

Evaluating the students' level of cognitive engagement to achieve English language curriculum objectives at International Islamic school, Gombak

ABSTRACT

This study evaluates the level of cognitive engagement in English class among secondary school students of International Islamic School in Gombak, Malaysia. Specifically, the objective of this research is to appraise the students' commitments in English class by observing their level of cognitive engagement, which can be deep or shallow; and this is done considering their gender, age and grades. The school has five grades (7-11) and the research was conducted in January 2014. It involves 191 participants (male and female) by using purposive sampling, ages range between 13 to 18 years. Data were obtained through questionnaire, which contains a 5-point Likerts scale. However, descriptive statistics was used to describe the level of cognitive engagement employed by the students in English language class. Thus, the overall results show that deep engagement is more associated with male students while shallow engagement is associated with their female counterparts. In terms of age, the result reveals those students of the ages 13, 14, 15, and 18, display deep engagement than their colleagues aged 12, 16 and 17. Similarly, concerning grade, students in grade 9 and 10, display deep engagement; whereas those in grade 7, 8, and 11 display shallow engagement in English language class. Therefore, it is recommended that, English teachers should employ all possible efforts in teaching and organizing activities that would enhance females' attitudes towards deep engagement.

Keywords: Engagement; shallow engagement; deep engagement; English Language

1.1 INTRODUCTION

Apparently, the process of learning and its outcomes depend on number of important factors and considerations. These factors determine how individual, at least within the formal educational structure, learns new experiences and dispense much or less engagement in given classroom activities. Similarly, every classroom instruction aims at arousing students' interest and provides all possible ways and effective techniques to engage students cognitively, affectively and behaviorally. Studies indicated that disengaged learners could easily disturb the classroom, fail to do homework and be absent from school. Although, attendance is sometimes easy to control; but engagement is very tough to regulate. In such situation, students could become uninvolved and bored throughout the whole day; they may likely fail to come to school [1]. Engagement in learning process has been considered as a crucial component that facilitates learning; it is also regarded as prerequisite part of learning which influences both learning process and students' academic performance [2]. Some psychologist in an attempt to elucidate the importance of engagement in teaching and learning, defined the term as a psychological endeavor that entails learner's attention, interest, investment and effort display during classroom activities. This definition however, encompasses all three aspects of students' engagement (cognitive, behavioral and affective). Cognitive engagement specifically, expounds the extent to which a student postulates the importance of school in relation to future ambition. This can be epitomized through students' interest in learning, self-regulation of performance and goal setting [3]. In addition, educationists found it well fascinating to investigate the motives or factors that make

48 students to exert efforts cognitively while undertaking learning activity. However, some
49 educationists demarcate that students usually operate within two types of cognitive engagement
50 namely, deep and shallow engagement. The former refers to cognitive expansion on the learning
51 material. It includes linking up new knowledge with the existing information, which leads to
52 generating a compound knowledge structure. While the latter associates with the actual
53 memorization of the new material to be learned or depending solely on reading material of a
54 given subject without consulting other related documents [4]. **Essentially**, numerous research
55 findings asserted that learners, who tend to be deeply cognitively engaged, emerge to be
56 successful. In addition, they exhibit every chance to graduate from school and demonstrate skills
57 of mastery in any given activity [5].

58

59 Scholars assert that studies on student engagement could provide promising solution and
60 explanation to schools' psychologists in dealing with students with different educational problems,
61 emotional and behavioral difficulties that may eventually result to students' school dropout [6].
62 Primarily, student engagement was focused on learners at middle and high school setting, where
63 usually disengagement becomes an issue [7]. Hence, this paper aims to evaluate the level of
64 cognitive engagement in English language among secondary school students of International
65 Islamic school Gombak, Malaysia. Significantly, both policy and practice could be enhanced to
66 minimize the possibility of cognitive disengagement in the school. This is especially essential in a
67 situation whereby students are required to attend schools but fail to be motivated in becoming
68 cognitively engaged.

