Multiple Intelligence-based Focus on Form and Iranian EFL Learners' Accurate Use of Grammar

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Abstract
This study examined the effect of Multiple Intelligence-based Focus on Form on enabling EFL learners to develop both the grammatical knowledge of the target structures (simple present and present progressive) and the ability to use it in written language context. Three different treatments were employed in three experimental groups: Multiple Intelligence-based Focus on Form (MI-FoF) focused on form, meaning, and use, along with learners' strengths and interests in language learning; Focus on Form (FoF) focused on form, meaning, and use; Focus on Meaning (FoM) focused on meaning. The control group, Focus on FormS (Fs), focused on explicit grammar instruction. In an intact group design, involving 218 university students, the outcome of the study, based on both direct (multiple choice questions) and indirect (free composition) types of tests, indicated that the performance of the participants didn’t differ significantly in the four groups in the indirect type of test but the performance of the MI-FoF differed significantly from the other groups in the direct type of test. This result can be attributed to the integration of MI into FoF, which enabled learners to engage in meaningful tasks actively, which, in turn, suggests that insights provided by MI can be very decisive in implementing FoF.

Keywords: Multiple Intelligences Theory; Focus on Form; Focus on Meaning; Focus on FormS; Direct Test; Indirect Test

Introduction
The role of grammar instruction in language learning has been the subject of language acquisition research and discussion over the years. As Richards and Renandya (2002) mentioned, grammar teaching has regained its rightful place in the language curriculum. People now agree that grammar is too important to be

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ignored and that without a good knowledge of grammar, learners’ language development will be severely constrained” (p. 145).

Renewed interest in Focus on Form (FoF) has provided a major impetus for recent Second Language Acquisition (SLA) research (Rodgers, 2001). The major motivation for the FoF approach has been frustration with the pure Focus on Meaning (FoM) approaches (Long & Robinson, 1998), in which there is not much attention to accuracy.

Pure Focus on Meaning itself was a reaction against traditional explicit teaching of grammar or Focus on Form (Fs) in which the focus is on forms in single isolated sentences without any contextualization and fluency development in language learners.

Thus, to develop both accuracy and fluency of language learners, Long (1991) introduced FoF, which is a type of instruction whose main focus is on meaning and learners’ attention can be drawn to formal aspects of language as they arise incidentally. Discussing the rational for FoF instruction, Ellis, Basturkmen, and Loewen (2002) asserted that “whereas learners are able to acquire linguistic forms without any instructional intervention, they typically do not achieve very high levels of linguistic competence with meaning-centered instruction” (para. 7).

Since the introduction of FoF, there have been different versions of FoF, based on theoretical assumptions and empirical studies, among which the role of noticing (Schmidt, 1994; Sharwood Smith, 1993) and, accordingly, the relationship between implicit and explicit knowledge have widely been discussed (Dekeyser, 1998; Ellis, 2003). As Nassaji and Fotos (2007) mentioned, the results of empirical studies on implicit and explicit knowledge show that the relationship between these two types of knowledge is complex and their effectiveness in language learning depends on a variety of factors ranging from the type of rule and instruction to learners’ individual differences. Furthermore, in this regard, variety of procedures, ranging from the most explicit metalinguistic rule explanation to the most implicit input enhancement have been proposed (Doughty & Varela, 1998; Doughty & Williams, 1998b, as cited in Sacidi, 2006).

Although there are plenty of theoretical discussions on how to focus on form, "much less attention has been paid to the way FoF actually occurs in L2
classrooms" (Ellis 2001a, as cited in Nassaji, 2007, p. 127). Furthermore, how to facilitate the deployment of language forms to accomplish a communicative purpose in a language classroom has been a subject of discussion in the SLA research literature. Moreover, the literature reviewed on FoF implementation indicates a wide range of techniques (implicit/explicit) that FoF can employ to draw learners' attention to form in a meaningful context of communication. This variety combined with the variety of tasks (input/output oriented) to implement FoF might affect different learners differently, which brings about the question of what role the learners' individual differences, which can manifest themselves in their learning strengths and preferences, can play in effectiveness of FoF. As Christison (1998) asserted, “[MI theory] helps us understand the diversity we observe in our students and provide a framework for addressing these differences in our teaching” (p. 7). Insights provided by MI theory, as Mackenzie (2002) asserted, help teachers to deepen and expand their instructional practices to reach all learners in the classroom, which will, generally, result in higher levels of students’ engagement in meaningful tasks. And this, consequently, will create more opportunities for meaningful language learning, which is the ultimate goal of FoF approach. Thus, this study is an attempt to implement FoF using insights derived from MI theory.

