

## **PUPILS' AND TEACHERS' PERCEPTIONS OF A LANGUAGE BOARD GAME, *CHALLENGE***

**Anisha Sasidharan and Tan Kok Eng**  
*Universiti Sains Malaysia*

### **ABSTRACT**

Psychological studies have shown that the act of play contributes to the physical, intellectual, social and emotional development of a child. School pupils have been observed to enjoy playing games. Games work as a stimulant and are able to captivate pupils' attention, and hence educators should channel the advantages of play into language learning. To explore the potentials of games in the learning of English mainly the speaking skill, a language board game called CHALLENGE was invented. The theory of Multiple Intelligences (MI) and the Social Learning Theory underpin CHALLENGE. This paper presents a study that examined the responses of some stakeholders towards CHALLENGE. The study used both qualitative and quantitative approaches in data collection and analysis. The responses were collected through two sets of survey questionnaires from primary school pupils who played the game and their teachers. These responses were further supported by interview sessions with ten players. The results showed that the two groups responded positively towards CHALLENGE, and pupils' various intelligences were activated as they interacted and played with their peers. The study will interest teachers and other academics in developing game-based materials for their language classrooms.

Keywords: games, language learning, multiple intelligences, social learning theory

### **Introduction**

Scholars have long realised the importance of play amongst children to help in their physical, intellectual, social and emotional development as well as language learning. Many studies have been carried out regarding the importance of games in early childhood which undoubtedly contribute to the cognitive development in a child in the later years. These include studies on play in the elementary school for young learners (Elkind, 2007; Ginsburg, 2007; Rizi, Yarmohamadiyan & Gholami, 2011; Runcan, Petracovschi & Borca, 2012).

Philosophers such as Frobel, Montessori, Dewey and Piaget strongly advocated the concept of play in children's early education (Morrison, 1988). The concept of game soon developed from play. Games then became popular among students

of today. Games work as a stimulant and are able to catch and captivate a student's attention. Table 1 below presents a brief literature review on the educational games used to enhance students' learning from the primary level up to the tertiary level.

Table 1  
*Highlighted Outcomes of Several Educational Games*

Author	Year	Game	Highlighted Outcome
Azriel, Erthal & Starr	2005	Jeopardy	<ul style="list-style-type: none"> <li>- motivated learners to actively partake in the learning process and teamwork</li> <li>- helped learners to review management theories and vocabulary</li> <li>- effective in preparing learners for the midterm exam</li> </ul>
Macedonia	2005	Several games using cards, dice, equipment & movement	<ul style="list-style-type: none"> <li>- learners unconsciously practised lexical, morphological and syntactical elements of English</li> </ul>
Reese & Wells	2007	Conversation Game	<ul style="list-style-type: none"> <li>- motivated learners to participate and engage themselves in ESL conversations</li> </ul>
Beylefeld & Struwig	2007	MMFWF board game	<ul style="list-style-type: none"> <li>- enhanced learners' social skills and negotiation skills (conversing, listening, giving and receiving positive and negative responses from peer)</li> </ul>
Arslan, Moseley & Cigdemoglu	2011	'Enviropoly' board game	<ul style="list-style-type: none"> <li>- attracted the pre-service teachers to learn new facts on environment</li> </ul>
Lee	2012	'SMARTies' board game-	<ul style="list-style-type: none"> <li>- helped the learning of English in a fun manner and helped students to be more proficient in the English language</li> </ul>

Consistent with the positive views of games in education, a game entitled CHALLENGE was developed for use by primary school children in Malaysia. The general aim is to increase the exposure to English and promote its use, especially in the area of speaking.

The rationale of the study is to introduce CHALLENGE as an innovative approach to support classroom teaching, and to comply with the latest stipulated Primary School Curriculum Standards (*KSSR*) syllabus. It is important to keep exploring the use of language games in the Malaysian English language learning context as it is a tool to capture the attention of young learners in the primary school. CHALLENGE stresses on learning in an enjoyable manner; triggering pupils' various intelligences and supporting the learner-centered principle through peer learning.

The game is unique as pupils get to move on the life-sized board game as tokens and participate in asking and answering questions to collect points to reach the finishing point on the map. In the process they activate their verbal-linguistic intelligence (i.e. expressing their thoughts in spoken words, discuss in teams, ask and answer questions in English), logical-mathematical intelligence (i.e. strategising moves and figuring out problem-solving techniques in teams), interpersonal intelligence (i.e. learning through teamwork), intrapersonal intelligence (i.e. realizing one's own role and responsibility in the process of learning), bodily-kinesthetic intelligence (i.e. active learning through body movement) and finally, visual-spatial intelligence (i.e. active learning through visual images, colours and landmarks on the board). CHALLENGE also emphasizes social learning which takes place when pupils interact with each other during the game.