69

70 **1.2 STATEMENT OF THE PROBLEM**

71 Many educationists have considered cognitive engagement as fundamental factor that leads to
72 students' success in school. Hence, some researchers have studied the concept of cognitive
73 engagement in relation to learning [8], motivational beliefs [9] and self-efficacy [10]. Majority of
74 such studies reveal one major thing that gives way to this research. Most of the participants used
75 in the previous studies on cognitive engagement were students coming from the same
76 background. Therefore, this study aims at bridging this gap by using international secondary
77 school students drawn from different backgrounds to appraise their level of cognitive engagement

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79 **1.3 RESEARCH OBJECTIVES**

- 80 1. To find out the types cognitive engagement displayed by secondary school students of
81 International Islamic school Gombak, in English language class.
- 82 2. To appraise the levels of cognitive engagement among secondary school students of
83 International Islamic school Gombak, in English language class across age, gender and
84 grade level.

85

86 **1.4 RESEARCH QUESTION**

- 87 1. What are the types of cognitive engagement displayed by secondary school students of
88 International Islamic school Gombak, in English language class?
- 89 2. What are the levels of cognitive engagement among secondary school students of
90 International Islamic school Gombak, in English language class across age, gender and
91 grade level?

92

93 **2.1 LITERATURE REVIEW**

94 Research works on student's engagement evolved in 1980's, and were all geared towards to
95 improve students' positive behaviors, achievement, and sense of belonging. Engagement is
96 considered as a core element in academic learning, and it is recognized by psychologists that

97 learners master the learning experience only if they pay attention to the learning material [11].
98 Early researchers such as Dewey [12] regarded students' interest in learning as engagement.
99 Harris [13] states that student engagement emerged "as an academic concept during the 1970's
100 and 1980's with many early constructs emphasizing time-on-task and participation". She
101 emphasizes that research on student engagement emerges in an effort to tackle problems with
102 disengaged students who were perceived to be underachievers. Williams [14] substantiates
103 Harris's theory by summarizing his findings that "most of the researches on engagement have
104 been concerned with their relationship with academic achievement; and others concern with
105 whether or not students are likely to complete secondary school". Eventually, student
106 engagement became a strategy or means for controlling classroom behaviors [15].
107

108 **2.2 CONCEPT AND APPLICATION OF COGNITIVE ENGAGEMENT**

109 Previous studies on cognitive engagement indicate two argumentative issues on which, yet to
110 some extent, contemporary scholars do not reach a distinctive agreement. First, on the definition
111 of cognitive engagement and the second has to do with the reasons for the emergence of
112 research on engagement. This shows a noticeable modification and variance in both purpose and
113 definition of students' engagement over decades because of rapid development in the body of
114 knowledge. Most importantly is the mounting move from appreciating students' engagement as
115 an instrument for enhancing learner's attendance and achievement to employing student
116 engagement as a means of encouraging and improving the learners' capabilities to learn.
117 Previous researches indicated that instructional contexts which include active learning strategies
118 and student oriented approach have become important factors to student engagement. Training
119 students to plan, organize and synthesize information in an instructional setting could lead to
120 cognitive engagement and yield a positive impact on their performance [16].
121

122 Cognitive engagement is also defined as a psychological process that comprises student's
123 interest, attention, effort and investment [17]. Equally, Shukor and Tasir [18], defined the term as
124 "the process, which entails incorporation and application of students' motivations and strategies in
125 the sequence of their learning". Additionally, Furlong and Christenson [19], defined cognitive
126 engagement as "the degree to which students presume the importance of school in relation to
127 future ambition, which can be understood, through student's interest in learning, goal setting and
128 self-regulation of performance". Interestingly, educational researchers found it very fascinating to
129 fathom the motives as well as reasons why students approach learning differently. Researchers
130 frequently strive to investigate the antecedents to students' approaches to learning, which are
131 significant in forecasting both approaches to learning and outcome of learning in an educational
132 setting [20].
133

134 However, the above inconsistency on the definitions and the reasons for the emergence of
135 research on engagement show a noticeable modification and variance in both purpose and
136 definition of students' engagement. Presently, there is an agreement that student's engagement
137 is quite an essential concept and multifaceted in nature, which comprises student's feelings,
138 behaviors and thoughts [21]. Many researchers concentrate on effective, behavioral and cognitive
139 aspect of engagement. However, the focal point of this study is cognitive engagement. It is
140 paramount to know that, cognitive engagement is an outcome of motivation in a learning process
141 [22]. Therefore, cognitive engagement in relation to academic work has been defined as
142 "psychological exertion expended by learners in an attempt to understand and master learning
143 skills, which is provided by academic environment" [23].
144