MI theory suggests that there are a number of distinct forms of intelligences that each individual possesses in varying degrees, which result in many different ways of knowing, understanding, and learning about our world (Gardner, 1983). According to MI theory, there are eight possible intelligences in every human being: Linguistic, logical/mathematical, spatial, musical, bodily/kinesthetic, interpersonal, intrapersonal, and naturalistic (Gardner, 1999). There are two more candidates under Gardner’s consideration, spiritual and existential intelligences "the intelligence of big questions" (Gardner, 2006, p. 20).

In this view, every human being has all the intelligences; the differences among the human beings are a matter of less or more developed in a particular intelligence. Thus, it is of the utmost importance to “recognize and nurture all the varied human intelligences and all of the combinations of intelligences” (Gardner, 2006, p. 24). According to Akbari and Hosseini (2008), individualism has more than ever been recognized and respected. Individual differences now occupy an important position in any debate related to teaching/learning and the professional literature is filled with terms and phrases which try to capture the elusive concepts
that distinguish one person from another (Fontana, 1988; Lefrancios, 1991; Crozier, 1997, as cited in Akbari & Hosseini, 2008).

Gardner (1995) pointed out that one of the applications of MI theory to classroom learning is to approach a concept, subject matter, or discipline in a variety of ways and promote learning by drawing on several of the intelligences and making use of the students’ strengths and preferences in learning. According to Viens (1999), “there is indeed no single ‘right way’ to apply MI theory; however, using an MI lens or framework can and has helped inform excellent, and often quite distinct, teaching and learning practices” (para. 4).

Similarly, according to Haley (2004), the application of MI theory can and do affect students’ learning, students’ attitudes and the learning environment. The study conducted by Akbari and Hosseini (2008) to investigate the relationship between the use of EFL learners’ language learning strategies and their multiple intelligences’ scores revealed that there is a significant relationship between the use of language learning strategies and their multiple intelligences' scores. As Larsen-Freeman (2000b) rightly mentioned, the issue for teachers is to honor the different types of students' intelligences to enable them to reach their full potential.

As the brief review of the literature above indicated, although there have been some studies regarding the relationship between MI and second language learning and teaching (Akbari & Hosseini, 2008; Christison, 1998; Haley, 2004; Mackenzie, 2002; Viens, 1999), the introduction of MI in close combination to an SLA approach to English language teaching is relatively new. Thus, integrating MI theory into FoF approach may bring about a new horizon in implementing FoF: Focus on learners, by making the learning tasks compatible with particular interests and strengths of the learners and by grouping them based on their multiple intelligences to follow different activities, along with focus on form. Accordingly, the researcher was interested in finding out which methods of instruction, Multiple Intelligence-based Focus on Form (MI-FoF), Focus on Form (FoF), Focus on Meaning (FoM), and Focus on FormS (Fs), affect learners' performance, in terms of their grammatical knowledge of the target structures (simple present and present progressive), on both direct (multiple choice questions) and indirect (free
composition) types of tests. To this end, the researcher proposed the following research questions:

1. Are there any differences among MI-FoF, FoF, FoM, and Fs groups in terms of their grammatical knowledge of the target structures (simple present and present progressive) in the indirect type of test?

2. Are there any differences among MI-FoF, FoF, FoM, and Fs groups in terms of their accurate use of the target structures (simple present and present progressive) in the direct type of test?

Accordingly, the following null hypotheses were formulated:

1. There are no differences among the four groups (MI-FoF, FoF, FoM, Fs) in terms of their grammatical knowledge of the target structures (simple present and present progressive) in the indirect type of test.

2. There are no differences among the four groups (MI-FoF, FoF, FoM, Fs) in terms of their accurate use of the target structures (simple present and present progressive) in the direct type of test?

