The Impact of Learning-Style and Task-Based Teaching of Language on Learners' Achievement

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Abstract

The purpose of this paper is to examine the relationship between learning-style and task-based teaching and learning and students' academic achievement in standard-based tests in English. The data were collected from two public secondary schools in the emirate of Fujairah, the United Arab Emirates (UAE). A sample of purposefully selected 54 Grade 10 students from both schools was surveyed with a VAK questionnaire. SPSS was used to compare the mean of the two standard-based tests. The results show that there is a relationship between a learning-style-based, task-based learning (TBL) model and Madaras Al Ghad (Arabic translation for Schools of Future: MAG) learners' achievement in standard-based language tests. The theoretical implications of the findings are discussed in this paper, together with recommendations pertaining to the significance of considering students' learning styles and task-based learning in the educational process. The significance of the present study rests on the fact that the links between learning-style and TBL model and students' academic achievement have been examined for the first time in public secondary schools in the UAE and the Arabic context. The findings of this study will be of interest to educators, policymakers as well as researchers.

Keywords: learning styles, VAK model, task-based learning, students' achievement

Introduction

This study has been conducted in two of MAG Schools in the United Arab Emirates, Fujairah Zone. The purpose of the study was to investigate whether, or not, espousing a learning-style-based, TBL approach with grade 10 students would improve their achievement in standard-based tests. MAG schools are part of the Ministry of Education's Specialized Schools Project, which has been implemented in some UAE state-run schools whose aim is

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to provide students with standard-based teaching that is based on the Common European Framework of Reference for Languages (CEFR), which describes foreign language proficiency at six levels: A1 and A2 (basic user), B1 and B2 (independent user) and C1 and C2 (proficient user) (Council of Europe, 2014). The MAG Curriculum Committee has selected a set of standards for each grade level. As far as the current study is concerned, it has been conducted in two grade 10 classes in two schools, which will be referred to as School 1 and School 2. The academic school year is divided into three trimesters. In the first two, grade 10 students are expected to meet A2 standards, whereas, in Trimester III, they move to B1 standards. The CEFR standards that students are expected to meet are distributed on six units, as students cover two units each trimester. As far as assessment within MAG schools is concerned, there are two types: Continuous Assessment (CA) and Standard Assessment (SA). The former focuses on one unit, and therefore, students receive two CA tests per trimester, whereas the latter is intended to assess the standards covered in two units, which means that there is only one SA for each trimester. Every SA contains four tasks that address the four major language skills: speaking, listening, reading and writing. The present study addresses variance in the results of the SA in Trimesters II and III for the two sample groups. SA tests are written by the MAG Assessment Committee, which is assigned by the academic program coordinator and the regional English coordinator. The members of the committee are professional instructional leadership coordinators and teacher development specialists, who are lesson plan writers and reviewers as well. Figure 1 shows where the Assessment Committee exactly lies within MAG's organisational structure.

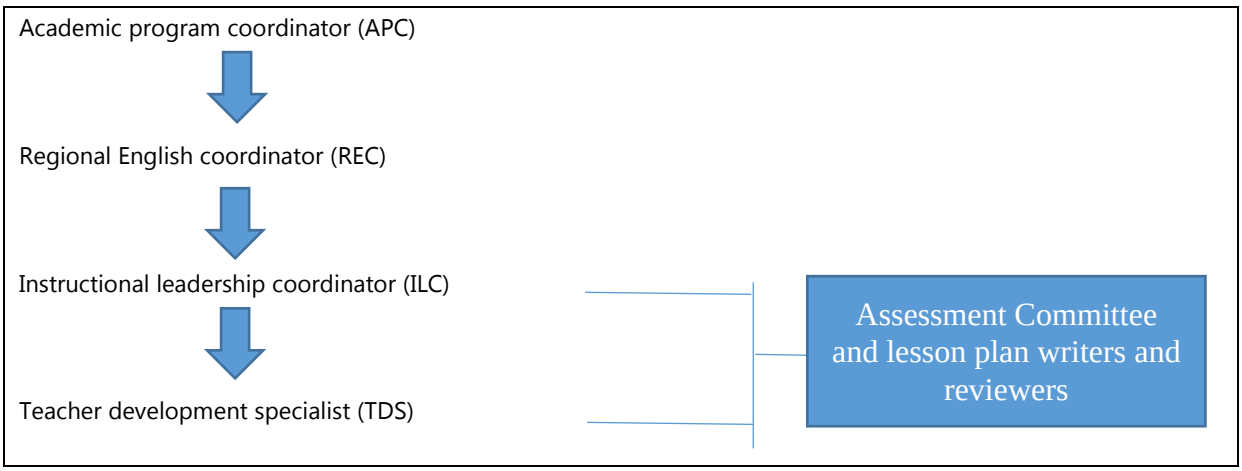

Figure 1: MAG Organisational Structure

Literature Review

This section of the paper is divided into two sub-parts: learning styles and task-based learning. The rationale behind including these two in this section is to address the literature on how the students prefer to learn and how the

teachers would deliver the curriculum. Therefore, the literature provided here reflects the present research's foci on preferences about learning and teaching, which consists of the procedural part of the present study.

Learning Styles

The notion of learning styles has been defined in a variety of ways. This variety was, in fact, criticised as confusing and perplexing, and thus taken as a shortcoming of research on learning styles (Curry, 1990; Spence, 2012). However, whether they are viewed as "a student's orientation toward learning" (Nunan, 1999, p. 310), "a student's consistent way of responding to and using stimuli in the context of learning" (Clark, 2011), "a description of the attitudes and behaviour which determine an individual's preferred way of learning" (Honey & Mumford, 1992, p.1) or just "a preferred way of learning and studying" (Pritchard, 2009, p. 43), all the definitions seem to rest on the idea that learning styles are about *how* learners prefer to learn, rather than *what* they learn. The main distinction between learning styles and learning strategies is that the former is inherently dependent on the learner's 'built-in', natural cognitive and behavioral characteristics, whereas the latter refers to the actions a learner uses and develops deliberately to learn (Bilash, 2009; Wong & Nunan, 2011).

Despite the conspicuous commonalities apparent in the definitions of learning styles, e.g., that they are a preferred way of or orientation toward learning (Clark, 2011; Pritchard, 2009), there has been, quite understandably, a plethora of models developed, based on how different researchers have approached the issue. The 1962-model known as Myers-Brigs Type Indicator (MTBI) comprises a list of sixteen personality variations (Myers et al., 1998) and is too general to be considered for classifying students in a classroom setting. Another broad model is that introduced by Honey and Mumford (1982), which divides learning styles into *activist*, *theorist*, *pragmatist* and *reflector*. These four styles, however, are depicted in terms of general personality traits. An activist is an open-minded person who shows enthusiasm for immediate experiences. A theorist, on the other hand, is analytical and prefers to take time before making a decision. According to this model, pragmatists are practical people who rely on experimenting new ideas, whereas reflectors meditate about past and present experiences and like to observe people in action. It is worth noting that the Honey and Mumford Learning Styles Questionnaire (LSQ) includes 80 questions (Honey & Mumford 2006). It is not hard to realise that, compared to the MTBI's sixteen personality types, these too are hard to measure within a classroom context because they are general personality traits.