The paper reports the responses to the game according to the following two research questions:

- 1) What are the responses of pupils and teachers towards CHALLENGE?
- 2) To what extent have the multiple intelligences and the social learning elements in pupils been activated through CHALLENGE?

The responses towards CHALLENGE from the pupils and teachers, collected through a survey questionnaire, are vital to find out the acceptance of the language board game among these two important groups. The qualitative data collected from the pupils' interview responses examined how their multiple intelligences and peer learning were triggered through the playing of CHALLENGE. The responses can be useful for future research in English Language teaching in Malaysia, and for English teachers who want to invent their own game materials for their pupils. Finally, the study will also benefit game developers who are eager to know the game aspects favoured by pupils and teachers.

### **CHALLENGE: An Educational Board Game**

CHALLENGE was initially developed to supplement the English learning modules created for primary school pupils under the Sabah Foundation Project. The objective of this project was to help the selected primary schools in Sabah in the learning of English. Modules and teaching aids were developed for this purpose. The creation of this new board game was initiated by a team of researchers who were responsible for the English modules. The first task of drafting out a board game was given to a small group of young children with the belief that they would be able to come up with something which they would desire to play and suits their best interest in games.

Theoretically CHALLENGE is supported by MI and the Social Learning Theory, emphasizing on young children's interest in games and taking into account strategic thinking and competitiveness in children during games. These two theories are further explained in the next section.

The CHALLENGE board game is played on a life-sized mat which can be spread out on any space on the floor or field. The mat contains tracks on which pupils move as tokens themselves. The game set also comes with a giant-sized dice which allows pupils to hold and roll. In order to play CHALLENGE, pupils have to form four teams, stationed apart around the mat.

Question cards will be given to each group, pertaining to the four categories of English, Science, Mathematics and General Knowledge. While the asking and answering of set questions can score points for them, pupils are encouraged to discuss and come up with their own questions for each category to challenge their opponents. The game facilitator will ensure that each team asks a question from each category, either from the question cards or questions they have constructed together. Pupils' speaking skills are practiced every time they ask and answer questions in English. Each team takes turns to throw the dice, and a member moves along the track accordingly. Depending on which colour circle s/he lands on, an opposing team with the same colour will ask him/her a question. Marks will be awarded for correct answers.

The concept of prisoner or captive is also found in CHALLENGE. Pupils who fail to answer their opponents' questions will be held captive by the team who ask the questions. This captive can be released if a fellow team member wishes to save the captive by answering a question from the opponent team. The winning team is the team which reaches the end point first or it can be determined by calculating the accumulated points acquired through the question and answer sessions as well as the number of captives held at the end of the game.

CHALLENGE's unique physical appearance of life-sized mat and method of playing in which pupils move as tokens are different from the features of conventional board games. These features of CHALLENGE excite pupils to play and motivate them to speak in English. CHALLENGE is aimed at making pupils practice the English language and be more confident in speaking English as they learn new phrases and vocabulary from their knowledgeable peers. Teachers could use this game as an enrichment activity or to assess pupils' level of understanding on certain topics. It is also flexible as teachers can alter the rules and the ways of winning the game to suit their pupils.

Pupils are engaged in active learning as they create questions to pose to their opponents, and as they attempt to answer questions directed at them. The elements of suspense and anticipation, creative and active thinking, competition, movement, excitement and fun make CHALLENGE appealing to pupils learning English.



Figure 1 Pupils standing as tokens



Figure 2 Group discussion before the game

## Theoretical Perspectives of CHALLENGE

### *Theory of Multiple Intelligences*

Gardner (1983) postulated that everyone possesses various intelligences in varying degree, and these intelligences collaborate in a coordinated manner. There are nine intelligences according to Howard Gardner. These intelligences encompass verbal-linguistic, logical-mathematical, musical, visual-spatial, bodily-kinaesthetic, interpersonal, intrapersonal, naturalist (Campbell, Campbell & Dickinson, 1996; Lazear, 2004; Baum, Viens & Slatin, 2005), and after much

analysis and argument, Gardner (2000) pronounced the ninth which is the existential intelligence. The MI theory is also a theory which could be used in pre-school education (Stancuna & Craciun, 2011; Delgoshaei & Delavari, 2012) up to tertiary level (Vincent, Ross & Williams, 2002).