145 **2.3 FACTORS AFFECTING STUDENTS' COGNITIVE ENGAGEMENT**

146 In the views of Helme and Clarke, [24] cognitive engagement involves assimilation and use of
147 both learners' motivations and strategies in the process of their learning. Fundamentally, they
148 defined an engaged learner as motivated learner. In addition, they paid attention to the type of
149 motivations and learning strategies that result to cognitive engagement so that learning
150 environment can be manipulated in order to enhance students' cognitive engagement. They
151 conclude that the indicators of cognitive engagement comprise students' participation in a class;
152 which includes asking questions, synthesizing information and making extra effort to obtain
153 information on learning tasks. Indeed, the ability of the instructor to understand appropriate ways
154 to structure the information to the learner (the client), may stimulate students' motivation to
155 comprehend information [25]. Most importantly, Pearl and Diane [26] developed a model of four
156 stages related to interest development that affects both learning and cognitive engagement.
157 Apparently, each phase is described with different value, knowledge and effect.

158
159 The first stage for stimulating students' cognitive engagement comprises learners' interest
160 development, which includes creating opportunities for students to gain positive feelings and firm
161 attention in a classroom. While the second stage of cognitive engagement development
162 maintains positive feelings while also entails sustained knowledge and value. Indicators of
163 second stage of cognitive engagement are regarded as learners' repeated knowledge and
164 engagement. Similarly, sustained interest which leads to cognitive engagement can be achieved
165 through either the difficulty or opportunity exhibited by the learning task or by the encouragement
166 from others. It is believed that the capacity of developing cognitive engagement exists in the
167 individual; albeit the nature of the content and environment guide the students' cognitive
168 engagement as well as affect its development [27].

169
170 The initial interest in learning process can be prompted by individual relevance, whereas
171 continued interest might be maintained and achieved by providing room for personal involvement
172 and meaningful tasks that include individual tutorials and project-based-learning. Nevertheless,
173 individual interest has to be supported in order to actualize cognitive engagement [28]. Indeed,
174 Marks [29] stated that an individual who is well developed in terms of their interest, managed to
175 be affectively and psychologically engaged. He added that, learners that were encouraged to
176 perceive the relevance of the learning task to their lives, tended to have much value on the
177 activity, increased their interest and accelerated their classroom performance, especially for the
178 learners who thought they were not up to the task. Hence, learners' perceptions of task value and
179 meaningfulness of the activity serve as important factors in creating and promoting students'
180 cognitive engagement.

181
182 Newmann Wehlage and Lambaorn [30] found that course value is intrinsic and it can be observed
183 at the beginning of learning. Previous studies confirmed that learners attach value to a course
184 that employs various methods in studying pertinent curricula [31]. However, learners' perception
185 of task or course value varies from engagement. A student could find a course valuable but on
186 the other hand partially engaged regarding its content. Course value, however, leads to
187 engagement and both lead to deep learning [32].

188 189 **2.4 LEVELS OF COGNITIVE ENGAGEMENT AND THEIR IMPLICATIONS ON STUDENT'S** 190 **ACHIEVEMENT**

191 The idea of deep and shallow engagement was first introduced and elucidated by Marton and
192 Saljo [33]. The former refers to the display of high thinking attitude that include evaluation,
193 synthesis and individual engagement to the learning task. It goes beyond learning purposely to
194 pass a course [34]. The latter relies more on rote learning with the aim to pass a given course

195 without going beyond the requirement. Learners with shallow engagement always make little
196 effort and less contribution to a learning process and their main concern is to avoid failure [35].

197

198 The difference between learners with shallow engagement is that they understand the learning
199 task clearly, but unable to realize relationships between concepts which learners with deep
200 engagement do [36]. Deep engagement learners usually apply what they have learned in various
201 situations and that help them to create a profound understanding and knowledge. Motivation is
202 the major factor that influences the students' level of cognitive engagement [37]. Likewise,
203 motivation has three factors that are consistently guiding students' level of cognitive engagement.
204 These include self-efficacy, achievement goals and perceived course value [38].