Fleming and Mills (1992) first introduced the VARK model, with VARK standing for *Visual*, *Aural*, *Reading/Writing* and *Kinesthetic*. The authors describe visual learners as those who have preferences for learning through pictorial representation of information, such as using graphics and symbols. In congruence with this description, Dobbs (2001, p. 2) remarks that "[w]hen the teacher writes on the board, students whose learning is strengthened by visual stimuli benefit". Students who learn better from lectures, tutorials or any other heard information are described in this model as aural learners. Reading/writing learning style involves students who like to learn through printed or handwritten information. Finally, kinesthetic learners prefer to be connected to reality. Fleming and Mills (ibid) argue that presenting information to kinesthetic learners can be done visually, aurally or in

a reading/writing way, thus integrating other learning styles. The authors argue, though, that what makes this understanding of the kinesthetic style is experience, whether it is practical or simulated. The seminal work of Fleming and Mills would appear in ample literature about learning styles and in different forms years after (e.g., Kharb et al., 2013; Marcy, 2001). One can rightly argue at this point that the VARK model has been the starting point for more research on learning styles inside the classroom. Following are two adaptations of the VARK model.

Based on Neuro-Linguistic Programming, which emphasises the way communication occurs and the way it affects learning, Pritchard (2009) prefers the model that divides learners into three categories as far as their learning styles are concerned: visual, auditory and kinesthetic. As already mentioned, visual learners like to learn by seeing, which makes pictures, diagrams, graphs, maps and posters their preferred representation of information. Auditory learners, on the other hand, prefer learning via listening and tend to "benefit from discussion, lectures, interviewing, hearing stories and audiotapes, for example" (ibid, p. 45). Finally, kinesthetic learners by and large prefer learning that occurs via doing. It is hard for these learners to keep still, and in addition to physically moving, they like manipulating objects.

Prashnig (2006) makes a distinction between kinesthetic and tactile learning styles, thus adopting a VATK (Visual – Auditory – Tactile – Kinesthetic) rather than Pritchard's VAK (Visual – Auditory – Kinesthetic) model of learning styles. The difference between the two models seems to be nested in the notion of mobility. Prashnig maintains that a tactile learning style has to do mobility, whereas a kinesthetic style characterizes learners who learn better by doing and physically experiencing a learning situation. Tactile learners' mobility, according to Prashnig, involves experiencing learning either by either moving the body or keeping it still. Despite Prashnig's distinction between tactile and kinesthetic, many researchers and authors still prefer the VAK distinction (Brown, 2007; Clark, 2011; Fleming, 2012). It might be worth noting that the VAK and VATK models above have not replaced the old VARK model, which has been around for decades now. The idea behind the absence of "Reading" learning style could be that if reading is done silently, then it can be embedded within "Visual," and if done aloud within "Auditory".

A number of everyday teaching and learning activities – which will be further explained in the Implications on the Procedures Section of this paper - can be employed to cater for different learning styles. Some of these are form-specific, such as the use of substitution tables, which exist profusely in English grammar books (Cook, 2001), the employment of vocabulary-related activities involving the use of graphic organizers, such as the KIM Graphic Organizer, in which "K" represents the key vocabulary word, "I" stands for information, and "M" represents a *memory clue"* (Nichols, Rupley & Kiser, 2009, p. 193), and the utilization of content-based strategies, like Kill the Text then Bring it back to Life, which has "a wide range of language aims and includes a focus on content" (Lindstromberg, 2004, p. 4). In addition to these, among the different variations of dictation (e.g. peer dictation, guided dictation, and running dictation) mentioned by Nation & Newton (2008), running dictation has been described as an energising activity that can galvanise an inactive class (Hart, 2010; Taylor, 2010), and that can be used in a learning-

style-based lesson. In addition to these, activities that utilize language forms in real communicative situations (Richards & Rodgers, 2001) can be also conducted to cater for different learning styles.

Anderson and Adams (1992) stress that the delivery of information alone cannot lead to effective teaching and that there is a need to build the delivery on a model that digs deep into the minds at work. The authors argue that the most effective learning occurs when teachers acknowledge and explore their students' learning styles and deliberately build their instruction on them.

Although learning styles do matter, Hatami (2013) emphasizes that the research on the relationships between the learning styles and learning outcomes has yet yielded contradictory results. Ellis (2008, p. 671), for instance, states that "at the moment there are few general conclusions that can be drawn from the research on learning style". It looks like that the relation exists, but is weak. This is why it is usually recommended that teacher appeals to the variety of styles, to develop students' cognitive and metacognitive development and to satisfy all students in the class. Besides, learning styles of the same person may change during life, this is why we should not base teaching only on the style preferable for the students right now.

The second part of this review sheds light on different definitions of tasks and the TBL models that were designed on the basis of these definitions. The point behind including the literature on TBL in this study is that this teaching method was conducted to teach the materials that were included in the SA tests.

Tasks and TBL Models

Skehan (1996) defines a task as a meaning-focused activity related to the real world,that has an outcome to be assessed. Following from this definition, Skehan stresses that the main characteristic of a well-chosen task is having 'an effective balance between fluency and accuracy' (ibid, 1996, p. 53). Skehan, therefore, draws a TBL model that houses a twin focus on accuracy and fluency. His model suggests that a TBL lesson be divided into *pre-emptive work* (pre-task), *during-task*, *post-task 1* and *post-task 2*. 'Pre-emptive work' establishes the target language, 'during-task' mediates accuracy and fluency, 'post-task 1' encourages accuracy over fluency, and 'post-task 2' features synthesis and analysis. The significance of accuracy and fluency also appears in an earlier model which stresses that acquired units be integrated into functional relationships via production, or practice (Chaudron, 1988).

Akin to Skehan's definition, Willis (1996, p. 23) defines tasks as "activities where the target language is used by the learner for a communicative purpose (goal) to achieve an outcome". Following from this definition, Willis specifies six types of tasks, which are *listing*, *ordering and sorting*, *comparing*, *problem-solving*, *sharing personal experiences* and *creative tasks*. By and large, Willis's TBL framework includes a pre-task, task cycle and language focus. According to this model, the pre-task introduces the topic and task. The task cycle is divided into: a task that is done in pairs or small groups, planning in which students prepare how to present the way they did the task to the class and report, or presentation. Willis finally divides the language focus into analysis and practice.

Johnson (2003) is interested in how an activity is designed rather than how it is defined and, therefore, does not provide his own definition of a task. The author, though, introduces a model that is similar to Willis's as far as task stages are concerned. Johnson divides a task-based lesson into *preparation*, *main activity* and *follow-up*. Although the sub-components of each stage are very much similar to Willis's, this model highlights some more valuable additions. For instance, *production*, viewed from a perspective similar to that of Willis's *report*, can be done through regrouping, defined by Johnson (2003, p. 153) as a "procedure whereby Ls [learners] form new groups to describe what has been done in an earlier group".