Method

Participants

Two hundred and eighteen university students, making up four grammar classes of first year English language teaching major, participated in this study. The nature of grammar courses at university level in Iran is traditional; the syllabus is a linear type, covering grammatical structures, such as verb tenses, adverb clauses, subject-verb agreement, etc. The study followed an intact group design. The age range of the students was 19-21 and they were both male and female English language students at undergraduate level.

Instruments

Two teacher-made tests and one standard test were used in this study. The first teacher-made test, consisting of 32 questions, was an indirect test (multiple choice questions). The internal consistency reliability index of the test, calculated through KR-21, was .857. The second type of the teacher-made test, direct test (free composition), required learners to use their grammatical knowledge of the target structures (simple present and present progressive) in more global context of language use. As the topic of the composition was about daily activities, it could successfully elicit the use of the target structures, simple present and present progressive. Inter-rater and intra-rater reliability index of the test, calculated through Pearson product-moment correlation, were 0.93, 0.93, 0.94, 0.95 and 0.96,
0.97, 0.98, 0.97 for MI-FoF, FoF, FoM, and Fs, respectively.

A standard test, Comprehensive English Language Test (CELT), involving grammar and usage with 75 multiple choice items, with reliability coefficient of .88, was used for checking the homogeneity of the participants in four groups.

Finally, in order to divide learners into groups according to their multiple intelligences in MI-based FoF group, an MI-inventory, prepared and used by Christison (1996), which is similar to the one developed by Armstrong (1993) and used by Haley (2004), was translated into Persian and was used after piloting. It was scaled from 1 to 6, the scoring of which was based on 0-2 for items, with maximum score of 12 for any intelligence. Scores above 8 was the basis for assigning students to a particular intelligence group. If a student had this score in more than one intelligence, he/she was free to choose the type of intelligence group to join. There were six groups, with seven or eight students in each of them. This arrangement was used to group students based on their intelligences to investigate the effect of multiple intelligence-based FoF on students’ language learning; students in groups followed language learning through activities compatible with their strengths and interests.

Procedures
The study was composed of a pilot study and a main study. In the pilot study both types of the tests, direct and indirect, were administered to a sample which was similar to the sample in the main study. The purpose of the pilot study was to determine item characteristics of the indirect test and to gain some insights about the direct test to remove any possible problems. Also, the pilot study was helpful in validating the MI-inventory. There were some items, which based on the students’ questions in the pilot study, needed to be modified.

In the main study, both types of the tests, indirect and direct, were both pre- and post- tested. To preclude a practice effect in the indirect test, the pre-test was slightly modified for the post-test without any major changes in the test complexity. In order to obtain scores that properly represent each candidate’s ability to use the target structure in context, care was taken to focus on the aspect of performance important for us. Thus, scoring was based on the correct use of the target structures in the context. Accordingly, to follow analytic scoring, a five-level scoring scale, adapted from Hughes (1989), was used to measure accuracy of the
target structures in context. The treatments for the three groups, together with the traditional instruction for the control group, were as follows:

As the MI-based FoF Model (Figure 1) indicates, the treatment for the MI-FoF group was composed of 3 Phases.

**Figure 1**

MI-Based FoF Model

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Input-Oriented Task</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Communicative Task (typographical input enhancement)</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Output-Oriented Task</td>
</tr>
<tr>
<td></td>
<td>Pictorial Dictogloss (learners’ reconstruction of the original text in groups)</td>
</tr>
<tr>
<td></td>
<td>Language Focus: Analysis by the learners (metatalk)</td>
</tr>
<tr>
<td></td>
<td>Reporting</td>
</tr>
<tr>
<td></td>
<td>Feedback (recast)</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Learner-Oriented MI-based Follow-up Task</td>
</tr>
<tr>
<td></td>
<td>project/ listing/ classifying/ matching/ problem solving/ sharing</td>
</tr>
<tr>
<td></td>
<td>experiences/ charting/ drawing/ speaking/ writing/ decoration of bulletin boards/ pairwork/ groupwork/ listening to songs and transcribing lyrics</td>
</tr>
</tbody>
</table>

The treatment for the FoF instruction was mainly the same as the MI-based FoF Model for the first 2 Phases but MI-based follow-up tasks (Phase 3) were replaced with the tasks which were not classified according to the results of the MI-inventory (i.e., the learners were not classified according to particular intelligences they were strong in).

