities related to the nine different intelligences. This study tries to evaluate a newly entered textbook in the realm of language teaching to see if it is a suitable alternative for the previous ones in terms of taking the nine intelligences into consideration. This study would benefit teachers, students, material developers and parents.

1.4 Conceptual and Theoretical Framework

Gardner (1983) proposed seven types of intelligences which would be presented as what follows. Note that each intelligence is further explained based on different sources (Armstrong, 1994; Brualdi, 1996; O'Brien, 2000; Waterhouse, 2000).

Verbal /Linguistic (VI) intelligence deals with the capacity of the affective use of words in both writing and oral conversation through the four skills: listening, speaking, reading, and writing. Another definition is provided by Brualdi as "it involves a mastery of the language" (1996).Writers, novelists, teachers, politicians, novelists, comedians, and poets are known to be of high verbal intelligence.

Logical/Mathematical (LM) intelligence refers to the capacity to work with numbers, recognize patterns and work with abstract symbols, shapes, functions. It deals with both inductive and deductive reasoning and logical thinking. This intelligence is highly dominant in scientists, computer programmers, logicians, accountants, bankers, and mathematicians.

Spatial/Visual Intelligence (SV) involves "the ability to perceive visual-spatial world accurately" (Armstrong, 1994, p.2). It concerns all the aspects dealing with space namely drawing, painting, architecture, navigation, visual arts, etc. This intelligence can be seen in such people as artists, interior decorators, inventors, architectures, producers of the visual arts, and cartographers.

Bodily/Kinesthetic (BK) Intelligence is the ability to use one's body to express emotions and ideas. It includes "physical skills such as coordination, balance, dexterity, strength, flexibility, and speed, as well as proprioceptive, tactile, and haptic capacities" (Armstrong, 1994, p.2).Actors, dancers, athletes, and acrobats are good at BK.

Musical Intelligence (M) concerns being sensitive to rhythm, pitch, beat, tonal pattern and melody and to have an ear for music. It involves people such as composers, musicians, dance bands, and music teachers.

Interpersonal Intelligence (IR) involves being extroverted in the community of others while showing pity to other's feelings, beliefs and emotions. Teachers, politicians, counselors, coaches, directors, salespeople, team leaders and supervisors are good at interpersonal intelligence.

Intrapersonal Intelligence (IA), as Brualdi (1996) puts it, is the ability to distinguish and identify various personal thoughts and feelings and to use them to understand one's own behavior. Psychiatrists, philosophers, and cognitive pattern researchers are of high intrapersonal Intelligence.

In 1999, Gardner proposed the eight intelligence, Naturalist Intelligence (N), which involves sensitivity to nature and the natural phenomena as well as the ability to classify the living organisms and species. It involves people such as biologists, veterinarians, environmentalists as well as the geologists.

He (1999) also presented the ninth intelligence called the Existential Intelligence (E) which is defined as:

> The capacity to locate oneself with respect to the furthest reaches of the cosmos-the infinite and the infinitesimal-and the related capacity to locate oneself with respect to such existential features of the human condition as the significance of life, the meaning of death, the ultimate fate of the physical and the psychological worlds, and such profound experiences as love of another person or total immersion in a work of art (p.60).

He believed that such outstanding figures in the realm of religion and psychology such as Gandhi and Albert Einstein enjoy high level of the existential intelligence (1999, p.62).

2 Literature Review

Since this study is intended to focus on the application of Multiple Intelligences (MI) theory in the realm of textbook evaluation, the literature review would deal with the two topics, textbook evaluation and the MI theory. The roots of the MI theory could be traced back to Binet (1904), who devised the first intelligence test (known as Stanford-Binet IQ test) to recognize students in need of remedial attention and to predict their success to the request of the minister of public instruction in Paris. This test requires the participants to answer a set of questions in a single sit and the results would be reported in the form of an "IQ score". Almost eighty years after, Howard Gardner (1998) challenged the validity myth of the so called IQ test with his theory of Multiple Intelligences which, as he puts it in his book *Frames of Mind,* "pluralizes the traditional concept" (Gardner, 1983).