Ellis (2003) defines a task with regard to its main features by claiming that it is a work plan, mainly focuses on meaning, employs real-world-related language, can be about listening, speaking, listening, and/or reading, involves cognitive processes and has an unequivocal communicative outcome. Although Ellis acknowledges Willis's pedagogic classification of tasks, he adds Prabhu's (1987) cognitive information gap, reasoning-gap and opinion gap activities to the list of task types. Ellis's framework of a TBL lesson differs substantially from Willis's. The model includes a pre-task, during-task and post-task. Nevertheless, Ellis (2003) asserts that the 'during-task' phase alone can be sufficient for a TBL lesson, which might suggest that flinging the pre-task and post-task through the window would not really affect the smooth flow of a TBL lesson. Since Ellis places a learner report in the non-obligatory post-task phase, he - as opposed to Willis - implicitly maintains that reporting is dispensable.

In his definition of a pedagogical task, Nunan (2004) adds more dimensions and stresses the learners' engagement in understanding, using, generating and interacting in the target language. He adds that a task should focus on conveying meaning by means of form, or grammatical knowledge. Nunan places task types within five categories. Table 1 provides a rough summary of the five categories together with the tasks that fall into each category:

Category	Task Types
Cognitive	Classifying, predicting, inducing, taking notes, concept mapping, inferencing, discriminating, diagramming
Interpersonal	Co-operating, role playing
Linguistic	Conversational patterns, practising, using context, summarising, selective listening, skimming
Affective	Personalizing, self-evaluating, reflecting
Creative	Brain storming

Table 1: Task types (developed by the researcher based on Nunan, 2004)

Nunan's framework for a TBL lesson describes enabling skills, including language exercises and communicative activities, which lead to the pedagogical task. According to Nunan (2004), a pedagogical task should have rehearsal tasks, which are directly related to the real world, and more pedagogically-oriented activity tasks.

Essentially, the above-cited models tend to divide a TBL lesson into three parts, although with different titles for each part. Ellis (2003), who is at odds with most of the models, maintains that only the 'during' stage is essential in a TBL lesson. In fact, Ellis could be right. Particular TBL lessons can be designed to be delivered over more than one teaching period, in which case, the pre-task at least will only be needed at the commencement of the first period. The variation of TBL models have also led to a plethora of suggested task types that can only be viewed as a rich resource for teachers who are in favour of applying TBL in their classrooms.

TBL offers many advantages, however, this in neither a perfect way of teaching. Tang, Chiou & Jarsaillon (2015), for instance, state that their study with participation of 76 intermediate EFL learners during 15 weeks at a Taiwanese university revealed that TBL was effective in fluency, lexical and syntactic complexity, but ineffective in accuracy.

Research Methods

This study, which was conducted at two grade 10 MAG classes, used a quantitative method for a number of reasons. The main aim of this paper is to measure variations in students' achievement in standard-based exams. Holloway and Wheeler (2013) point out that while a qualitative approach is process-oriented, a quantitative research is product-oriented. Following from this distinction, the quantitative paradigm has been preferred over the qualitative one for this study since the focus is the product, the students' results in SA tests, rather than the process. On a similar note, Kumar (2011) states that quantitative designs are more appropriate than qualitative designs when the focus of research is to measure the magnitude of a certain variation. Since discovering and clarifying attitudes, feelings and beliefs of the involved teachers and students do not fall within the scope of the current study, a qualitative design has not been employed.

The target analysis of the current study involves quantitative data, collected through a close-ended questionnaire. Dörnyei (2003, p. 14) describes a typical questionnaire as "a highly-structured data collection instrument, with most items either asking about very specific pieces of information (…) or giving various research options for the respondent to choose from". The questionnaire employed in the research involved multiple-choice items that elicit specific information about the learning styles of the participants. As a rule of thumb, closed-ended questions provide the subjects with fixed choices (Balnaves & Caputi, 2001). The questionnaire (Appendix A) consists of twenty items, each of which has three choices: *A*, *B* and *C*. Each choice indicates some preference towards a certain learning style. For example, item two in the questionnaire asks participants about what they are most likely to do when they are not sure how to spell a word. The three choices are (A) Write it down to see if it looks right, (B) Spell it out loud to see if it sounds right and (C) Trace the letters in the air (finger spelling). Choice *A* indicates a visual preference, *B* auditory and *C* kinesthetic. The significance of these choices lies in that the learning style of a student will be determined based on the total number of his choices.

The learning-style questionnaire used in this study was introduced by Pennsylvania Higher Education Assistance Agency (*http://www.educationplanner.org/students/self-assessments/learning-styles.shtml*). Using a VAK, rather than any other learning styles model, in this questionnaire is due to the fact that VAK distinction is "salient in a formal classroom setting" (Brown, 2007, p. 129). The questionnaire was translated into Arabic, the mother-tongue of the participants, who are the students of two MAG grade 10 classes aged between 15-16 years old, to provide a better comprehension of the items. Parents were asked to complete a consent form to allow their sons to take part in the research (see Appendix B). Following the elicitation of students' learning preferences via the VAK questionnaire, the teachers were familiarised with different TBL frameworks. The action plan of the TBL course was determined on the basis of the students' learning styles, on the one hand, and the content/standards they were going to learn/cover, on the other. By way of illustration, the students were divided into groups, based on their responses to the questionnaire and each TBL lesson was designed in a way that assured that the content was delivered in the preferred way of each group, which means that each lesson was designed and delivered on the basis of the students' learning styles. The English teachers did not interfere in writing the SA since all the SAs are designed by the MAG Assessment Committee.

The SAs are basically based on the CEFR, B1 standards covered during Trimester III. Given that, the SA of Trimester III was based on Units five and six, and the layout of the test was identical to the format of Trimester II test. The teachers, groups of students, method of teaching and the classroom were also the same. The only difference was that the TBL model was based on students' learning styles – a factor that was not considered in Trimester II. The independent variable was the change, or lack of it, in the students' achievement in the SA tests between the second and the third trimesters.

Analysis and Discussion

The students of Grade 10 in School 1 will be referred to as Class I (henceforth CI), and School 2's as Class II (henceforth CII). Each student's responses to the questionnaire have been added up to determine his/her learning style. If a student has more A's than B's or C's, s/he is a visual learner, and the same applies to the other two choices. The result of the *VAK* Learning Styles Questionnaire shows that the majority of the CI students involved in the study were kinesthetic learners. Figure 2 is a generic representation of the percentage of CI students as per their learning preferences. It can be noticed that only 23% of the students are visual learners, whereas the majority of CI students are either auditory or kinesthetic with 35% and 42% respectively.