In FonM group, tasks were meaning-based, with no focus on form activities; for example, the input enhancement through underlining the target structure was omitted because it was one of the FonF techniques. In other words, the learners did the task without their attention being directed to the target structure through input enhancement. The feedback employed in FonM instructional treatment was meaning-based rather than form based. In other words, as far as the learners could express what they intended to express, no feedback was given to them to correct their incorrect use of the target structure, and whenever there were shortcomings in expressing the meaning, a brief help was given to the learner to express the content of the given task. Dictogloss, as a focus on form activity, was not applied because it was one of the FonF tasks to draw the learners’ attention explicitly to the target structure. The follow up activities were carried out through the utilization of the...
activities in a meaningful context. In other words, the focus of the tasks were meaning-based rather than form-based. Thus, the materials were similar to the materials used for the FonF group but input enhancement, explicit focus on form, and dictogloss were excluded from the activities. The methodology employed in carrying out the FonM instructional treatment made it totally different from a FonF instructional treatment.

In Fs group, the instruction was based on single, isolated sentences, the traditional explicit teaching. There was no exposure to tasks requiring the use of the target structure in contexts. For example, in the teaching of the simple present tense, first, it was explained that simple form of the verb was used in the simple present tense. Then the following sentence was written on the board: *I study two hours every night.* After some more explanations about its use with third person singular pronouns and other related points, it was explained that the simple present tense was used for habitual or everyday activity and general statements of facts. After mentioning some examples to demonstrate the different uses of the simple present tense, the learners did some exercises.

In order not to have any practice effects in a particular treatment, there was the same amount of follow up activities but in different manners for all groups. For example, the FoF group had the following type of follow up activities: Preparing a short talk on a specific topic (eliciting the use of simple present verbs)/interviewing some of the classmates about the way they spend their money/guessing game on different types of sports students like. As it is evident, the types of the tasks were "focused" (Ellis, 2003, p. 167). FoM group had the same type of activities; however, in both preparation and presentation of the follow up activities, no attempt was made to draw learners' attention to form, as it was mentioned before. The follow up activities in Fs were restricted to doing plenty of exercises at home from a traditionally oriented English grammar textbook. The textbook used for the Fs was “Understanding and Using English Grammar” (3rd Ed.) by Azar (1999). But the material for the MI-FoF, FoF, and FoM was constructed by the researcher. The material was mostly adapted with some modifications from “Grammar Dimensions: Form, Meaning, and Use” by Larsen-Freeman (2000a). In the book, for example, for teaching simple present tense, there was a questionnaire in which the learners were asked to read each statement about learning English grammar and circle the number that describe them best; the numbers ranged from 1 to 5, indicating never to always. The researcher modified the text by underlining
the simple present verb to draw the learners’ attention to form implicitly. The following explanations about the type of treatment used in MI-FoF provide more explicit information about the types of activities chosen from the book and modified for treatment purposes.

The following is the examples of the three phases of MI-FoF treatment for teaching one of the target structures, simple present, which took two sessions of one and a half hour, with the interval of one week:

**Input-Oriented Task (Phase 1):** In this phase, the students answered a questionnaire about different strategies they follow in learning English grammar and then exchanged the responses in a groupwork. In the text, the target structure, simple present tense, was underlined (input-enhancement).

**Output-Oriented Task (Phase 2):** This phase was performed through different activities. First, a dictogloss was carried out: The teacher read a text, containing the target structure, three times. The participants, initially, listened to the readings, next made notes, and later checked their notes with the other members of their group. Subsequently, the participants, through groupwork, reconstructed the original text by the help of the pictures, which were based on the description of the sentences which contained the target structure, their notes, and group discussions. Group discussion was based on the metalinguistic analysis or metatalk -- talking about language or attending to grammatical structures through reflection (Swain, 1998). In this particular case, the text was about routines and habits in a country life, which required the use of simple present tense. The participants were required to analyze the sentences of the text; for example, “This sentence expresses a habitual activity, so simple present verb must be used.” The metalinguistic analysis had already been done for a few sentences of the text -- as a model -- by the teacher, so that learners could do it properly. While the participants were reporting the reconstructed text to the class, the teacher provided them with feedback in the form of recast whenever needed.