After presenting nine intelligences including verbal, musical, kinesthetic, visual, logical, spatial, interpersonal, intrapersonal, existential, in his book *Audiences for the theory of multiple intelligences,* Gardner (2004) talks of two other intelligences based on the results of the IQ test including the "Mental Searchlight" and the "Laser Intelligence". As Waterhouse (2006) puts it the former one is the ability for those who score high in the IQ test to

scan wide spaces in an efficient way thus permitting them to run society smoothly while the latter one concerns specialists in the arts, sciences, and trades (Gardner 2004). However, Gardner would not relate these two intelligences to the former nine ones because the basis for the MI theory is to reject the IQ test while these two intelligences are based on that. Armstrong (1994) believed that each person possesses all the intelligences but to different portions. For example, while a person may be of high naturalist intelligence, he may at the same time enjoy low level of mathematical intelligence. Nevertheless, each person is able to enhance some or all the intelligences simultaneously while going through training. And the fact that all the intelligences can work together in intricate ways should not be ignored. For the person to learn better through the intelligences he has improved, one should make use of beneficial textbooks in the process of language learning.

The role of textbook cannot be denied in the triangular net of elements of language learning which includes the learner, the teacher and the textbook. And it goes without saying that so much attention should be paid to the way the textbooks are evaluated to fulfill both the learners' and teachers' needs. As Williams (1983) puts it "Any textbook should be used judiciously, since it cannot cater equally to the requirements of every classroom setting". The researchers have devised her checklist after close analysis of the elements of the MI theory and the works done on textbook evaluation namely, that of Rivers (1981) who presented a scheme for textbook evaluation which includes seven areas: 'appropriateness for local situation', 'appropriateness for teachers and students', 'language and ideational content', 'linguistic coverage and organization', 'types of activities', 'practical considerations', and 'enjoyment index'. The rating system in River's checklist (pp.477-483) is based on a 5-point scale: excellent for my purpose (1), suitable (2), will do (3), not very suitable (4), and useless for my purpose (5); that of Ur (1996), who proposed a model for text evaluation which includes nineteen elements: objectives being explicitly laid out in an introduction and implemented in the material, approach educationally and socially to the target community, clear attractive layout and easy print to read, appropriate visual materials available, interesting topics and tasks, varied topics and tasks, clear instructions, systematic coverage of syllabus, clearly organized and graded content, periodic review and test sections, plenty of authentic language, good pronunciation, vocabulary and grammar explanation and practice, fluency practice in all four skills, encouraging learners to develop their own learning strategies and to become independent, adequate guidance for teacher; audio cassettes, and being readily available locally. The rating is based on a 5-point scale: a double tick (very important), a single tick (fairly important), a question mark (not sure), a cross (not important) and a double cross (totally unimportant) are used to rate the items; Graves (2000), who classifies the textbook evaluation into two main categories: formative and summative. She defines formative evaluation as evaluating whatever effective in the process

of the students' learning while Richards (2001) believes formative evaluation to be seeking to find details about the time spent on particular objective, result of placement test, methodology, difficulties facing teachers or students, students' enjoyment for the program, sufficient practice work for students, and adequate material pacing. He also defines summative evaluation as seeking to make decisions about the worth or value of different aspects of the curriculum and to be concerned with determining the effectiveness, efficiency with its acceptability. Graves (2000), however, believes summative evaluation to assess the achievement of the course to provide information when the course is redesigned; and last but not least Botelho (2003), who analyzed interchange series to see the degree to which they respond to multiple intelligences theory. He examined the activities of the books to explore to what level they engage each of the nine intelligences. To accomplish this objective, he devised a list containing different activities and techniques as well as a description of each intelligence.

3 Method

This study aims at investigating the Top-Notch series based on the elements contributing to each type of nine intelligences to see the extent to which it fulfills the MI framework. Every randomly chosen unit of each book would be analyzed according to the checklist. First, each activity is analyzed based on the representative items mentioned in the right side of the checklist. For ease of understanding, for each item in the checklist, one example is provided based on the relevant units of the series, which is brought up on the right side of the checklist. Next, a table is presented to show the number and percentage of each activity in relation to the total number of activities of the book. However, it should be noted that some of the activities can be regarded as representative of more than one intelligence. For example, the following activity:

> "D: Discussion. Do you think the Hong Kong tailoring services described in the tour guide sound like "a good deal"? What's more important to you-price or quality?"

This activity can be regarded as representative of both verbal intelligence and the intrapersonal one. Therefore, the activities of this kind would be counted to the number of their occurrences for different intelligences.

3.1 Materials

The Top-Notch series (Saslow, & Ascher 2005) comprised the material of this study. From each of the eight books of the series one unit is chosen randomly and its activities would be analyzed.