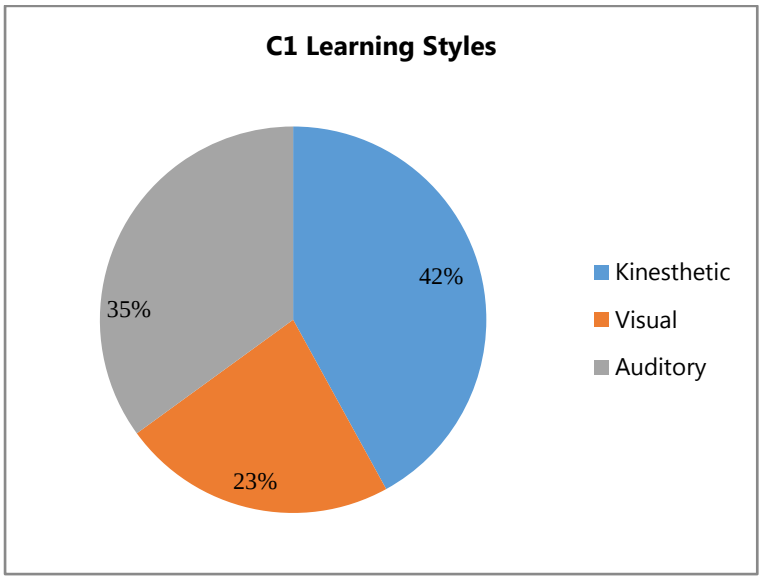

Figure 2: Generic representation of CI students' dominant learning styles

Table 2 outlines the exact responses of CI participants to each question. Students' names have been kept anonymous (*S* stands for *student*) and listed according to the dominant learning styles.

Participant	Visual	Auditory	Kinesthetic
S1	5	6	9
S2	5	4	11
S3	7	4	9
S4	3	9	8
S5	5	7	8
S6	2	5	13
S7	5	4	11
S8	4	7	9
S9	11	2	9
S10	13	3	4
S11	12	2	6
S12	4	3	13
S13	5	4	11
S14	7	8	5
S15	12	5	3
S16	7	9	4

S17	4	5	11
S18	5	10	5
S19	4	1	15
S20	4	12	4
S21	11	4	5
S22	4	12	4
S23	3	10	7
S24	12	4	4
S25	6	9	5
S26	5	10	5
S27	4	11	5
S28	7	2	11

Table 2: Summary of CI students' responses

CII results were different from CI's as the dominant learning style in CII was the visual, rather than the kinesthetic. Figure 3 shows that 50% of the students in CII are visual, 15% - auditory and 35% - kinesthetic.

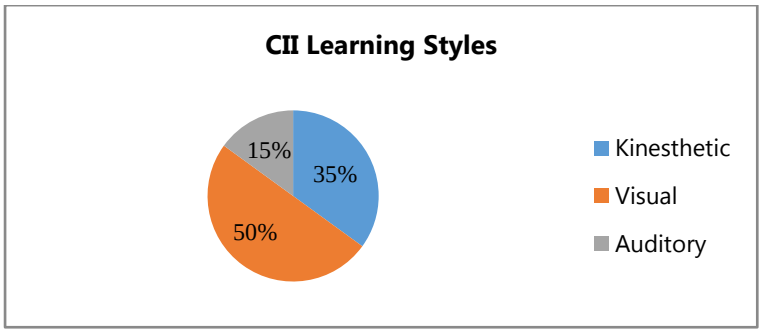

Figure 3: Generic representation of CII students' dominant learning styles

Table 3 outlines the exact responses of CII participants to each question.

Participant	Visual	Auditory	Kinesthetic
S1	10	3	7
S2	11	6	3
S3	6	5	9
S4	9	6	5
S5	6	5	9

S6	11	1	8
S7	8	10	2
S8	11	6	3
S9	11	6	3
S10	10	6	4
S11	10	2	8
S12	7	10	3
S13	9	7	4
S14	8	1	11
S15	6	4	10
S16	7	8	5
S17	9	6	5
S18	6	4	10
S19	8	10	2
S20	10	4	6
S21	7	5	8
S22	5	11	4
S23	6	5	9
S24	7	4	9
S25	9	7	4
S26	10	3	7

Table 3: Summary of CII students' responses

So far, there have been two options as far as class organisation is concerned. The first option involves dividing the class into groups based on the students' *dominant* learning styles, since the questionnaire has originally been designed to elicit this basic information. This type of organisation has ended up with five groups in CI and six groups in CII, given that the group should not consist of more than six students. Table 4 below shows the groups' distribution and the students who have formed each group for both classes (*V* stands for *visual*, *A* for *auditory* and *K* for *kinesthetic)*.

Groups based on learning styles	**C I**	**C II**
V1	S9, S10, S11, S15, S21, S24	S1, S2, S4, S6, S8
V2	---	S9, S10, S11, S13
V3	---	S17, S20, S25, S26
A1	S4, S14, S16, S18, S20	S7, S12, S16, S19, S22

A2	S22, S23, S25, S26, S27	---
K1	S1, S2, S3, S5, S6, S7	S3, S5, S14, S15
K2	S8, S12, S13, S17, S19, S28	S18, S21, S23, S24

Table 4: Distribution of groups based on the dominant learning style

Obviously, although CI has a bigger number of students, 28 students compared to 26 in CII, the number of groups in CII is higher. The reason behind this is that the groups have been formed based on two criteria: the dominant learning style for each student and the size of the group, which should not exceed six per group. As shown in Table 4, the results of this grouping led to the option of creating five groups in CI (one visual, two auditory and two kinesthetic) and six groups in CII (three visual, one auditory and two kinesthetic). The sizes of the groups are apparently different due to the variation observed in the students' learning styles.

The second option involves dividing students into pairs. Each pair will consist of two learners on the basis of their dominant learning styles.

Learning style	CI Pairs	CII Pairs
Visual	S9 & S21; S10 & S11; S15 & S24	S2 & S6; S8 & S9; S10 & S20; S1, S11 & S26; S4 & S17; S13 & S25
Auditory	S20 & S22; S26 & S27; S18 & S23; S4 & S25; S14 & S16	S12 & S22; S7, S16 & S19
Kinesthetic	S12 & S19; S6 & S17; S2 & S7; S13 & S28; S1 & S8; S3 & S5	S14 & S15; S18 & S24; S3 & S5; S21 & S23

Table 5: Pair distribution as per the dominant learning style

Using the second distribution can be a good option for a number of reasons. First, not only will learners in each pair have the same learning style, but they will also have almost the same degree of preference. Secondly, with the minor exception of the two triad groups in CII, all groups have the same size, which helps the teacher having more control over learning activities. The third advantage of using pair distribution is that the teacher will be able to observe each student's performance during tasks easily. To put it differently, in large groups it is likely that some learners may prefer to sit back and watch other members of the group do the task.

Based on the above analysis, the distribution of the students was implemented mainly using the second option. However, in tasks that required three or more students working together, the first option was implemented, therefore, embracing Johnson's (2003) notion of regrouping. Exploring the learning styles of the two groups was a core element in designing the TBL framework and in deciding on the proper learning tasks to be practised by the learners throughout the third trimester. As mentioned earlier, learning tasks have been outlined not only to meet the learners' preferences but also to be integrated into the pre-set lesson plans.

To start with, the TBL framework of the course under investigation was divided into three parts: *pre-task*, *task* and *post-task*. This general layout is similar to a number of frameworks discussed above, including those proposed by Willis (1996), Ellis (2003) and Johnson (2003). Nevertheless, the pre-task and post-task phases were neglected in lessons where the students' focus had to be on the task alone and in activities where the emphasis was mainly on form rather than on oral production. Thus, the model adopted for this course is closer to that of Ellis (2003), who maintains that pre-task and post-task are non-obligatory in a TBL lesson.