**Learner-Oriented MI-based Follow-up Task (Phase 3):** The tasks in this phase were to be done by students as assignments for the next session. The students were divided into 6 groups (as labeled below), based on the results of the MI-inventory, to have cooperation for doing the tasks and completing them as outside the classroom activity. As Table 1 indicates, different tasks were used in different
intelligence groups in MI-FoF class in order to learn one of the target structures, simple present tense.

<table>
<thead>
<tr>
<th>Different Intelligence Groups</th>
<th>Type of Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musical Intelligence</td>
<td>Listening to several songs containing the target structure, transcribing and reporting them to the class</td>
</tr>
<tr>
<td>Linguistic Intelligence</td>
<td>Describing a special day or holiday that they celebrate in their country, including what they routinely do at that day/ Interviewing their classmates on their favorite holiday and reporting to the class</td>
</tr>
<tr>
<td>Spatial Intelligence</td>
<td>Transferring the information of a chart, which contained the results of a survey of adult education on their reasons for studying, to another form of presenting the information/ Making a pie chart of the results of an interview about different types of sports their classmates like</td>
</tr>
<tr>
<td>Logical Intelligence</td>
<td>Identifying, classifying, and providing reasons for the particular use of the target structure in a text</td>
</tr>
<tr>
<td>Interpersonal Intelligence</td>
<td>Conducting a research and finding out about a set of proverbs (containing the target structure) whose meaning match with their native language proverbs and using the bulletin board for displaying the outcome</td>
</tr>
<tr>
<td>Intrapersonal Intelligence</td>
<td>Choosing two types of activities (among variety of activities) and reflecting on the outcome of their learning and finding out the weaknesses and strengths of the strategies they employed by answering certain questions (eliciting the use of the target structure)</td>
</tr>
</tbody>
</table>

As it was mentioned before, the researcher designed the tasks based on Larsen-Freeman (2000a) and in order to make them compatible with students’ different intelligences, modified them. This made MI-FoF group distinct from other groups, in which all the students did activities regardless of their particular high intelligences.

It is worth mentioning that in all four types of instructions, the researcher was the teacher. From one point of view, this might be advantageous because there was no need for training other teachers and there was no possible effect of
methodological misunderstanding by other teachers but at the same time there was
the possibility of bias for a certain methodology by the researcher. In order to avoid
this problem, the pilot study created the opportunity for the researcher to
consciously try to follow the instructions and have enough practice on them.

**Data Analysis**

To answer Research Question 1, one-way analysis of variance (ANOVA) was used
for the comparison of the MI-FoF, FoF, FoM, and Fs groups on the indirect test
(multiple-choice questions). The independent variable, method, has four levels
(MI-FoF, FoF, FoM, Fs) and the dependent variable is the indirect test.

To answer Research Question 2, one-way analysis of variance (ANOVA) was
used for the comparison of the MI-FoF, FoF, FoM and Fs groups on the direct test
(free composition). The independent variable, method, has four levels (MI-FoF,
FoF, FoM, and Fs) and the dependent variable is the direct test.

**Results**

In order to make sure of the participants' homogeneity in terms of language
proficiency, the proficiency test of CELT was used. A one way analysis of variance
indicated that there was not a significant difference in proficiency level among
FoM (M = 32.34, SD = 10,30), MI-FoF (M = 32.20, SD = 10.93), FoF (M = 32.33,
SD = 8.61), and Fs (M = 34.90, SD = 0.01), F (3, 1.262) = .751, P = .751 > .05.

To check the homogeneity of the participants with regard to grammatical
knowledge of the target structures (simple present and present progressive) in both
indirect test (multiple choice questions) and direct test (free composition), a pre-
test was administered.

First, in order to compare the mean scores of the four groups (MI-FoF, FoF,
FoM, Fs) on the indirect test of the target structures in the pre-test, a one-way
analysis of variance was run. The descriptive statistics are displayed in Table 2.
A one-way analysis of variance indicated that there was no significant difference in grammatical knowledge of the target structures among the four groups in the indirect test in pre-test with $F (3, 13745.441) = .176, p = .913 > .05$.

Second, in order to compare the mean scores of the four groups on the direct test in pre-test, a one-way analysis of variance was run. The descriptive statistics are displayed in Table 3.