3.2 Instrument

The instrument would be a checklist devised by the researchers based on the points mentioned in the theoretical and conceptual framework, which are related to the Multiple Intelligences theory as well as other checklists made by the researchers mentioned in the literature review. This checklist would be used to analyze the amount of each intelligence use throughout different activities of the Top-Notch series.

3.3 Data collection

The data would be obtained based on eight units chosen randomly from each book of the Top-Notch series. It contains the activities in each unit as well as the small boxes called Top Notch Project, Song, Visit our Website, etc.

3.4. Data analysis

As the research would be mainly conducted qualitatively as the parts chosen from each book would be carefully observed based on the elements related to each intelligence. However, each qualitative analysis would be followed by the presentation of descriptive statistics in form of a table.

4. Results

To begin with, the activities representative of the verbal intelligence are analyzed according to the following checklist.

Table 1. Verbal Intelligence Representative Activities[2]

Numbers	Checklist	Sample
1	Ask your partner about…	FB, p.97, E: Ask your partner questions about past activities.
2	Continue the dialogue in your own way	FB, p. 95, N3: Continue in your own way.
3	Complete sentences based on the reading	1A, p47, E: Complete each sentence with an adjective based on the reading and listening.

[2] *F=fundamental/ P=page/ A,B,…=name of the activity/N=number*

Numbers	Checklist	Sample
4	Complete sentences based on the grammatical point mentioned	FA, p12, B: Complete the sentences.
5	Create conversations on…	FB, p99: Create conversations for Don Baker and Karen Taylor. Ask about last weekend.
6	Create new conversations on…	FB, p93, N3: Now role-play the conversation. Use the pictures and the guide, or create a new conversation.
7	Discussions	1B, p100, B: Discussion. How do you often fly? Complete the chart with flights you took or that someone you know took. Tell your class about them.
8	In-other-words activities	2A, p15, E: With a partner, restate each statement in your own words.
9	Make a character chart that outlines the characters, major traits, actions, and relationships	FA, p19: Point and name the relationships
11	Rewrite the end of the story, continue the conversation anyway you like	FB, p95, N3: Continue in your own way…
12	Either find or solve problems with …	1A, p5: Write about the problems in the pictures.
13	Read and answer some questions based on that	1A, p41, D: Read the conversation carefully. Then check each statement true, false or no information.
14	Students assess their own strengths and weaknesses during reading or speaking	FA, p19: Now I can…
15	Tell your idea about (a picture, product…)	1A, p40, A: Look at the ad from a shopping catalogue. Do you like catalogues that sell electronic gadgets?
16	Use dialogue in/after reading or writing	FA, p15, N3: Practice the conversation with your own name. Write your partner's information.
17	Vocabulary building exercises	1A, p45, D: Vocabulary building. 3A, p28, A: Vocabulary. Services. Listen and practice.
18	Finding alternate words activities	3B, p64, B: With a partner, say what you think the speaker's original words were.
19	Write journals or diaries	FB, p94, D: On a separate piece of paper, write three things you did yesterday. Write three things you didn't do. Then tell your partner about your day.
20	All kinds of writing and rewriting activities including:	3B, p65, C: Rewrite each statement in indirect speech.

Numbers	Checklist	Sample
	1. Write on problems	1A, p51: Write about the problems in the picture
	2. Write about you	1A, p41: What about you?
	3. Write about what specific characters have done/said	FB, p99: Create conversations for Don Baker and Karen Taylor.
	4. Write your own answers to questions	1A, p50, D: Write your own answers to each question with real information.
	5. Write something based on your notes	1A, p50, F: Write a paragraph about a machine that you own. Use your notes on page47 for ideas.
	6. Write something to your friend	FB, p98, D: On a separate piece of paper, write about a vacation that you took. Then tell your partner about your vacation.
	7. Write a poem, myth, legend, story, short play, or news article about a picture	1B, p 111, writing: Tell the story in the pictures. Use the times and dates.
	8. Write a newsletter, booklet, dictionary or a notepad	2A, p21, step2: On your notepad, make notes about two movies you've seen recently.

The number and percentage of the activities representative of the verbal intelligence are presented in Table 2.