By and large, all the pre-task activities involved materials that were in accordance with the students' learning styles. For example, since the use of videos appeals for auditory and visual learners, some videos were displayed in order to prepare the students for the relevant tasks. Other pre-task activities involved questions that elicited the students' knowledge about certain topics. These pre-task discussions involved using pictures (appealing to visual learners), eliciting oral answers or reading aloud statements that described pictures (appealing to auditory learners) and asking the students to move to the blackboard and stick the pictures next to the corresponding words, phrases or sentences (appealing to kinesthetic learners). The post-task, where implemented, focused on the content and was, therefore, done through a worksheet that measured the students' understanding of the target content.

As far as tasks are concerned, almost all of them were designed and produced in three different versions that were compatible with the students' learning styles. Classifying (Nunan, 2004), or ordering and sorting (Willis, 1996), was widely implemented throughout the course in pairs and groups. By way of illustration, while groups of visual learners were provided with images that represent target lexical items and asked to match them with corresponding, usually written in different colours, words, kinesthetic groups were asked to cut out the images and paste them next to the corresponding words, while auditory learners were asked to listen to the words and say the answers aloud. Other tasks that involved all the learning styles included: diagramming, role-play, personalising, listing, comparing, problem-solving and sharing personal information.

By the end of Trimester III, the students sat for SA tests. Figures 4 and 5 depict the change in the independent variable, which represents variation in the students' achievement between Trimesters II and III in CI and CII, respectively.

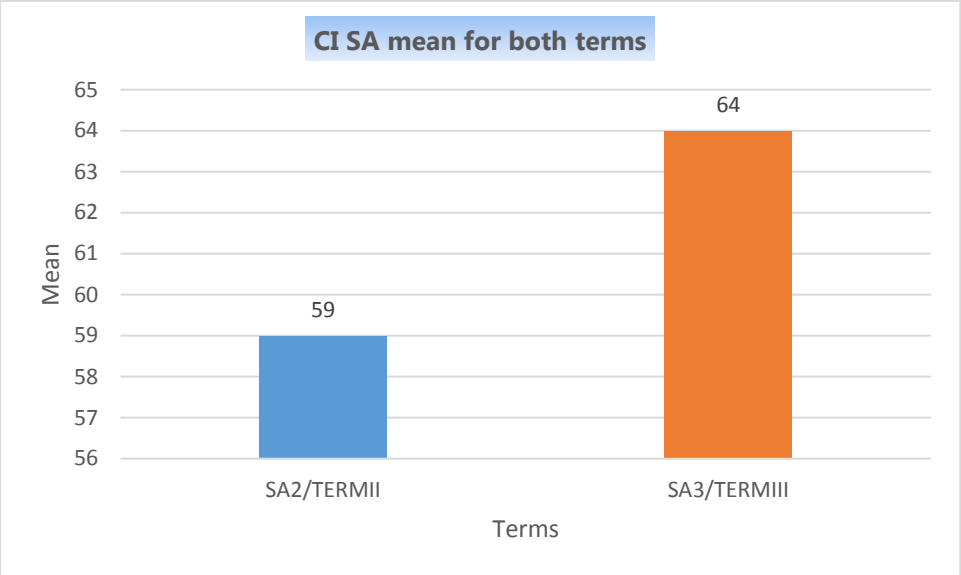

Figure 4: CI SA mean for both terms

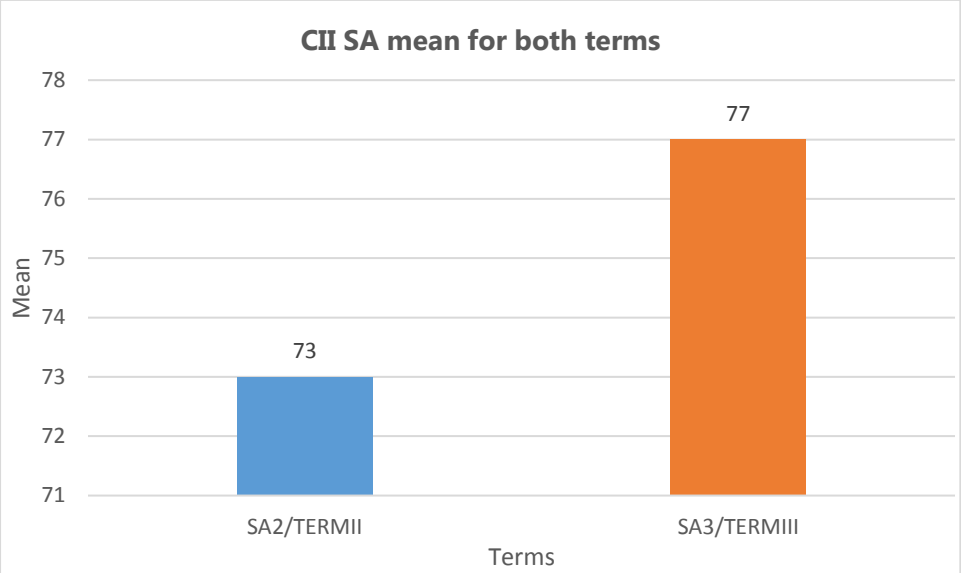

Figure 5: CII SA mean for both terms

Figures 4 and 5 indicate that there was an obvious improvement in the marks of the majority of the students in both classes. While the average score in CI increased by 5% (from 59 to 64), the average score in CII rose by 4% (from 73 to 77). Moreover, it can be noticed from Figure 6 that 89% of the students in CI improved their grades in SA tests following the course.

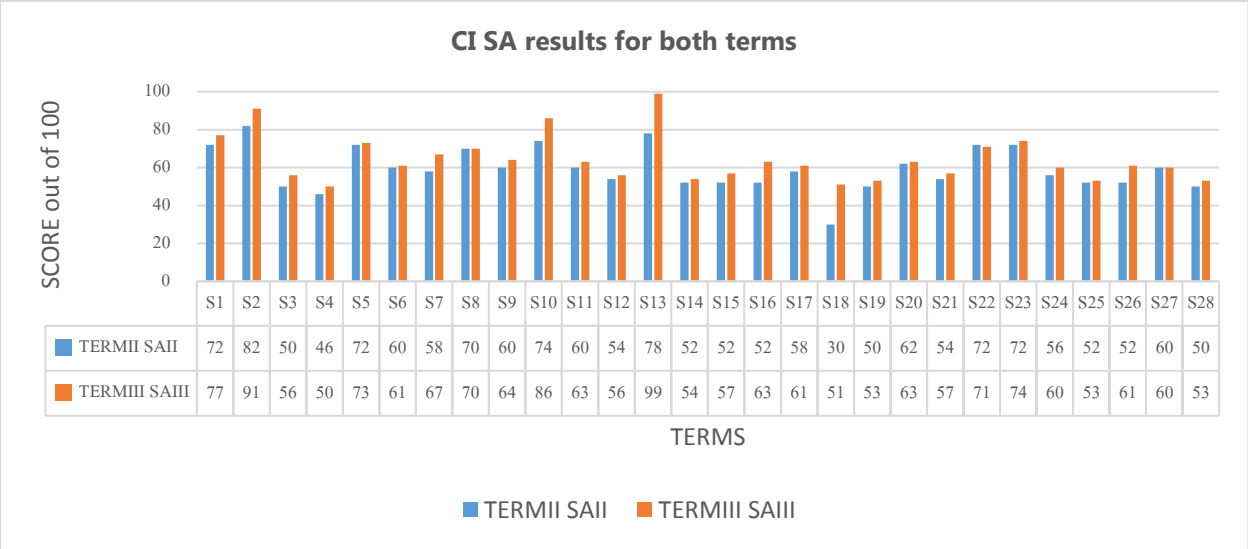

Figure 6: CI SA results for both terms

The same applies to CII where 62% of the students achieved higher marks in the SA in Trimester III as shown in Figure 7.