The relationship between multiple intelligences and language learning is an intricate one. Several studies regarding the MI theory were carried out to examine the relationship of foreign or second language learning and multiple intelligences. In Savas's (2012) study to find out to what extent each intelligence plays an overall role in foreign language learning according to the perceptions of 160 pre-service English-as-Foreign-Language (EFL) teachers, it was discovered that 97% of the participants believed that linguistic intelligences combined with other intelligences aided in successful language learning. Eng and Mustapha (2010) set out to investigate the MI strategies and instructions useful for the improvement of students' writing ability. After two months, the post-test showed that there was significant improvement in the experimental group's overall writing ability. Other studies have similarly revealed a significant relationship between language learners' MI and their language learning strategies (Akbari & Hosseini, 2008; Razmjoo, Sahragard & Sadri, 2009). MI was seen to improve students' knowledge of vocabulary as well as their vocabulary learning strategies.

Two studies have applied the MI theory in the Asian school context. Both were carried out in Singapore. The first was a study conducted by Chew (2009) in which a test was carried out to see if there was any improvement in pupils' language skills before and after the implementation of MI. The results showed that the experimental group with MI inputs showed 9% of improvement in the listening and speaking skills, whereas 5% of improvement was reported in the writing skill and 1% of improvement in the comprehension skills. During the interview, the teachers also responded that participants were motivated and well-informed and they loved the variety amalgamated in their learning process.

The second study by Mokhtar, Majid and Foo (2008) explored the impact of information literacy teaching which integrated pedagogical approaches with students' information literacy competencies. This study proved that MI was effective in assisting students to apply the information skills more efficiently. Students were found to be more receptive, and they performed better in their project as their interest and abilities were taken into consideration. It was also concluded that students' learning style preferences moulded the way they learn, how much they remember and also how well they put into application what was learnt. The theory suggests that everyone has the potential to activate these intelligences under various conditions despite having certain intelligences

stronger than the others (cited in Kelly & Tangney, 2006). The theory of MI also implies that educators should cater to a broader range of talents and skills. The search of the literature on MI and classroom pedagogy in the Asian context has not revealed studies in the field of MI within educational language games.

Based on the understanding of the theory of MI, CHALLENGE applies six out of the eight stated principles. The six MI involved in the board game are: linguistic intelligence, logical-mathematical intelligence, spatial/visual intelligence, bodily-kinesthetic intelligence, interpersonal intelligence and intrapersonal intelligence. The natural intelligence and musical intelligence are the two intelligences absent in CHALLENGE. The natural intelligence focuses on natural patterns, flora and fauna species, subspecies categorization and other encounters with nature. The musical intelligence, on the other hand, emphasizes the ability to recognize pitch, melody, rhythm and tone. These two intelligences have not been emphasized in the development of the game.

The verbal-linguistic intelligence aspect in pupils is triggered when language is used to express and comprehend thoughts through spoken words. Pupils not only have to answer questions but also generate questions in the target language, which is English. Pupils need to discuss and strategise moves in order to play the game as a team. In this environment, they may be motivated and feel less shy to speak in English as all their peers are doing so. The game facilitator (preferably the English teacher) will encourage pupils to speak in English and ensure that they do not use their mother tongue while playing. They will also be more alert when it comes to listening to the questions posed, in order to answer them correctly. Thus, it trains students in both listening and speaking in English.

CHALLENGE caters to the interpersonal intelligence in learners as they interact with peers and learn through collaboration and cooperation in a team environment. They can learn from each other. In particular, the good students can coach the weaker students on certain knowledge and skills. In addition, students will be able to learn the social skills of communicating and expressing their thoughts. CHALLENGE encourages students to use and practice English more often.

The aspect of logical-mathematical intelligence in students is prompted when they recognize the recurring patterns involving numbers. This happens as students move on the board. This intelligence is also prominent when students discover the problem-solving and strategising tactics among peers. Students will solve the questions thrown to them and come up with a strategy to play and try their best to win the game as a team.

CHALLENGE captures students' visual-spatial intelligence through the shapes, colours and images designed on the board. Students also move on the board as tokens in the game. These elements in CHALLENGE generate interest and excitement among learners. Another observation is that students usually remember colors better than verbal cues. Thus combining lesson content with colorful visuals can improve student's memorization skills.

The bodily-kinesthetic intelligence in a student is activated through the movements of the player (as a token) from one number to another on the CHALLENGE game mat, as indicated by the dice. The student is very much engaged in the game as s/he moves forward on the game mat and trying to reach the 'FINISH' point. The players are kept alert throughout the learning process as they follow the counting and movements of other players when they themselves are not moving. They are not confined to their seats in the classroom.

CHALLENGE also caters to the intrapersonal intelligence in a student. Through CHALLENGE, the student becomes aware of the quest of his own learning process. He takes charge and becomes more responsible for his own learning. Learning then becomes student-centered. Students go through the thinking process all by themselves, exhibit their values as a learner and make decisions as well as answer questions, while playing. Students also explore their own abilities while playing as they would realise their own strengths and weaknesses and find out how to further improve themselves.