Table 2. Number and Percentage of the Activities Representing Verbal Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of verbal activities	Number of the total activities	Percentage of verbal activities
Fundamental A	2	11.0	24.0	45.83
Fundamental B	11	15.0	27.0	55.55
1A	4	30.0	39.0	76.92
1B	9	32.0	46.0	69.56
2A	2	37.0	48.0	77.08
2B	8	31.0	39.0	79.48
3A	3	30.0	37.0	81.08
3B	6	31.0	39.0	79.48
Total		217.0	299.0	72.57

Next, the activities representative of the logical intelligence are analyzed according to the following checklist.

Table 3. Logical Intelligence Representative Activities

Numbers	Checklist	Sample
1	Activities concerned with collecting data	FA, p19: Create conversations for the people. A: What's your last name? ….. What's your phone number?
2	Brainstorming	Not available
3	Creating and finding patterns	Not available
4	Coding activities/ Making a code for…	Not available
5	Categorizing facts or information/ Categorizing/Listing on a notepad	1A, p45: Make a list of the machines and appliances in the pictures. Add machines and appliances you have in your own house.
6	Comparing…	1A, p41, pair work: Compare your lists. Are they same or different?
7	Creating or analyzing timelines of events	1B, p100, A: Look carefully at the departure schedule and the clock. What time is the next flight?
8	Critical thinking	1B, p101, D: Read the statements critically. Check the statements that you are sure are true.
9	Explaining/Listing reasons for	1B, p107, step3: Tell the class what you decided and why.
10	Estimating activities	Not available
11	Memory games or activities	1A, p51: Look at the picture. Then close your books. Write all the machines you remember.
12	Making predictions or plans	1B, p101: What are your travel plans?
13	Making up analogies to (explain)	2A, p15, E: In other words. With a partner restate each statement in your own words.
14	Rating exercises	2A, p23, Step1: Complete the chart with films and TV shows you know. Rate the level of violence from 0 to 3, with 3 being the most important.
15	Setting up a (lab) project on…	1A, p50, Top Notch project: Write and design ads for the best products. Include pictures or photographs. Use the ads in unit 4 as a model.
16	Using Inductive reasoning in teaching	FA, p12, A: Grammar. Possessive adjectives and nouns.
	Or in doing activities	1A, p41, D: Read the conversation carefully. Then check each statement true, false or no information.
17	Using deductive reasoning in	1A, p42, A: Grammar. Use the

Numbers	Checklist	Sample
	teaching (esp. grammar)	present continuous for actions in progress now and for some future actions. Form the present continuous with be and a present participle (base form + ing)
	Or in doing activities	1B, p103, D: Complete each sentence or question with should or could and the base form of the verb.
18	Understanding from context	3B, p63, D: Find a word or expression in the conversation that means…
19	Working with number sequences	FA, p16, B: Listen while your partner reads a number. Write the number on a separate piece of paper.
20	Memory games or activities	1A, p51: Look at the picture. Then close your books. Write all the machines you remember.

The number and percentage of the activities representative of the logical intelligence are presented in Table 4.

Table 4. Number and Percentage of the Activities Representing Logical/Mathematical Intelligence to the Total Number of the Activities in the Chosen unit of Each Book

Book Level	Unit #	Number of Logical activities	Number of the total activities	Percentage of Logical activities
Fundamental A	2	9.0	24.0	37.50
Fundamental B	11	12.0	27.0	44.44
1A	4	19.0	39.0	48.71
1B	9	21.0	46.0	45.62
2A	2	21.0	48.0	43.75
2B	8	17.0	39.0	43.58
3A	3	15.0	37.0	40.54
3B	6	16.0	39.0	41.02
Total		130.0	299.0	43.47

Then, the activities representative of the spatial intelligence are analyzed according to the following checklist.

Table 5. Spatial Intelligence Representative Activities

Numbers	Checklist	Sample
1	Associations (i.e. Link pictures with concepts)	FA, p12, C: Vocabulary. Relationships. FB, p95, E: Weekend activities. (Each concept is visualized in form of a picture; e.g. the concept of a classmate is illustrated in form of a