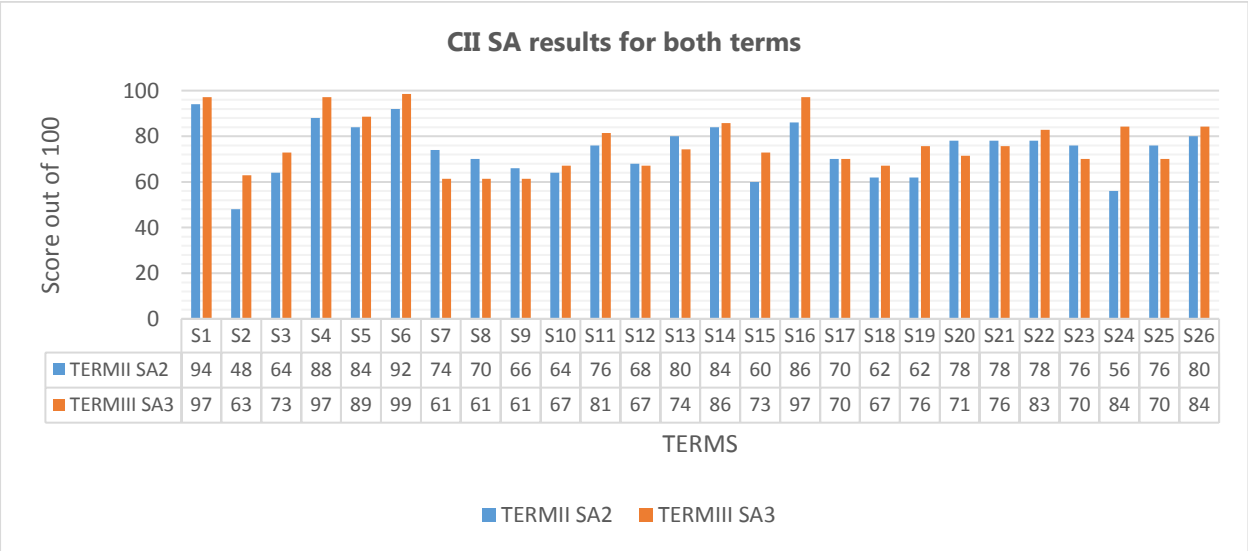

Figure 7: CII SA results for both terms

Although the big picture shows that the programme has affected the students' achievement positively, one should not turn a blind eye to the fact that some students' grades in both classes either dropped or remained the same. This can be due to some reasons that were out of the scope of this study, which will be discussed in the Limitation section of this paper. And, of course, the 4-5% growth of the skills' level reveals a positive, but weak relation between the learning style and the learning outcomes.

Implications about the Procedures

The twin focus of the current study on students' learning styles and the proper model has had several implications that are worth elucidating as far as content and SA are concerned.

Grammar was introduced in a way that attracted all the learners in the target groups. Utilising the notion of substitution tables is one example. Below is a substitution table on which a core TBL task was designed.

Do	you they	like	listening to stories? helping people with special needs? picking up litter and trash? assisting at the library?	Yes,	I we they	do
				No,	I we they	don't
Does	he she			Yes,	he she	does
				No,	he she	doesn't

Table 6: Sample substitution table

The substitution table was introduced to kinesthetic and visual learners via a problem-solving task and to auditory learners through a role-play task. To elaborate, the kinesthetic learners were given a similar substitution table and asked to design a similar one using the target structure via a hands-on activity. Visual learners were given colouring crayons and asked to draw a substitution table with the condition of using the same colour for all the items that fall in the same column. The auditory learners were required to practice the questions and answers orally. To consolidate this practice, the teacher wrote some examples and asked kinesthetic learners to write their own examples on the board. This listing activity usually targets both visual learners, who look at the examples, and

kinesthetic learners, who move to the board and write their responses. The teacher, then, asks auditory learners to read the examples aloud.

Vocabulary exercises were also conducted in a way that encompassed both students' learning styles and appropriate TBL corresponding tasks. Students benefit from using graphic organisers in understanding new words. One strategy that was used by teachers in teaching vocabulary is the KIM strategy, where KIM organisers were utilised to introduce most of the vocabulary items for Units five and six. KIM organisers involved writing the key vocabulary items in the "K" column, their definition or any information about them in the "I" column and memory clues, such as sentences or drawings, in the "M" column. Visual learners were asked to design the chart and colour the headings. Kinesthetic learners were asked to cut and paste relevant definitions and/or images on the chart instead of writing them. Auditory learners were required to report, or say the words, their definitions and corresponding memory clues aloud.

The illustration above does not mean that form was introduced as a separate 'island' without attention to meaning. All the tasks conducted in class had focus on both meaning and form, therefore, was utilised to serve communicative purposes. On the one hand, the tendency to blend form and meaning was derived from a core characteristic of TBL lessons, specifically through which classroom activities students should be able to recognise how language forms are used in real communicative situations. On the other hand, practical conversations are one element of the final written exam. That is why students have to learn and practice different conversations and dialogues via a variety of tasks, such as role-play and problem-solving.

Following is an example that involves using role-play and problem-solving in a vocabulary exercise and employing the target form in an authentic practice. The dialogue below is adapted from Evans and Dooley (2003, p.56):

A: Hi, Sarah. How is your new job?

B: It is great. I love teaching, and I really enjoy working with the children in my class. However, it's hard work too.

A: Do you start early in the morning?

B: Yes, school starts at nine o'clock, but I always get there at half past eight. Then I have lessons all morning.

A: Do you get a lunch break?

B: Yes. I usually bring something with me from home, or sometimes I get a sandwich from the school canteen. Then I have a few more lessons in the afternoon and school finishes at four o'clock.

A: Oh, that is good. You have your evenings free.

B: Not really. I often have work to do.

A: So you do not have much free time then.

B: Well, I always go to the gym after work, for about an hour. When I get home, I just finish my work and then watch TV or read a book.

A: Do you go out during the week?

B: Very rarely…because I like to go to bed early.

A: I see. Well, at least you never work at weekends.

B: That is true.