CHALLENGE has been designed to further help ELT teachers in Malaysia to deliver learning in a fun way. Moreover, it provides an enjoyable and educational environment for students to learn. It also cultivates team work, collaboration and strategic thinking among students. Additionally, students get to learn and practice the English language frequently. Furthermore, CHALLENGE can be used to strengthen other subjects such as Maths, Science and General Knowledge. Last but not least, CHALLENGE emphasises on speaking and listening skills, critical thinking and risk-taking through drawing from the MI in a student.

### ***Social Learning Theory***

The Social Learning Theory claims that children learn through social interaction. Social learning promotes cognitive growth. This learning zone is named 'Zone of Proximal Development' which Vygotsky (1978, p.86) has described as "the difference between a child's actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers."

Vygotsky claims that learning takes place in this zone whereby learners learn through the help of the ‘more knowledgeable other’ and not alone. The ‘more knowledgeable other’ here refers to a person who has a better understanding of a task, process or concept compared to the learner himself. The person can be a teacher, coach, or even a peer. Thus, interaction and collaboration among peers are very essential to create a learning community (McLeod, 2007; Riddle, n.d). CHALLENGE was devised with the intention that during the game, the social interaction which takes place will allow students to learn from the more knowledgeable peers.

CHALLENGE also encourages social interaction and social learning through teamwork and collaboration. This will help the more knowledgeable learner to facilitate the weaker learner and construct meaningful learning (while playing and acquiring knowledge) and be active learners. Learners thus actively internalize the current problem solving practice and develop their cognitive level as the transfer of knowledge takes place through the interaction between the expert and novice (Kutnick & Manson, 2000). Through CHALLENGE, learners will be able to gain new knowledge and discoveries together with as well as from their peers. Such an environment decreases passive learning and absorbing everything from the teacher without critically constructing one’s knowledge.

According to Schneider and Watkins (1996), Vygotsky’s social learning theory does not only apply to cognitive development, but also linguistic functioning in learners. Based on this conception, it is also noted that CHALLENGE promotes language learning as learners playing and moving on the board would interact with many parties as well as asking and answering questions using English to score points for their team. Thus, the language is being used and practiced by the learners.

## **Methodology**

### ***Participants and Setting***

CHALLENGE was presented to the public and played on several occasions. The responses garnered from the playing of the game on MELTA National Literacies Day in 2011 held at the National Library Malaysia in Kuala Lumpur are reported in this paper. The participants consisted of Malaysian primary school pupils from the ages of eleven and twelve. Fifty-six pupils were involved in this study. All the schools responded to an invitation to send their pupils as representatives to participate in this CHALLENGE board game. The eight English teachers who accompanied their pupils were also the participants of the study. All these teachers witnessed the game being played from the start till the end.

### ***Instruments***

The first instrument used to collect data on responses to the game was two survey questionnaires distributed to the pupils and teachers respectively. The survey questionnaires consisted of five-point Likert scale questions. The second instrument used was an interview protocol to obtain qualitative data from the pupils to support the survey data. Semi-structured interview questions were used as the respondents were young learners who might not be able to answer unstructured interview questions.

### ***Pilot Study***

The pilot study was carried out during the Technology Expo held on the 17<sup>th</sup> till the 19<sup>th</sup> of February 2011, at the Kuala Lumpur Convention Centre. CHALLENGE was exhibited and played on the 18<sup>th</sup> of February during the Technology Expo. Several primary schools from the region of Kuala Lumpur were invited by USM to send their players to participate in the game. Eight schools turned up and sent four players each for the game. Overall, 40 pupils participated and eight teachers witnessed the game. These were the sources of data for the pilot study. All these people were given enough time after the game to complete the survey questionnaires. Data from the pilot study were analysed to address reliability issues.

### ***Reliability and Validity of the Survey Questionnaires***

The reliability test was carried out with the data collected during the pilot study. The internal consistency of the items in the questionnaire were analysed using Cronbach's Alpha in SPSS. The results are as shown below.

Table 2  
*Reliability Statistics*

Survey Questionnaires	Cronbach's Alpha	Number of items
Pupils (n = 40)	.832	15
Teachers (n = 8)	.834	16

The alpha values from the reliability test show that the questionnaires were reliable as they were more than 0.70. Additionally, there were no comments or difficulties raised by pupils and teachers in understanding and answering the survey questionnaires. Thus, the items in the survey questionnaires were retained for the main study.

The interview questions were validated in terms of content. The questions asked by the researcher were to elicit data to answer the second research question; how

are the MI and the social learning elements in pupils activated through CHALLENGE from the perspectives of the pupils. Thus, every item/question is carefully mapped onto the aspects of CHALLENGE and the MI Theory, Social Learning Theory as well as the practice of speaking and listening in English. Every question/item was checked by a researcher of the board game.