### Table 2
Descriptive statistics for the indirect test (multiple choice questions) among the four groups (MI-FoF, FoF, FoM, Fs) in pre-test

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>MI-FoF</td>
<td>43</td>
<td>24.65</td>
<td>9.07609</td>
<td>1.384</td>
<td>21.8580</td>
<td>27.4444</td>
<td>11</td>
</tr>
<tr>
<td>FoF</td>
<td>70</td>
<td>25.04</td>
<td>7.17025</td>
<td>.850</td>
<td>23.3451</td>
<td>26.7394</td>
<td>14</td>
</tr>
<tr>
<td>FoM</td>
<td>45</td>
<td>25.20</td>
<td>8.63028</td>
<td>1.286</td>
<td>22.6072</td>
<td>27.7928</td>
<td>9</td>
</tr>
<tr>
<td>Fs</td>
<td>60</td>
<td>24.20</td>
<td>7.60196</td>
<td>.981</td>
<td>22.2362</td>
<td>26.1638</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>218</td>
<td>24.76</td>
<td>7.95028</td>
<td>.537</td>
<td>23.7083</td>
<td>25.8260</td>
<td>9</td>
</tr>
</tbody>
</table>

A one-way analysis of variance indicated that there was no significant difference in grammatical knowledge of the target structures among the four groups in the indirect test in pre-test with $F (3, 13745.441) = .176, p = .913 > .05$.

### Table 3
Descriptive statistics for the direct test (free composition) among the four groups (MI-FoF, FoF, FoM, Fs) in pre-test

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>MI-FoF</td>
<td>43</td>
<td>2.59</td>
<td>.98353</td>
<td>.149</td>
<td>2.2903</td>
<td>2.8957</td>
<td>.50</td>
</tr>
<tr>
<td>FoF</td>
<td>70</td>
<td>2.27</td>
<td>1.15508</td>
<td>.137</td>
<td>2.0012</td>
<td>2.5481</td>
<td>.00</td>
</tr>
<tr>
<td>FoM</td>
<td>45</td>
<td>2.26</td>
<td>1.12172</td>
<td>.167</td>
<td>1.9274</td>
<td>2.6014</td>
<td>1</td>
</tr>
<tr>
<td>Fs</td>
<td>60</td>
<td>2.08</td>
<td>1.00071</td>
<td>.129</td>
<td>1.8248</td>
<td>2.3418</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>218</td>
<td>2.28</td>
<td>1.08157</td>
<td>.073</td>
<td>2.1386</td>
<td>2.4267</td>
<td>.00</td>
</tr>
</tbody>
</table>

A one-way analysis of variance indicated that there was no significant difference in grammatical knowledge of the target structures among the four groups in the direct test of the pre-test with $F (3, 248.469) = 1.888, p = .133 > .05$. 

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After the treatments, in order to probe the first research question, a one-way analysis of variance was run to investigate the effects of the different types of instructions (MI-FoF, FoF, FoM, Fs), on performance of the language learners, in terms of their grammatical knowledge of the target structures, in the indirect type of test in the post-test. Table 4 indicates the descriptive statistics.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI-FoF</td>
<td>43</td>
<td>37.32</td>
<td>7.086</td>
<td>1.08</td>
<td>35.1445 to 39.5066</td>
<td>20</td>
<td>48</td>
</tr>
<tr>
<td>FoF</td>
<td>70</td>
<td>36.21</td>
<td>7.197</td>
<td>.854</td>
<td>34.5078 to 37.9148</td>
<td>21</td>
<td>49</td>
</tr>
<tr>
<td>FoM</td>
<td>45</td>
<td>36.37</td>
<td>6.796</td>
<td>1.01</td>
<td>34.3358 to 38.4197</td>
<td>17</td>
<td>48</td>
</tr>
<tr>
<td>Fs</td>
<td>60</td>
<td>36.93</td>
<td>7.191</td>
<td>.928</td>
<td>35.0755 to 38.7912</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>218</td>
<td>36.66</td>
<td>7.058</td>
<td>.476</td>
<td>35.7221 to 37.6021</td>
<td>17</td>
<td>49</td>
</tr>
</tbody>
</table>

A one-way analysis of variance indicated that there was no significant difference in grammatical knowledge of the target structures among the four groups in the indirect test in the post-test with F (3, 10819.584) = .274, p = .844 > .05. Thus, the first null hypothesis, there are no differences among the four groups (MI-FoF, FoF, FoM, Fs) in terms of their grammatical knowledge of the target structures (simple present and present progressive) in the indirect type of test, was not rejected.