The students were asked to listen to the conversation and then to perform it in role-play, thus responding to the learning preferences of the auditory learners. Kinesthetic and visual learning styles were also catered for when the text was written on the board with the task being converted into a problem-solving task called 'Kill the Text then Bring it Back to Life'. In this task, each student was asked to choose two words from the dialogue and write them down. Students were then asked to use the words they have chosen in sentences of their own. Whenever a sentence was produced correctly, the word was erased from the dialogue. After 'killing the text' by producing correct sentences, students were asked to bring it back to life by moving to the board and writing the missing words. Apparently, this activity involved all learning styles and made use of different task types.

In running dictation, groups were organised in a way that each group would consist of students from different learning styles. Five or six copies of the target text were placed in different locations in the classroom. Kinesthetic learners were asked to run, each to his/her assigned copy, read as much as he can remember, run back to his group and dictate what s/he remembered to the auditory learners. This was repeated until the texts were fully dictated. The visual learners were then given coloured marking rubrics and asked to mark the products.

Limitations

Although many variables that could have affected the findings of the study were controlled, a few limitations need to be acknowledged. Firstly, attendance and absence records of students were not taken into account. If this had been done, probably it would have accounted for the scores that declined or remained the same in the two classes.

Secondly, the study was conducted in Trimester III, which is a B1 level, and the results were compared to Trimester II, which is an A2 level. This variable could have been controlled in a better way, had the study been conducted in Trimester II and the results compared to those of Trimester I, since both these trimesters are at level A2.

Thirdly, more teacher-training on TBL and integrating learning styles should have been done to make sure that the method was implemented correctly, and the results were accordingly more valid.

Besides, the population sample was limited and permits to make conclusions only about the students involved in the study.

Finally, the study needs to cover other school subjects besides English to obtain a better picture of the intervention.

Conclusion

The current study has explored whether designing and implementing TBL tasks according to the students' learning styles can help improve their achievement in SA tests. In order to measure the change in this variable, Trimesters II and III results of Grade 10 students in two MAG were compared. The reliability of the measurement stems from different factors, including the fact that the course was conducted in both trimesters under investigation by using the same classroom setting, the same students, the same teacher, the same core textbook, the same teaching method (TBL) and on top of those the same final, blind SA test written by the MAG Assessment Committee. The tests of both trimesters had the same structure, but were based on the standards presented in each trimester. The results of the participants show that, with a small number of exceptions, the students' achievement did improve. Finally, although the current study signals a relation between the implementation of a teaching method based on learning styles and achievement in standard-based exams, it is still a context-specific endeavour, and therefore, it is recommended that this type of study be implemented in other educational contexts before coming out with a generalisation.

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Appendix A: VAK Questionnaire

Learning Styles (أنماط التعلم)

Dear students,

We are kindly asking you to help us by answering the following questions concerning your learning styles. This survey is conducted by Emad Abu Ayyash and Mohammad Assaf, doctorate students at the British University in Dubai. This is not a test so there are no "right" or "wrong" answers. Please, give your answers sincerely as only this will help us design the proper course that will help you improve your grades in the final exam. Thank you very much for your help.

أعزائي الطلاب،

نحن نرجو منكم أن تساعدونا في الإجابة على بعض الأسئلة التي تتعلق بأنماط التعلم لديكم. يجري هذا البحث عماد أبو عياش و محمد أحمد عساف، طلبة الدكتوراة في الجامعة البريطانية في دبي. هذا ليس اختباراً، وبالتالي ليس هناك إجابة صحيحة وأخرى خطأ. أرجو أن تجيبوا على الأسئلة بأمانة لأن هذا وحده هو ما يساعدنا في تصميم برنامج ملائم سيساعدكم في تحسين درجاتكم في الاختبار النهائي. شكراً جزيلاً على مساعدتكم.

Name: .....

Age: .....

In the following section, you are kindly asked to choose A, B, or C.

في القسم التالي نرجو منكم اختيار إحدى الإجابات: أ، ب، أو ج.

1.	**What kind of book would you like to read for fun?**		ما نوع الكتاب الذي تحب أن تقرأه للمتعة؟		**.1**
	a.	A book with lots of pictures in it	كتاب فيه الكثير من الصور	أ.	
	b.	A book with lots of words in it	كتاب فيه الكثير من الكلمات	ب.	
	c.	A book with word searches or crossword puzzles	كتاب فيه لعبة الكلمات المتقاطعة والبحث عن الكلمات	ج.	
2.	**When you are not sure how to spell a word, what are you most likely to do?**		عندما لا تكون متأكداً من إملاء كلمة، ماذا تفعل على الأرجح؟		**.2**
	a.	Write it down to see if it looks right	تكتبها لتتأكد أنها صحيحة من شكلها	أ.	
	b.	Spell it out loud to see if it sounds right	تقول حروفها بصوت عال للتأكد أنها صحيحة من لفظها	ب.	
	c.	Trace the letter in the air (finger spelling)	تكتبها في الهواء (إملاء عن طريق الإصبع)	ج.	

3.	**You're out shopping for clothes, and you're waiting in line to pay. What are you most likely to do while you are waiting?**		أنت تتسوق لشراء بعض الملابس، وتنتظر الآن دورك لتدفع. على الأرجح، ما الذي ستفعله أثناء انتظارك؟		**.3**
	a.	Look around at other clothes on the racks	تنظر حولك إلى الملابس المعروضة على الرفوف	أ.	
	b.	Talk to the person next to you in line	تتحدث مع الشخص الذي يقف قربك في الطابور	ب.	
	c.	Fidget or move back and forth	تتململ أوتبدأ بالتحرك للأمام والخلف	ج.	
4.	**When you see the word "cat," what do you do first?**		عندما ترى كلمة "قطة"، ما أول شيء تفعله؟		**.4**
	a.	Picture a cat in your mind	تتخيل صورة للقطة في دماغك	أ.	
	b.	Say the word "cat" to yourself	تقول كلمة "قطة" لنفسك	ب.	
	c.	Think about being with a cat (petting it or hearing it purr)	تفكر في أن تكون مع قطة (تدللها أو تستمع إلى صوتها)	ج.	
5.	**What is the best way for you to study for a test?**		ما أفضل طريقة لديك لتدرس لامتحان ما؟		**.5**
	a.	Read the book or your notes and review pictures or charts	تقرأ الكتاب أو تقرأ ملاحظاتك وتراجع الصور والأشكال	أ.	
	b.	Have someone ask you questions that you can answer out aloud	تطلب من أحدهم أن يسألك أسئلة وتجيب عليها بصوت مرتفع	ب.	
	c.	Make up index cards that you can review	تكتب ملاحظات على بطاقات وتبدأ بمراجعتها	ج.	
6.	**What's the best way for you to learn about how something works?**		ما أفضل طريقة تتبعها لتتعلم طريقة عمل شيء ما؟		**.6**
	a.	Get someone to show you	تطلب من أحدهم أن يريك ذلك	أ.	
	b.	Read about it or listen to someone explain it	تقرأ عنها أو تستمع إلى شخص يوضحها	ب.	
	c.	Figure it out on your own	تستكشف طريقة عملها بنفسك	ج.	
7.	**If you went to a school dance, what would you be most likely to remember the next day?**		إذا ذهبت إلى حفلة مدرسية، ما هو الذي ستتذكره منها على الأرجح في اليوم التالي؟		**.7**
	a.	The faces of the people who were there	وجوه الناس الذين كانوا متواجدين في الحفلة	أ.	
	b.	The music that was played	الموسيقى التي عُزفت	ب.	
	c.	The dance move you did and the food you ate	الدبكات أو الرقصات والطعام الذي تناولته	ج.	
8.	**What do you find most distracting when you are trying to study?**		ما أكثر ما يشتت انتباهك عندما تحاول أن تدرس؟		**.8**