### ***Data Analysis***

The first research question on the responses of CHALLENGE from the pupils and teachers used descriptive statistics whereby the means and standard deviations, frequencies and percentage were generated using the SPSS. The second research question was answered through a descriptive analysis of the pupils' responses from the survey questionnaire as well as the thematic analysis using the interview input. The data collected through interviews helped in triangulation of quantitative data to prove the validity of the quantitative data results.

## **Results and Discussion**

In order to facilitate discussion, the responses in the two survey questionnaires for 'Strongly Disagree' and 'Disagree' were combined into one category labeled 'Disagree' whereas the responses for 'Strongly Agree' and 'Agree' were combined into 'Agree'. After the descriptive results on pupils' and teachers' responses are presented to answer research question one, qualitative findings from the thematic analysis are discussed to answer the second research question.

### ***Pupils' Responses***

The responses from the pupils came from both the five-point Likert scale survey questionnaires and the semi-structured interview questions asked. Both the data collected were analysed and combined to show that the multiple intelligences in pupils as well as peer learning were activated via CHALLENGE as claimed by the pupils.

Table 3 shows that CHALLENGE was positively received by the pupils who played the game. Most of the responses are in the mean scores ranging from 3.00 to 4.00. The highest positive responses were gained from the items 'the game encourages teamwork' (87.5%) followed by 'the game requires the use of strategies to win' (87.5%), 'the game motivates me to use English' (78.2%) and 'the game motivates me to learn English' (74.5%). The highest negative response came from the item 'I took a long time to understand how to play the game,' indicating that the pupils did not take a long time to understand the rules and the method of playing the game. This is encouraging news to the game developers and teachers that the rules have been written in a clear manner.

**Table 3**  
*Players' Responses towards CHALLENGE*

Item No.	Item	D (%)	N (%)	A (%)	M	SD
1	The game was enjoyable	7.1	14.3	78.6	4.07	1.14
2	The length of time for playing the game was suitable.	19.6	30.4	50.0	3.29	1.12
3	The rules of the game were clear.	5.4	19.6	75.0	4.13	0.97
4	The questions asked were challenging.	8.9	12.5	78.6	4.11	1.09
5	I took a long time to understand how to play the game.	37.5	32.1	30.4	2.93	1.33
6	I prefer to create our own questions to challenge other teams.	10.7	14.3	75.0	4.09	1.25
7	I like the interaction with other players during the game.	23.2	17.9	58.9	3.46	1.39
8	I am active during the game.	17.9	16.1	66.1	3.71	1.37
9	The game keeps me alert.	7.1	21.4	71.4	4.05	1.15
10	I enjoy moving around on the board.	14.3	25.0	60.7	3.86	1.33
11	The game motivates me to learn English.	3.6	21.8	74.5	4.24	0.98
12	The game motivates me to use English.	3.6	18.2	78.2	4.36	0.97
13	I get to know new places on the map.	23.2	28.6	48.2	3.52	1.32
14	The game encourages teamwork.	5.4	7.1	87.5	4.46	0.93
15	The game requires the use of strategies to win.	7.1	5.4	87.5	4.39	1.00

\*D=Disagree, N=Neutral, A=Agree, M=Mean, SD=Standard Deviation

***Teachers' Responses***

Table 4 below shows the results from the teachers who accompanied their pupils to play CHALLENGE. These were eight English teachers who witnessed the whole game being played by their pupils.

Table 4  
*Teachers' Responses towards CHALLENGE*

Item No.	Item	D (%)	N (%)	A (%)	M	SD
1	The game was enjoyable.	12.5	12.5	75.0	4.13	1.13
2	The length of time for playing the game was suitable.	12.5	25.0	62.5	4.00	0.54
3	The rules of the game were clear.	12.5	25.0	62.5	3.63	0.92
4	The questions asked were challenging.	-	12.5	87.5	4.00	0.54
5	I took a long time to understand how to play the game.	37.5	25.0	37.5	3.00	0.93
6	I prefer the pupils to create their own questions to challenge other teams.	12.5	12.5	75.0	4.00	1.07
7	I like the interaction of the players during the game.	12.5	12.5	75.0	3.75	0.89
8	The game keeps the pupils active.	-	25.0	75.0	4.25	0.89
9	The game keeps the pupils alert.	-	25.0	75.0	4.25	0.89
10	I like the fact that the pupils are moving around on the board.	-	25.0	75.0	4.25	0.89
11	The game can motivate my pupils to learn English.	12.5	12.5	75.0	4.00	1.07
12	The game can motivate my pupils to use English.	12.5	12.5	75.0	4.25	1.17
13	The pupils can get to know new places on the map.	-	37.5	62.5	4.13	0.99
14	The game encourages teamwork	12.5	12.5	75.0	4.25	1.17
15	The game requires the use of strategies to win.	12.5	12.5	75.0	4.14	1.22
16	The game can be adapted for other subjects.	-	25.0	75.0	4.38	0.92

\*D=Disagree, N=Neutral, A=Agree, M=Mean, SD=Standard Deviation

Table 4 shows that the highest positive response was from the item 'the game can be adapted for other subjects' with a mean score of 4.38 and a standard deviation of 0.92. None of the teachers disagreed with this item. Clearly the flexibility and adaptability of the game were favoured by the teachers. The teachers saw the potential of the CHALLENGE board game for the teaching and learning of other subjects as well.