Numbers	Checklist	Sample
		picture showing two students close to each other and talking)
2	Asking the students to create an ad for a product	1A, p50, Top Notch project: Write and design ads for the best products. Include pictures or photographs. Use the ads in unit 4 as a model.
3	Accompanying an activity with (genuine) advertisement illustrations	1A, p40, A: Look at the ad from a shopping catalog. Do you like catalogs that sell electronic gadgets?
4	Activities accompanied by charts, maps, posters, clusters, notepads, or graphs	FB, p92, C: Now choose five years from the chart. Say a year to your partner. Your partner circles the year.
5	Activities accompanied by timelines	1B, p100, A: Look carefully at the departure schedule and the clock. What time is the next flight to Sao Paulo?
6	Activities involving imagining…	3B, p73: Tell the story in the pictures. Who do you think the people are? What does the report say about the weather?
7	Creating a new conversation based on given pictures	FB, p93, N3: Now role-play the conversation. Use the pictures and the guide, or create a new conversation.
8	Creating a movie review	2A, p 24, Top Notch project: Create a movie review page with your class.
9	Inserting Web pages in an activity/Referring to Web pages	3A, p 26, A: Look at the business service web site. 2B,p96, Top Notch Website: For Unit 8 online activities, visit the Top Notch companion Website at www.longman.com/topnotch
10	Making up a story based on some pictures	1B, p 111: Tell the story in the pictures. Use the times and dates.
11	Using mind maps	Not available
12	Providing students with ideas to talk on by use of pictures	1A, p 43: Suggest a brand or model. Use the pictures and the guide, or create a new conversation.
13	Picture-present activities/parts	FA, p14, B: For each question there exists a photo Each chapter ends in a unit wrap-up page which contains pictures related to the concepts covered in the unit
14	Setting the scene by means of a photo	FB, p93, conversation: All the conversation parts are accompanied by a relevant photo related to the topic.
15	Writing Based on pictures	2A, p25: Write about the picture.

The number and percentage of the activities representative of the visual intelligence are presented in Table 6.

Table 6. Number and Percentage of the Activities Representing Spatial/Visual Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Visual activities	Number of the total activities	Percentage of Visual activities
Fundamental A	2	12	24.0	50.00
Fundamental B	11	14	27.0	51.85
1A	4	21	39.0	53.84
1B	9	22	46.0	47.82
2A	2	20	48.0	41.66
2B	8	19	39.0	48.71
3A	3	16	37.0	43.24
3B	6	17	39.0	43.58
Total		141.0	299.0	47.15

Next comes, the activities representative of the bodily/kinesthetic intelligence are analyzed according to the following checklist.

Table 7. Bodily Intelligence Representative Activities

Numbers	Checklist	Sample
1	Activities involving pointing to a specific thing	FB, p11, B: Listen to the years. Point to the year you hear.
2	Acting out activities/ Mime	Not available
3	Activities with topic related to doing sports	FB, p95, E. Weekend activities.
4	Clapping for pronunciation	Not available
5	Discussions	FB, p96, B: Discussion. Tell your partner your favorite season. What do you do during that season?
6	Designing (Products)	1A, p50, Top Notch project: Write and design ads for the best products. Include pictures or photographs. Use the ads in unit 4 as a model.
7	Group/pair work	FA, p13, N3: Group work. Introduce classmates in your class. Use the guide.
8	Holding a student party	
9	Rolling play a story or acting out words	2A, p17: Apologize for being late meeting a friend at the movies. Provide an explanation. Then, together, use the schedule to

Numbers	Checklist	Sample
		decide on a movie to see. Start like this: Sorry…
10	Taking field trips	Not available

The number and percentage of the activities representative of the bodily intelligence are presented in table 8.

Table 8. Number and Percentage of the Activities Representing Bodily/Kinesthetic Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Bodily activities	Number of the total activities	Percentage of Bodily activities
Fundamental A	2	5	24.0	20.83
Fundamental B	11	9	27.0	33.33
1A	4	10	39.0	25.64
1B	9	6	46.0	13.04
2A	2	14	48.0	29.16
2B	8	8	39.0	20.51
3A	3	10	37.0	27.02
3B	6	11	39.0	28.20
Total		73.0	299.0	24.41

The following checklist stands for the activities representative of the musical intelligence.

Table 9. Musical Intelligence Representative Activities

Numbers	Checklist	Sample
1	Activities accompanied by videos (video CDs)	Not available
2	All listening activities including: 1.Listening comprehension 2.Listen and practice 3. Read and listen	FA, p14, B: Listen to the questions about first and last names. Circle the names. FB, p92, A: Past-time expressions. Listen and practice. FB, p98, A: Reading. Read and listen. What's your dream vacation?
3	Pronunciation	FB, p94, B: The simple past tense ending. Listen and practice.
4	Putting an story, article or song to music	Not available
5	Requiring students to create (rap) songs to remember or teach the lesson	Not available
6	Reading and writing tongue twisters	Not available
7	Read and Listen	FA, p13, Conversation: Read and listen.