205 It is essential to find out the extent to which students become cognitively engaged in learning
206 process because that will help in knowledge building [39]. This process could be either online
207 learning process or traditional system of learning, which is also known as face-to-face learning
208 encounter. Regarding online discussion, most studies have viewed some students' online
209 discussion as shallow engagement, which encompassed only information-sharing statement.
210 Consequently, there was an absence of higher order of thinking such as critical analysis and
211 creation of new knowledge among themselves [40]. Likewise, Zhu [41] claimed that to achieve
212 higher level of cognitive engagement/deep engagement, there must be an appropriate setting up
213 of learning activities as well as enhancement throughout the learning process. In fact, the level of
214 students' engagement affects leaning and learners' motivation. In some cases, students can be
215 highly motivated, but found to be shallowly engaged [42].

216

217 **2.5 EMPIRICAL STUDIES ON STUDENTS' COGNITIVE ENGAGEMENT**

218 A number of researchers have carried out various studies related to cognitive engagement. Most
219 of the studies conducted in the area of cognitive engagement were carried out with high school
220 students. Among those studies are some that aimed to examine the relationship between
221 cognitive engagement and students' achievement. Others focused to find out how students
222 improve in the three dimensions of engagement (affective, behavioral and cognitive).
223 Remarkably, the findings of Archambault Janosz Morizot and Pagani [43], in a research
224 conducted to figure out the interconnection between behavioral, emotional and cognitive school
225 engagement among high school students was quite magnificent. It revealed that behavioral
226 engagement (students' adherence to school and classroom rules) and emotional engagement
227 (learners' attitudes, feelings, and perceptions regarding school) are related. Likewise, each
228 serves as basis and an outcome of other. Additionally, the behavioral engagement influenced
229 cognitive engagement. It was also affirmed that the extent to which learners become committed,
230 involves an engagement in both social and academic activities in school. Thus, it provides an
231 important ground in promoting competence, preventing academic failure and inspires students to
232 achieve good performance. More so, some studies related to classroom learning project,
233 recommended that the style of instruction and the quality peer relations both have an immense
234 impact on the student cognition and meta-cognition [44].

235 Lorch, Milich, Astrin and Berthianume [45] conducted a research that examines children's
236 cognitive engagement in story comprehension, where a comparison was made with typically
237 developing children and children with attention deficit/hyperactivity disorder (ADHD) right from
238 their preschool to elementary school. The main aim was to enlarge the inquiry on how far
239 children's cognitive processing changes in relation to television story content, either by increase,
240 or decrease when the central or incidental sequence of story decreases or increases. The
241 findings of the study supported the hypothesis that a reflection of the causal organization of the
242 televised story helps the typically developing children to create representation while watching a
243 program; though this is lacking in children of four to nine years that have ADHD disease.

244

245 In addition, a research was conducted by Archambault, Janosz, Morizot and Pagani [46], in
 246 Canada with 69 high schools, and within three sequential high school years. The aim was to
 247 investigate how students improve in the three dimensions of engagement (effective, behavioral
 248 and cognitive) in high school, and how these are associated to dropout. The sample was 13,330
 249 children, and questionnaires were distributed to the participants. The findings of the study
 250 indicated that majority of adolescents became very engaged in high school, whereas one-third
 251 depicted changes, particularly decreased in willingness to learn, interest in school and in rule
 252 compliance. Moreover, those students observed with low engagement from the short run,
 253 presented maximum risks of later dropout.

254
 255 Based on the discussed research findings on students' cognitive engagement, it can be
 256 presumed that there are many things that influence cognitive engagement, among which include
 257 motivational factor and instructional context. Thus, this provides an insight to investigate the level
 258 of students' cognitive engagement at International Islamic school Gombak, Malaysia and as well,
 259 to find out whether lack of motivation, interest and absence of effective instructional materials are
 260 part of the causal agents of students' shallow engagement.

261 3.1 METHODS

262 This research intends to examine the students' level of cognitive engagement in English class at
 263 Gombak. Therefore, it used survey method, which has been considered as the most frequently
 264 used method in quantitative research. More so, the survey method allows research to collect
 265 quantitative data that can be analyzed quantitatively using either descriptive or inferential
 266 statistics (Saunders, Lewis and Thornhill [47]). In addition, some previous related studies on
 267 cognitive engagement used quantitative techniques to evaluate the students' level of cognitive
 268 engagement.