The second highest positive responses came from several items which shared the same mean score of 4.25. These items are 'the game encourages teamwork', 'the game can motivate my pupils to use English', 'the game keeps the pupils active', 'the game keeps the pupils alert' and 'I like the fact that the pupils are moving

around on the board'. These English teachers agreed that the CHALLENGE board game delivered all the aspects that it has promised. Learning was made fun and easy through the act of playing. Pupils were vigilant and engaged in the whole process. They were observed by their teachers to be learning from their peers and most importantly, speaking and communicating in the English language.

However, when compared with their pupils, the teachers responded with lower means for the items 'the rules of the game were clear' and 'I took a long time to understand how to play the game.' It is likely that the rules were clearer to the pupils as they had to participate in the game unlike the teachers who were just the onlookers.

**Evidence of MI and the Social Learning Theory in CHALLENGE**

Table 5 displays the responses from the ten pupils (A - J) during the interviews which were transcribed, analysed and coded according to the various aspects of the theories.

Table 5  
*Pupils' Interview Responses*

Theme	Code	Respondent	Response
Verbal-Linguistic Intelligence & Social Learning Theory	Discussion and Social Interaction	A	<i>"We discussed about the questions that we wanted to ask."</i>
		F	<i>"We discuss it (questions). We find questions and then we discuss it."</i>
	Use and Learn English and Knowledgeable Peer	I	<i>"Discussing with friends"</i>
		B	<i>"...because other teams also know other words and we can learn from them."</i>
		C	<i>"I use proper English."</i>
		J	<i>"Yes. Forced to answer the questions in English while playing CHALLENGE."</i>
		B	<i>"Used and learned a lot of English words."</i>
		A	<i>"We discussed about the questions that we wanted to ask"</i>
		F	<i>"We discuss it (questions). We find questions and then we discuss it."</i>
		I	<i>"Discussing with friends"</i>
Logical-Mathematical Intelligence & Social Learning	Problem Solving Techniques, Strategizing and Social Learning	B	<i>"Firstly we try to think of a question then we change most of the questions so that it becomes tricky."</i>
		C	<i>"...search the internet and then</i>

			<i>contribute some ideas and just help each other to create their own questions and make the questions more tricky”</i>
		H	<i>“We find questions, we do our own questions, one people, one topic, like that. So we find and create our own questions”</i>
	Listening Attentively	A	<i>“...listened attentively to the teams that ask questions to us.”</i>
		B	<i>“We had to listen properly to the questions that other team said (ask)...”</i>
		E	<i>“...by listening to the pupils who ask the questions, clearly”</i>
Interpersonal Intelligence & Social Learning Theory	Team Work and Independent Problem Solving Among Peers	B, E, G & J	<i>“...asking questions...”</i>
		C & E	<i>“...making questions...”</i>
		A	<i>“...discussed about the questions ...”</i>
		F	<i>“...discuss it (questions).”</i>
		I	<i>“Discussing with friends.”</i>
		J	<i>“We worked together in the team. It made us closer when we strategised to win the game”</i>
		D	<i>“...when making questions, we find some words quite challenging so we look through the dictionary together”</i>
Intrapersonal intelligence	Responsible For Own Learning/ Active Learning	G	<i>“...we have to focus in every question. They gave us 10 seconds so we have to really think fast.”</i>
		A	<i>“need to listen attentively to the teams that ask questions to us.”</i>
		C	<i>“requires team work and some thinking skills...so it (CHALLENGE) improves your thinking skills.”</i>
		B	<i>“It’s not about competing with others but also about increasing our IQ (knowledge).”</i>
		H	<i>“...while we are doing our question, we also gain knowledge.”</i>
	Values and Beliefs (as a learner)	E	<i>“...by being patience and giving other people a chance to go and play.”</i>
Bodily-Kinesthetic	Movement	B	<i>“I enjoyed moving on the mat and I felt happy”</i>

		I	<i>"...feel alert as I move"</i>
		J	<i>"...balance and body stability made me active"</i>
Visual-Spatial Intelligence	Various Parts of the Game	A,B,C,D,E, F,G,H,I,J	<i>"pictures, landmarks, colours, movement, dice"</i>

The interview responses in Table 5 show pupils' perception of their own learning through the activation of their multiple intelligences as well as peer learning.