	a.	People walking past you	الناس الذين يمرون بقربك	أ.	
	b.	Loud noises	الأصوات العالية المزعجة	ب.	
	c.	An uncomfortable chair	الكرسي غير المريح	ج.	
9.	**When you are angry, what are you most likely to do?**		عندما تكون غضباناً، ما الذي ستفعله على الأرجح؟		**.9**
	a.	Put on your “mad” face	تُظهر الغضب على وجهك	أ.	
	b.	Yell and scream	تصرخ وتحتج	ب.	
	c.	Slam doors	تضرب الأبواب بعنف	ج.	
10.	**When you are happy, what are you most likely to do?**		عندما تكون سعيداً، ما الذي ستفعله على الأرجح؟		**.10**
	a.	Smile from ear to ear	تبتسم ابتسامة عريضة	أ.	
	b.	Talk up a storm	تتحدث فرحاً بصوت مرتفع	ب.	
	c.	Act really hyper	تقفز أو تتحرك بفرح عارم	ج.	
11.	**When in a new place, how do you find your way around?**		عندما تكون في مكان جديد، كيف تستدل على طريقك؟		**.11**
	a.	Look for a map or directory that shows you where everything is	تبحث عن خريطة أو لوحة إرشادية تريك مكان كل شيء	أ.	
	b.	Ask someone for directions	تسال شخصاً عن الاتجاه	ب.	
	c.	Just start walking around until you find what you are looking for	تبدأ بالتجول حتى تجد ما تبحث عنه	ج.	
12.	**Of these three classes, which is your favourite?**		ما هي الحصة المفضلة لديك من بين هذه الثلاثة؟		**.12**
	a.	Art class	حصة الرسم	أ.	
	b.	Music class	حصة الموسيقى	ب.	
	c.	Gym class	حصة التمارين الرياضية	ج.	
13.	**When you hear a song on the radio, what are you most likely to do?**		عندما تسمع أغنية على الراديو، ما الذي ستفعله على الأرجح؟		**.13**
	a.	Picture the video that goes along with it	تتخيل الفيديو الذي يرافق الأغنية	أ.	
	b.	Sing and hum along with the music	تغني وتتمتم مع الموسيقى	ب.	
	c.	Start dancing or tapping your foot	تبدأ بالرقص أو بهز قدمك طرباً	ج.	
14.	**What do you find most distracting when in a class?**		ما أكثر شيء يشتت انتباهك في الصف؟		**.14**
	a.	Lights that are too bright or too dim	أن يكون النور شديداً او خافتاً	أ.	

	b.	Noises from the hallway or outside the building (like traffic or someone cutting the grass)	ب.	الأصوات المزعجة في الممر أو من خارج المبنى (كصوت السيارات أو صوت أحدهم يجزُ العشب)	
	c.	The temperature being too hot or too cold	ج.	ارتفاع أو انخفاض درجة الحرارة	
15.	**What do you like to do to relax?**			ماذا تحب أن تفعل طلباً للراحة؟	**.15**
	a.	Read	أ.	تقرأ	
	b.	Listen to music	ب.	تستمع للموسيقى	
	c.	Exercise (walk, run, play sports, etc.)	ج.	تتمرن (تمشي، تركض، تلعب الرياضة، الخ)	
16.	**What is the best way for you to remember a friend's phone number?**			ما أفضل طريقة لديك لتتذكر رقم هاتف صديقك؟	**.16**
	a.	Picture the numbers on the phone as you would dial them	أ.	تتخيل الأرقام على جهاز الهاتف بينما تطلب الرقم	
	b.	Say it out aloud over and over and over	ب.	تقول الرقم بصوت عال مرات ومرات	
	c.	Write it down or store it in your phone contact list	ج.	تكتب الرقم او تخزنه في قائمة الأسماء على هاتفك	
17.	**If you won a game, which of these three prizes would you choose?**			إذا ربحت مباراة، أي هذه الجوائز الثلاث ستختار؟	**.17**
	a.	A poster for the wall	أ.	ملصق على الجدار	
	b.	A music CD or mp3 download	ب.	قرص موسيقى أو برنامج mp3	
	c.	A game of some kind (or a football or a soccer ball, etc.)	ج.	لعبة من نوع ما (أو كرة قدم، الخ)	
18.	**Which would you rather go to with a group of friends?**			أي من هذه الثلاثة سترغب بمرافقة أصدقائك إليها؟	**.18**
	a.	A movie	أ.	فيلم	
	b.	A concert	ب.	حفلة	
	c.	An amusement park	ج.	مدينة ألعاب	
19.	**What are you most likely to remember about new people you meet?**			ما الذي تتتذكره على الأرجح في الناس الجدد الذين تقابلهم؟	**.19**
	a.	Their face but not their name	أ.	وجوههم، لا أسماؤهم	
	b.	Their name but not their face	ب.	أسمائهم، لا وجوههم	
	c.	What you talked about with them	ج.	ما تتحدثت معهم به	
20.	**When you give someone directions to your house, what are you most likely to tell them?**			عندما تصف لأحدهم الاتجاه لمنزلك، ماذا تقول لهم على الأرجح؟	**.20**

	a.	A description of the buildings and landmarks they will pass on the way	وصفاً للمباني والعلامات التي سيمرون بها في طريقهم	أ.	
	b.	The names of the roads or streets they will be on	أسماء الطرق والشوارع التي سيكونون بها	ب.	
	c.	"Follow me – it will be easier if I just show you how to get there."	"اتبعوني – سيكون من الأسهل أن أريكم الطريق."	ج.	

Appendix B

Consent Form: On Behalf of a Minor or Dependent Person

I, of Hereby give consent for my son / dependent to be a subject of a human research study to be undertaken by Emad Abu Ayyash and Mohammad Ahmad Assaf.

I have read the 'Statement for Participants' relevant to the research study and I understand that the purpose of the research is: The purpose of the study is to investigate whether or not espousing a learning-style-based, task-based language (TBL) approach with Grade 10 students will improve their achievement in standard-based tests. The study intends to answer the following question:

What is the Impact of a Learning-styles-based, Context-specific TBL Model on MAG Learners' Achievement in Standard-Based Tests?

We believe that the findings of this research project will be useful in improving English teaching strategies.

I acknowledge that:

1. The aims, methods, and anticipated benefits, and possible hazards of the research, have been explained to me.
2. I voluntarily and freely give my consent to my child's participation in such research study.
3. I understand that the findings will be used for research purposes and may be reported in academic journals.
4. Individual results will not be released to any person including medical practitioners.
5. I am free to withdraw my consent at any time, during the study in which event my child's / dependent's participation in the research study will immediately cease and any information obtained from me will not be used.

Signature:

Date: / /2014