269 3.2 PARTICIPANTS OF THE STUDY

270 The participants of this study comprise secondary school students of International Islamic school
 271 Gombak, Malaysia from grade 7-11. These students are from diverse backgrounds with different
 272 norms and values. The school has a total number of 375 secondary school students composing
 273 five (5) grades. At each grade, there are three classes with 25 students respectively (*Al-Ghazali*,
 274 *Al-Farabi* and *Ibn-Sina*). Therefore, each grade consists of 75 students. Subsequently, Table 1
 275 indicates students' enrolment register.

276
 277 **Table 1. Registered students' enrolment**

278 Description of secondary level students' population at International Islamic school			
279 Gombak (IIS), 2015			
	Class 1	Class 2	Class 3
	(Al-Ghazali)	(Al-Farabi)	(Ibn-Sina)
Grade 7	25	25	25
Grade 8	25	25	25
Grade 9	25	25	25
Grade 10	25	25	25
Grade 11	25	25	25
Total	125	125	125

280 *Source: School enrolment register, 2015*

281 3.3 SAMPLE SIZE AND SAMPLE TECHNIQUE

282 Ideally, any research sample size is generated from a population that represents the entire group
 283 of the study. In order to ensure representation of the target population, which is quite remarkable
 284 in a survey research, there is need for a researcher to employ all possible means to overcome

285 non-response bias. Thus, in the present study the researcher used Krejcie and Morgan [48]
 286 sampling size determination for which out of total population of 375 students, 191 were selected
 287 as the study sample size with 5% margin error that shown 95% confidence level. In addition,
 288 purposive sampling technique was used to obtain the required total number.

289 **3.4 INSTRUMENTATION**

290 Survey method enables a researcher to have an easy access to numerical facts, percentages
 291 and frequency that serve as ground to elucidate participants' demographic features. For the
 292 purpose of this research a questionnaire, which measures students' level of cognitive
 293 engagement (deep and shallow) was adapted in the study. Biggs, Kember, and Leung [49],
 294 develop the scale with 13 items. Thus, for all the questions except those measuring level of
 295 processing, students responded to a Likert scale ranging from low of 1 (strongly disagree) to high
 296 of 5 (strongly agree). While questions measuring level of cognitive engagement, students
 297 responded to a Likert scale ranging from low of 1 (never) to high of 5 (always). Specifically, items
 298 1-9 measure deep cognitive engagement and items 10-13 measure shallow cognitive
 299 engagement. Table 2 shows the 13 items that measure students' level of cognitive engagement.

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Table 2. List of cognitive engagement items

Category	Item Statement
Cognitive Engagement	1. I find that at times studying in English class gives me a deep feeling of personal satisfaction.
	2. I feel that almost any topic in English class can be highly interesting once I get into it.
	3. I find new topics in English class interesting.
	4. I often spend extra time trying to obtain more information about many topics related to English class.
	5. I find that reading my English books at home can at times be as exciting as a good novel or movie.
	6. I test myself on important topics in English class until I understand them completely.
	7. I work hard at my studies because I find the material used in English class interesting.
	8. I spend a lot of my free time finding out more about interesting topics which have been discussed in the English class.
	9. I come to English class with questions in mind that I want their answers.

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10. My aim is to pass English subject while doing as little work as possible.
 11. I do not find English subject very interesting, so I keep my work to the minimum.
 12. I actually restrict my English study to what is specifically set, as I think it is unnecessary to do any extra studies.
 13. I make a point of looking at most of the suggested readings that go with the teachers.
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311

312 **3.4 VALIDITY OF THE INSTRUMENT**

313 Validity of a research normally targets to find the length and breadth of what it intends to
314 measure. There are three classes of validity of an instrument, which include construct validity,
315 content validity and face validity. The last one, which has been approved by the experts,
316 encompasses three PhD students and one specialized lecturer in research methodology.
317 Moreover, the experts affirmed that the items are strong and meaningful to measure the level of
318 students' cognitive engagement (deep or shallow) in English classroom.