Among the interview questions asked were "Do you think it is easier or better to play CHALLENGE as an individual or in a team? Did you learn through teamwork and strategy while you were playing CHALLENGE? How?" These questions were based on the logical-mathematical and interpersonal intelligences and the Social Learning Theory. Most of the respondents said that they learnt to cooperate as they got together in building questions to challenge their opponents. Most of the pupils agreed that CHALLENGE encouraged them to work with peers to cooperate, discuss and strategise to play and win.

The pupils were also motivated to use and learn English. They said in their interviews that they used and learnt English while discussing with team members and also asking and answering questions as part of the playing. Peer learning was prominent in this less stressful and play environment. The weaker pupils also went through the Zone of Proximal Development, discovering and learning what they did not know earlier, aided by their better peers as reported by Student B *"...because other teams also know other words and we can learn from them."*

The verbal-linguistic intelligence in pupils was also triggered while playing CHALLENGE as pupils were quoted saying that they discussed the questions with their peers (Student A, F and I), learnt new words from other teams (Student B) and used proper English while playing the game (Student C). The players also enjoyed the kinesthetic part of CHALLENGE which contributed to their learning. Respondent B responded that he enjoyed moving on the board and felt happy.

In order to find out more about the visual-spatial intelligence, pupils were asked "Which part of the game mat, for example, the pictures, landmarks, colours, movement and the dice helped you in learning English?" Responses were varied but many indicated that the colours, dice and movement contributed to their learning. Different aspects of the pupils' visual-spatial intelligences were activated during the game. Pupils were excited with the colourful life-sized board which had pictures, landmarks, colours, movement and a huge dice.

When the pupils were asked whether they could learn without their teacher while playing CHALLENGE and whether the absence of the teacher limited their learning, most of them answered that the teacher's absence did not affect their learning. They were found to be more focused and attentive as reported by Student G "...we have to focus in every question. They gave us 10 seconds so we have to really think fast" and Student A who explained, "need to listen attentively to the teams that ask questions to us." Pupils' intrapersonal intelligence was triggered as they realised their own individual role in playing and winning CHALLENGE. Student E's values and beliefs in learning were observed through his or her response "...by being patience and giving other people a chance to go and play." This response also falls under the intrapersonal intelligence as the exhibition of learners' values and beliefs in learning is also a trait of this intelligence. This also goes to show that CHALLENGE is student centered and contributes to learner autonomy through peer learning.

## Conclusion

The paper has presented the responses from the players of CHALLENGE and their teachers. Generally, the positive responses from them show that the board game was well received by these stakeholders. Most importantly, from a research perspective, this study on CHALLENGE shows the integration of play in learning especially in relation to communicating in English by primary school pupils. There are very few classroom games invented in Malaysia which integrate games in the learning of English. It is important to amalgamate fun in the learning of English especially in the Malaysian primary school setting to garner pupils' interest and eagerness to learn English.

Based on this purpose, CHALLENGE was invented to encourage pupils to speak in English. The particular skill is emphasized as it is considered the most important skill and the negligence of teachers in the aspect of speaking in the classroom will impede the development of other skills (Zhang & Kortner, 1995).

CHALLENGE also cultivates student-centred learning which is seldom practiced in the Malaysian English Language classroom as pointed out in a study by Mustafa, Aman, Seong, and Noor (2011) that the teaching and learning of English in Malaysia is still heavily teacher-centered.

To realise the full potentials of CHALLENGE, more research should be conducted to investigate the effectiveness of this game in various aspects of the teaching and learning of English. A very interesting focus would be on the quality of talk by the pupils. The sociolinguists may ask how much of the mother tongue is employed and what their discussions are about.

Indeed the development and consolidation of a game for educational purposes is an ongoing process requiring much research and follow-up work. However, the greater message we wish to share is that an educational language game can be home-grown and tailored to meet pupils' specific needs.