Numbers	Checklist	Sample
8	Rhythm and intonation practice	FA, p13, N2: Rhythm and intonation practice.
9	Songs	FA, p18, Top Notch Song: "Excuse me, please"
10	Sound bites	1A, p41, C: Read along silently as you listen to a natural conversation.

The number and percentage of the activities representative of the musical intelligence are presented in table 10.

Table 10. Number and Percentage of the Activities Representing Musical Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Musical activities	Number of the total activities	Percentage of Musical activities
Fundamental A	2	14	24.0	58.33
Fundamental B	11	14	27.0	51.85
1A	4	14	39.0	35.89
1B	9	15	46.0	32.60
2A	2	15	48.0	31.25
2B	8	12	39.0	30.76
3A	3	14	37.0	37.83
3B	6	14	39.0	35.89
Total		112	299.0	37.45

The following checklist stands for the activities representative of the interpersonal intelligence.

Table 11. Interpersonal Intelligence Representative Activities

Numbers	Checklist	Sample
1	Calling for classroom parties/ clubs	3A, p36, Top Notch project: Have a real social event for the class. Invite other classes to join you.
2	Conducting interviews and surveys	3A, p35, Step1: Take the survey. Compare your answers with a partner.
3	Conversations	3B, p64, conversation: Convey a message
4	Classroom activities	2A, p24, Top Notch project: create a movie review page with your class. Write reviews about good and bad movies.
5	Discussions	3B, p62, B: Why do you think the news is often about disasters? What other kinds of news stories make headlines? What happens to the good news?
6	E-mail exchanging/ having pen pals	1B, p105, E: Complete the e-mail. Circle the correct forms.

Numbers	Checklist	Sample
7	Group work activities	3B, p69, Step1: Divide into groups. Each group chooses an emergency to plan for. Then write plans for your emergency on your notepads. Use the ideas to help you plan.
8	Peer counseling, peer tutoring, peer review - students decide together on skills and criteria to evaluate, peer editing, peer sharing	Not available
9	Pair work activities	FA, p15, N3: Practice the conversation with your own name. Write your partner's information.
10	Social language activities	3B, p73: Create a conversation between the two men on Tuesday.

The number and percentage of the activities representative of the interpersonal intelligence are presented in table 12.

Table 12. Number and Percentage of the Activities Representing Interpersonal Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Interpersonal activities	Number of the total activities	Percentage of Interpersonal activities
Fundamental A	2	10	24.0	41.66
Fundamental B	11	11	27.0	40.74
1A	4	11	39.0	28.20
1B	9	10	46.0	21.73
2A	2	17	48.0	35.41
2B	8	10	39.0	25.64
3A	3	15	37.0	40.54
3B	6	14	39.0	35.89
Total		98	299.0	32.77

Then, the activities representative of intrapersonal intelligence are analyzed according to the following checklist.

Table 13. Intrapersonal Intelligence Representative Activities

Numbers	Checklist	Sample
1	Continue in your own way parts	3A, p 29: Continue the conversation in your own way
2	Discussing your opinion and support it	2A, p 23, Step 4: Write a short article expressing your opinion about violence in the movies and on TV.

Numbers	Checklist	Sample
3	In other words…	3A, p27, D: Read the conversation again and restate the following underlined words and phrases in your own words.
4	Keeping a diary, journal or personal notepad	2B, p93, Step2: On your notepad, write notes about some art that decorates your home.
5	Narrating a story	3B, p73, Narration: Tell the story in the pictures. Who do you think the people are? What does the report say about the weather?
6	Reporting individual studies, plans, projects	3B, p69, step2: Present your plan to the class. Compare your plans.
7	Self assessments	3B, p73, Now I can…
8	Topics dealing with personal experiences	3B, p70, B: Have you or someone you know experienced a natural disaster? What happened? Use the vocabulary.
	Topics on personal likes and dislikes	2B, p86, B: Which of these pieces of art do you like the best? Why?
9	Topics on personal experiences	2B, p86, A: Which of these pieces of art have you seen before? Are you familiar with the artists?
10	What about you parts	3B, p63: Check the places you get the news. Then write the name of the newspaper, magazine, TV station, etc.