319 **3.5 RELIABILITY OF THE INSTRUMENT**

320 In order to obtain reliability for the instrument and to ensure items' consistency, the researcher
321 went for pilot testing of the questionnaire. During the process, the he administered 20
322 questionnaires to 20 students that were randomly selected from 7-11. From the analyzed result, it
323 was obtained that all the variables satisfactorily obtained both mean values and internal
324 consistency reliability of Coefficient Alpha=0.667.

325 **3.6 DATA COLLECTION PROCEDURE**

326 Initially, the institute of education of International Islamic University Malaysia (IIUM), through
327 Head of International Islamic School (IIS), offered a letter of approval to the researcher. With the
328 **principal's consent**, teachers from the IIS, where the research was carried out, voluntarily
329 assisted the researcher in dispersing questionnaires to the participating students who were 191 in
330 number. Before they began filling the questionnaire, the researcher read out all the instructions to
331 the students so that they would properly understand the intended questions and to avoid any
332 ambiguity. Furthermore, the students were made to understand that they could still ask for more
333 clarification whenever there was a need to do so. This was to make sure that the information
334 gathered would yield a good result. Though no duration was given to the students within which
335 they must complete the exercise, but it was observed that they finished within 30 to 40 minutes.

336 **4.1 DATA ANALYSIS AND PRESENTATION OF DEMOGRAPHIC RESULTS**

337 This research employed descriptive statistics to describe the students' level of cognitive
338 engagement at International Islamic School Gombak, in English class. The original questionnaire
339 adopted entails 5 Likert scale (never, rarely, sometimes, often and always). However, during the
340 analysis, the researcher collapsed the scales into three (never, sometimes and always). This
341 was done in order to ease the analysis process and to produce substantive findings. As stated
342 earlier, the original questionnaire that measures students' level of cognitive engagement consists
343 of 13 items; 9 out of 13 assess deep engagement, whereas the remaining four (4) items evaluate
344 shallow engagement. Moreover, table 3 illustrates descriptive statistics about the students'
345 demographic variables, which comprises age, grades and nationality. The result represents that
346 more female students participated in the study than the males with 60% (N=78) and 40% (N=52)
347 respectively. Regarding the participants' age, the score indicates that the minimum age group
348 was 12, whereas the maximum was 18 with a mean age of 14 and a half years (SD=1.43). Again,

349 it was recorded from the results that the respondents with age below the mean were 58 or 44.7%.
 350 Contrarily, the respondents' age above the mean age were 72 or 55.3%, which explains that
 351 majority of the respondents were above the mean age. Furthermore, out of the total number of
 352 the participants, 33% (N=42) were Malaysians and 67.7% (N=88) were international students.
 353 This however, expounds that non-Malaysians students participated in the study much more than
 354 Malaysians populace. Regarding the students' grade, the result shows that participants from
 355 grade 9 were the highest with 30.8% (N=37), followed by grade 11 students with 28.5% (N=37),
 356 then those from grade 8 25.4% (N=33) and the least were grade 10 students 15.4% (N=20).

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Table 3. Demographic information of the respondents

Demographic	Frequency	Percentage
Gender		
Male	52	40.0
Female	78	60.0
Age		
12.00	13	10.0
13.00	24	18.5
14.00	21	16.2
15.00	32	24.6
16.00	30	23.1
17.00	9	6.9
18.00	1	.8
Nationality		
Malaysian	42	32.3
Non-Malaysian	88	67.7
Grade		
8.00	33	25.4
9.00	40	30.8

10.00	20	15.4
11.00	37	28.5

359 Table 4 shows the breakdown information regarding the students' gender and age, which reveals
360 that total number of 52 male students participated in the study. This number accumulates those of
361 age 16 with the highest frequency of 15 (28.8%). Then those of 15 age with frequency of 4
362 (26.9%), whereas students aged 12 and 17 were with the lowest frequency of 3 (5.8%) each.
363 Regarding female respondents, it was recorded that they have frequency of 78 from which
364 students of 15 age have the highest frequency of 18 (23.1%), then those of 13 and 16 with
365 frequency of 15 (19.2%) each. Whereas the least was a student of 18 age with frequency of 1
366 (1.3%).