In order to probe the second research question, a one-way analysis of variance was run to investigate the effects of the different types of instructions, on accurate use of the target structures in the direct type of test in the post-test. Table 5 indicates the descriptive statistics.
Table 5
Descriptive statistics for the direct test (free composition) among the four groups (MI-FoF, FoF, FoM, Fs) in post-test

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>MI-FoF</td>
<td>43</td>
<td>3.37</td>
<td>1.086</td>
<td>.16563</td>
<td>3.0378</td>
<td>3.7064</td>
<td>1</td>
</tr>
<tr>
<td>FoF</td>
<td>70</td>
<td>2.66</td>
<td>1.311</td>
<td>.15569</td>
<td>2.3585</td>
<td>2.9795</td>
<td>.00</td>
</tr>
<tr>
<td>FoM</td>
<td>45</td>
<td>2.60</td>
<td>1.227</td>
<td>.18299</td>
<td>2.2312</td>
<td>2.9688</td>
<td>1</td>
</tr>
<tr>
<td>Fs</td>
<td>60</td>
<td>2.47</td>
<td>.936</td>
<td>.12086</td>
<td>2.2332</td>
<td>2.7168</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>218</td>
<td>2.73</td>
<td>1.193</td>
<td>.08067</td>
<td>2.5807</td>
<td>2.8987</td>
<td>.00</td>
</tr>
</tbody>
</table>

A one-way analysis of variance indicated that there was a significant difference on accurate use of the target structures among the four groups in the direct test in the post-test with F (3, 288.031) = 5.632, p = .001 < .05. Thus, the second null hypothesis, there are no differences among the four groups (MI-FoF, FoF, FoM, Fs) in terms of their accurate use of the target structures in the direct type of test, was rejected.

As the difference among the four groups was significant, the Post-hoc Scheffe’s tests were run to compare the mean scores of the four groups on the direct test to see where exactly the differences are. Table 6 indicates the results of the comparison in terms of homogeneous subsets.

Table 6
Post Hoc Tests, homogeneous subsets

<table>
<thead>
<tr>
<th>Method</th>
<th>N</th>
<th>Subset for alpha = .05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Fs</td>
<td>60</td>
<td>2.4750</td>
</tr>
<tr>
<td>FoM</td>
<td>45</td>
<td>2.6000</td>
</tr>
<tr>
<td>FoF</td>
<td>70</td>
<td>2.6690</td>
</tr>
<tr>
<td>MI-FoF</td>
<td>43</td>
<td>3.3721</td>
</tr>
<tr>
<td>Sig.</td>
<td>.864</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Means for groups in homogeneous subsets are displayed. Type I error levels are not guaranteed.

a  Uses Harmonic Mean Sample Size = 52.473.
b  The group sizes are unequal. The harmonic mean of the group sizes is used.
As Table 6 indicates, the difference between MI-FoF and the other three groups (FoF, FoM, Fs) on the direct test (free composition) is significant, but the difference among the three groups (FoF, FoM, Fs) is not significant. However, although the difference among the three groups (FoF, FoM, Fs) is not significant, the mean of the FoF is higher than the mean of the FoM and Fs, which matches with our expectations: FoF with focus on both form and meaning could help learners to have a better performance on more global context of language use, direct test.

Discussion & Conclusion
The results of the study with regard to the first research question indicated that there is no differences among the four groups (MI-FoF, FoF, FoM, Fs) in terms of their grammatical knowledge of the target structures in the indirect test, multiple choice questions.

Although we might have expected to see a significant difference among the four groups, because of exposure to different types of instructions, ranging from dealing with grammar in isolated single sentences (Fs) to meaningful use of language (MI- FoF, FoF, FoM), the differences are not significant. This result is particularly promising, because some teachers might wrongly believe that in order to increase the grammatical knowledge of the EFL learners, they have to deal with grammar explicitly through teaching grammatical structures in single isolated sentences. However, according to the results of this study, regardless of your teaching orientation, more meaning-based or form-based, you can develop the formal grammatical knowledge to be tested on discrete types of tests, indirect tests. Mastery of grammatical forms is very important in the Iranian EFL context of language learning, because it is the special requirement of our EFL situation which is test-driven and requires the EFL learners to attend to the knowledge of grammatical forms. For example, nationwide examinations held for different purposes have created a motivation for language learners to prepare for demonstrating their knowledge of the structures in discrete point or indirect tests.