The number and percentage of the activities representative of the intrapersonal intelligence are presented in table 14.

Table 14. Number and Percentage of the Activities Representing Intrapersonal Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Intrapersonal activities	Number of the total activities	Percentage of Intrapersonal activities
Fundamental A	2	4	24.0	16.66
Fundamental B	11	6	27.0	22.22
1A	4	8	39.0	20.51
1B	9	7	46.0	15.21
2A	2	9	48.0	18.75
2B	8	7	39.0	17.94
3A	3	5	37.0	13.51
3B	6	6	39.0	15.38
Total		52	299.0	17.39

Next, the activities representative of natural intelligence are analyzed according to the following checklist.

Table 15. Natural Intelligence Representative Activities

Numbers	Checklist	Sample
1	Categorizing nature items from the story, culture, or time period	Not available
2	Going on a nature walk for a prewriting activity	Not available
3	Keeping an observational notebook/ Keeping a record of the observed events	1B, p 109, Step3: Choose a trip when you had transportation problems. On the notepad, make notes about the trip.
4	Listing characteristics of...	Not available
5	Promoting the habit of asking "Why?" And searching for answers	1A, p46, D: Which product would you like to have? Why?
6	Topics on the natural phenomenon	FB, p 96, A: Vocabulary. Seasons. FB, p 96, B: Tell a classmate your favorite season. What do you do during that season? 3B, p 70, B: Have you or someone you know experienced a natural disaster? What happened? Use the vocabulary.
7	Teaching outside	Not available
8	Taking field trips to aquariums, zoos, forests, tide pools, lakes, etc.	Not available
9	Use of pictures or photos related to nature, for example that of trees, rivers, birds, etc.	FB, p93:Top of the page, the photo of the sea 1B,p106: Bottom of the page, the photo of the sea
10	Using graphic organizers to organize learning	Not available

The number and percentage of the activities representative of the natural intelligence are presented in table 16.

Table 16. Number and Percentage of the Activities Representing Natural Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Natural activities	Number of the total activities	Percentage of Natural activities
Fundamental A	2	1	24.0	4.16
Fundamental B	11	5	27.0	18.51
1A	4	2	39.0	5.12
1B	9	4	46.0	8.69
2A	2	2	48.0	4.16
2B	8	4	39.0	10.25
3A	3	2	37.0	5.40
3B	6	7	39.0	17.94
Total		27	299.0	9.03

Finally, the activities representative of existential intelligence are analyzed according to the following checklist.

Table 17. Existential Intelligence Representative Activities

Numbers	Checklist	Sample
1	Asking philosophical questions	Not available
2	Activities related to seeing things from different points of view	Not available
3	Discussing religious topics	Not available
4	Discussing questions like: Why am I here? Why are we here? Are there other dimensions and if so what are they like? Are there really ghosts? Where do we go when we die? Is there life on other planets? Why does God exist?	Not available
5	Doing tasks with topics concerning artistic issues.	2B, p86, A: Which of these pieces of art have you seen before? Are you familiar with the artists?
6	Doing tasks with scientific or philosophical topics	Not available
7	Finding solutions to questions	Not available
8	Maintaining a current events notebook with a focus on humanitarian stories	Not available
9	Posing a series of questions about topics dealing with people	Not available
10	Planning a charity event	Not available

The number and percentage of the activities representative of the existential intelligence are presented in table 18.

Table 18. Number and Percentage of the Activities Representing Existential Intelligence to the Total Number of the Activities in the Chosen Unit of Each Book

Book Level	Unit #	Number of Existential activities	Number of the total activities	Percentage of Existential activities
Fundamental A	2	0	24.0	0
Fundamental B	11	0	27.0	0
1A	4	0	39.0	0
1B	9	0	46.0	0
2A	2	0	48.0	0
2B	8	8	39.0	20.51
3A	3	0	37.0	0
3B	6	0	39.0	0
Total		8	299.0	2.67

3. Discussions and Conclusions

In order to answer the first question, which is "to what extent does Top-Notch series represent the MI features?", it is useful to put the final percentage of each intelligence occurrence in the books together in form of a table (See Table 19 below)

Table 19. The Overall Percentages of Each Intelligence Occurrence

Intelligence Type	Percentage
Verbal	72.57
Visual/Spatial	47.15
Logical/Mathematical	43.47
Musical	37.45
Interpersonal	32.77
Bodily/Kinesthetic	24.41
Intrapersonal	17.39
Natural	9.03
Existential	2.67