## References

- Akbari, R., & Hosseini, K. (2008). Multiple intelligences and language learning strategies: investigating possible relations. *System*, 36,141-155.
- Arslan, H. O., Moseley, C., & Cigdemoglu, C. (2011). Taking attention on environmental issues by an attractive educational game: Enviropoly. *Procedia - Social and Behavioral Sciences*, 28, 801-806.
- Azriel, J.A., Erthal, M.J., & Starr, E. (2005). Answers, questions, and deceptions: What is the role of games in business education? *Journal of Education for Business*, 81(1), 9-13.
- Baum, S., Viens, J., & Slatin, B. (2005). *Multiple Intelligences in the elementary Classroom: A teacher's toolkit*. New York: Teachers College Press.
- Beylefeld, A. A., & Struwig, M.C. (2007). A gaming approach to learning medical Microbiology: Students' experiences of flow. *Medical Teacher*, 29, 933-940.
- Campbell, L., Campbell, B., & Dickinson, D. (1996). *Teaching & Learning through Multiple Intelligences*. Boston: Allyn & Bacon.
- Chew, P. G.-L. (2009). Globalization, Multiple Intelligences, and ELT in Singapore. *Malaysian Journal of ELT Research*, 5, 27-55.
- Delgoshaei, Y., & Delavari, N. (2012). Applying multiple-intelligence approach to education and analyzing its impact on cognitive development of pre-school children. *Procedia - Social and Behavioral Sciences*, 32, 361-366.
- Elkind, D. (2007). Preschool academics: Learning what comes naturally. *Exchange-Exchange Press*, 178, 6.

- Eng, L.L., & Mustapha G. (2010). Enhancing writing ability through multiple intelligences strategies. *Pertanika, a Journal of Sociology, Science & Humanities*, 18, 53-63.
- Gardner, H. (2000). A case against spiritual intelligence. *International Journal for the Psychology of Religion*, 10(1), 27-34.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191.
- Kelly, D., & Tangney, B. (2006). Adapting to intelligence profile in an adaptive educational system. *Interacting with Computers*, 18, 385–409.
- Kutnick, P., & Manson. I. (2000). Enabling children to learn in groups. In D. Whitebread (Ed.), *The Psychology of Teaching and Learning in the Primary School* (pp.78-95). London: RoutledgeFalmer.
- Lazear, D. (2004). *Higher- Order Thinking: The Multiple Intelligence Way*. Chicago: Zephyr Press.
- Lee, H. L. J. (2012). SMARTies: Using a board game in the English classroom for edutainment and assessment. *Malaysian Journal of ELT Research*, 8(1), 1-35.
- Macedonia, M. (2005). Games and foreign language teaching. *Support for Learning*, 20(3), 135-140.
- McLeod, S. A. (2007). *Vygotsky - Simply Psychology*. Retrieved July 17<sup>th</sup>, 2012 from <http://www.simplypsychology.org/vygotsky.html>
- Mokhtar, I. A., Majid, S., & Foo, S. (2008). Teaching information literacy through learning styles The application of Gardner's multiple intelligences. *Journal of Librarianship and Information Science*, 40(2), 93-109.
- Morrison, G. S. (1988). *Early childhood education today*. Merrill Publishing Company Columbus, Ohio.
- Mustaffa, R., Aman, I., Seong, T. K., & Noor, N. M. (2011). Pedagogical practices of English language lessons in Malaysian primary schools: a discourse analysis. *Journal of Language Teaching and Research*, 2(3), 626-639.

- Razmjoo, S., Sahragard, R., & Sadri, M. (2009). On the relationship between Multiple Intelligences, vocabulary learning knowledge and vocabulary learning strategies among the Iranian EFL learners. *The Iranian EFL Journal Quarterly*, 3, 82-110.
- Reese, C., & Wells, T. (2007). Teaching academic discussion skills with a card game. *Simulation & Gaming*, 38(4), 546-555.
- Riddle, E. M. (n.d.). Lev Vygotsky's Social Development Theory. Retrieved 29 January 2012, from <http://funwithfcs.uvjvs.wikispaces.net/file/view/LevVygotsky.pdf>
- Rizi, C. E., Yarmohamadiyan, M. H., & Gholami, A. (2011). The effect group plays on the development of the creativity of six-year children. *Procedia - Social and Behavioral Sciences*, 15(0), 2137-2141.
- Runcan, P. L., Petracovschi, S., & Borca, C. (2012). The importance of play in the parent-child interaction. *Procedia - Social and Behavioral Sciences*, 46, 795-799.
- Savas, P. (2012). Pre-service English as a foreign language teachers' perceptions of the relationship between multiple intelligences and foreign language learning. *Learning and Individual Differences*, 22(6), 850-855.
- Schneider, P., & Watkins, R. V. (1996). Applying Vygotskian Developmental Theory to language intervention. *Language, Speech, and Hearing Services in Schools*, 27, 157-170.
- Stancuna, L. A., & Craciun, A. I. (2011). A multiple intelligences approach: intuitive English learning – a case study for k-1 students. *Procedia - Social and Behavioral Sciences*, 11, 72-76.
- Vincent, A., Ross, D., & Williams, A. (2002): Using the multiple intelligences theory in International Business. *Journal of Teaching in International Business*, 14(1), 45-63.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher mental process*. Cambridge, MA: Harvard University Press.
- Zhang, H.-A., & Kortner, N. (1995). Oral language development across the curriculum, K-12. *ERIC Digest*.