The results of the study with regard to the second research question indicates that MI-FoF methodology affects the performance of students differently on the accurate use of the target structures in the direct type of test, free composition. Free composition in comparison with multiple choice questions was more contextualized; consequently, form, meaning, and use could be approached in a
meaningful relationship. It is a special requirement of communicative language learning which advocates the ability to use the grammatical knowledge in appropriate contexts. Thus, it should be our main concern to facilitate the development of the ability to use the grammatical knowledge in wider context of language use. As Widdowson (1990) stated, while it is essential for learners to be able to manipulate grammatical form, this is not sufficient. Learners need to understand the concepts expressed and the functions performed through a particular grammatical element, as well. This is possible, as Larsen-Freeman (1997) mentioned, if learners attend to form, meaning, and use in learning any grammatical structure. Larsen-Freeman further stated that language teachers would not be content if their students have the knowledge about the grammatical structures but not be able to apply them in appropriate contexts of language use.

What contributes to the supreme position of MI-FoF is that MI theory provides many different ways of knowing, understanding, and learning, as Christison (1998) mentioned. The high achievement of the learners in MI-FoF was because of integration of MI into FoF, which helped learners to attend to meaningful tasks actively. This is in line with the findings of Coustan and Rocka (1999) who suggested that applying MI in the classroom facilitated learning and increased accuracy on a reading lesson because the instructor, following the MI-based instruction, encouraged the students to express and explore meaning on their own different ways.

Although we should be cautious in generalizing the results of the study because of the intact group design, the findings of this study is suggestive in terms of the potential for communicative language use which the integration of MI into FoF approach can bring to grammar instruction in the EFL language learning setting. Therefore, EFL teachers should begin to see the possibilities for the application of MI to language education in even the most traditional language learning settings, such as EFL grammar classroom with large number of students.

In this study, the role of MI-FoF on the development of language use in written language was investigated. Therefore, the role of MI-FoF in facilitating spontaneous speech is a topic for future research. Furthermore, the current study examined the effect of MI-FoF on the achievement of the accurate use of the grammatical structures (simple present and present progressive) in both direct and indirect types of tests; however, to see the term 'form' in the broadest possible
context, the role of the MI-FoF approach on the development of other aspects of language, such as vocabulary learning or pragmatics, can be good topics for research. Finally, results of this study might be of interest to theoreticians and practitioners in terms of employing various input-output-oriented tasks enriched by MI-based tasks to increase learners’ attention systematically from comprehension to production (MI-based FoF Model, Figure 1). It is worth mentioning that this study was conducted at the university level. As such, generalizations to other communities of EFL learners, including junior and senior high school students, would not be appropriate without further research.

Grammar instruction should focus on form, meaning, and use, without sacrificing one at the expense of another. The ultimate goal of the grammar instruction should be the accurate use of the grammatical knowledge of the target structures in appropriate contexts. Grammar instruction should create enriching and meaningful language experiences to help learners become more able and successful language learners. To this end, insights provided by MI theory, which encourage the compatibility of learning tasks with students’ particular interest and strength, is decisive. The significant difference of the MI-FoF with FoF, FoM, and Fs is particularly suggestive in terms of supreme position of MI-FoF in enabling EFL learners to use their grammatical knowledge in context. This may partially be because of the implementation of FoF and partially because of the integration of MI into FoF methodology.

Notes
In this study, simple present and present progressive were used as the target structures. According to the experience of the researcher, they are among problematic grammatical structures for Iranian language learners (especially, in the context of language use). Furthermore, according to Wilson (1987), the present tense in Persian language is used for a variety of functions, including present progressive (He is reading a book), which contributes to the difficulty of the use of simple present and present progressive tenses in a more global context of language use, free composition. It’s worth mentioning that as the form, meaning, and use relationships of the target structures were our main concern in this study, subject-verb agreement was excluded from simple present tense in the indirect type of test (multiple choice questions) and students' errors in terms of subject-verb agreement were not counted in the direct type of test (free composition).
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References