As the Table illustrates, the activities in the Top Notch series are mainly representative of the verbal intelligences followed by the visual and logical ones. However, the natural and existential intelligences occurrences throughout the activities are small in comparison to the other types. Nevertheless, the Top Notch series is to a high degree representative of the verbal, logical, and musical intelligences, which could be regarded as a promising point for the multiple-intelligences-use students. In sum, it is evident from table 19 that the verbal intelligence is the most frequent type with the frequency of 72.57%, followed by the visual, logical, musical, interpersonal, bodily, intrapersonal, natural and finally existential with the frequency of 2.67% of occurrence. The results for the analysis of Top Notch series could be compared with that of the Interchange series in a study done by Bothelho (2003). For ease of comparison table 15 of his study would be copied here (Table 20):

Table 20. Number of Activities per Intelligence and Percentage of Occurrence

Multiple Intelligences	Number of activities	Percentage of occurrence
Verbal linguistic (VL)	928	100
Logical Mathematical (LM)	348	37.5
Spatial Visual (SV)	836	90.08
Bodily Kinesthetic (BK)	77	8.29
Musical (M)	11	1.18
Interpersonal (IR)	706	76.07

Intrapersonal (IA)	928	100
Naturalist (N)	11	1.18
Existential (E)	03	0.32

As table 20 shows, verbal and intrapersonal intelligences are the most frequent ones with the frequency of 100%, followed by visual and interpersonal and logical ones. While the percentages for other intelligences including bodily, musical, natural and existential are highly low.

Although it is possible to compare the results, it should be taken into consideration that the two textbook evaluations have been done based on two different checklists but with the same themes, and two researchers with different social and educational backgrounds have done the analysis which means subjectivity may have meddled with the results. Having this point in mind, it is time to compare the results: as table 20 and table 19 show, verbal, visual, interpersonal and logical intelligences are of high occurrence in the two series, whereas bodily, natural and existential are of low occurrence. Besides, the results show that the Interchange series is highly representative of the intrapersonal intelligence while the Top Notch series is mainly visual. And while Top Notch is rich (37.45) in musical intelligence, Interchange is poor (1.18%). An outstanding point which the two series share is that the natural and existential intelligences are the two final ones in rank among intelligences. The low addressing of the natural intelligence, can be regarded a deficiency in the Top Notch and Interchange series since as other studies show (Razmjoo, Sadri, & Sahragard, 2009) natural intelligence is one of the important intelligences(significant at .032) through which students learn vocabulary best from.

So as to answer the second question, which reads “How frequently each of the eight intelligences is used in each book of the series?”, it should be mentioned that one can find patterns in the special intelligences occurrences in different levels, for example the percentage of the verbal intelligence enhances as the books improve in level (see table 2) which is the verbal intelligence percentage is 45.83 for the book fundamental A but 79.48 for the book 3B of the series. As for the reason, it could be declared that as the students improve in level, their ability to handle and use the language would improve too; therefore, more activities would be representative of the verbal intelligence. As for the logical intelligence, one can find an even pattern without that much of the fluctuation in the percentages, which are all around 40% (see table 4). As it is expected of the visual intelligence, the percentage falls as the levels improve (see table 6), which can be justified this way that as the students improve in level, their need for visual aid decreases since they are able to handle verbal tasks better.

On the other hand, there is no such pattern to be found in the percentage of the bodily, musical, interpersonal, and intrapersonal intelligences occurrences. As the natural intelligence counts, the pattern is

highly fluctuated (see table 16), which may be due to the fact that the element for an activity to be regarded as natural is mainly for it to be of a topic related to nature, so since not all the units are involved to the same level with natural topics, the percentages fluctuate widely. This is the same story with the existential intelligence too; the existential intelligence could be representative in an activity if that is of a topic of life, death, God, religion, art or philosophy, and throughout the units analyzed from the series, just unit 8 of the book 2B is of the topic "art". While the percentage of existential intelligence for other units is zero (see table 18).

According to the results and comparisons made for the two series, it is evident that there is a need to improve textbooks in terms of the natural and existential intelligences. It could be mentioned that Top Notch series is more representative of the intelligences altogether than the Interchange and this shows that Topnotch is a justified substitute to Interchange. However, there is a need for administering textbook evaluation based on the MI theory on other ELT material available on the market and deciding on the best choice from among them.

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