367

Table 4. Breakdown information based on gender and age

		Age							Total
Students' Age		12.00	13.00	14.00	15.00	16.00	17.00	18.00	
Male	Count	3	9	8	14	15	3	0	52
	% within Gender	5.8%	17.3%	15.4%	26.9%	28.8%	5.8%	0.0%	100.0%
female	Count	10	15	13	18	15	6	1	78
	% within Gender	12.8%	19.2%	16.7%	23.1%	19.2%	7.7%	1.3%	100.0%

Total	Count	13	24	21	32	30	9	1	130
	% within Gender	10.0%	18.5%	16.2%	24.6%	23.1%	6.9%	0.8%	100.0%

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369 Table 5 illustrates the breakdown information based on grades and gender of the students. The
 370 results depict that male students from grade 11 were the majority with frequency of 16 (30.8%);
 371 then, those of grade 10 with frequency of 10 (9.2%); and followed grade 8 with least number and
 372 frequency of 8 (15.4%). Concerning female participants, those from grade 8 are the highest with
 373 frequency of 25 (32.1%), then those of grade 9 with frequency of 22 (28.2%); and the least were
 374 the students from grade 10 with frequency of 10 (12.8%).

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Table 5. Breakdown information based on gender and grade

		Grade				Total	
		8.0	9.0	10.0	11.0		
Gender	Male	Count	8	18	10	16	52
		% within Gender	15.4%	34.6%	19.2%	30.8%	100.0%
	Female	Count	25	22	10	21	78
		% within Gender	32.1%	28.2%	12.8%	26.9%	100.0%
Total	Count	33	40	20	37	130	
	% within Gender	25.4%	30.8%	15.4%	28.5%	100.0%	

376 Table 6 shows breakdown of information on students' gender and nationality, which the results
 377 elucidate that male international students, with frequency of 31 (59.6%), were the highest
 378 participants compared with those Malaysians students with frequency of 21 (40.4%). Generally,
 379 the results conspicuously reveal that female international students were the majority in the study
 380 with 57 (73.1%).

381

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Table 6. Breakdown of information based on gender and nationality

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		Nationality		Total	
		Malaysian	Non-Malaysian		
Gender	Male	Count	21	31	52
		% within Gender	40.4%	59.6%	100.0%
	female	Count	21	57	78

	% within Gender	26.9%	73.1%	100.0%
Total	Count	42	88	130
	% within Gender	32.3%	67.7%	100.0%

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385

386 **5.1 DESCRIPTIVE ANALYSIS OF THE STUDENTS' RESPONSES**

387 Descriptive statistics compound four major things, which are frequency, percentage, means and
 388 standard deviation. Frequency and percentage are used to determine the extent of the agreement
 389 or otherwise of items' statements related to the variables been examined in a given study.
 390 Meanwhile, mean and standard deviation of each of the variables are used to draw substantive
 391 conclusions concerning the respective constructs.

392

393 **4.2 Types and Levels of cognitive engagement among the secondary school students**

394 In answering this research question, deep and shallow engagements were the two types of
 395 engagement taken into consideration in the study.

396 ***Deep Engagement***

397 The deep engagement was examined using 9 items as presented below in table 7. The frequency
 398 and percentage of each of the item statement was computed and presented. In addition, mean
 399 and SD for each item are also presented at the end of each descriptive results for every item as
 400 well as for the variable. Mean and SD for the variable were used in drawing conclusion about the
 401 variable in the study. Thus, the table below reveals that many of students have deep
 402 engagement as regard to learning of English language (Mean= 3.1 SD =.787). The results further
 403 reveal that although students have deep engagement in learning English language, but majority
 404 of them 53.8% (N=70) did not often spend extra time trying to obtain more information about
 405 many topics related to English class. Similarly, most of the students 54.7% (N=71) did not come to
 406 the English class with questions in mind which they need answer.

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Table 7. Reports students' level regarding deep engagement

SN	Item	Never	Sometimes	Always
1	I find studying in English class gives me satisfaction	53 (40.8%)	50 (38.5%)	64 (49.3%)
2	I feel that topic in English class is interesting	54 (41.6%)	39 (30.0%)	75 (57.8%)
3	I find new topics in English class interesting	36 (27.8%)	36 (27.7%)	80 (59.3%)
4	I often spend extra time trying to obtain information on many topics in to English class	70 (53.8%)	43 (33.1%)	36 (38.5%)
5	I find that reading my English	54	30	58

	books at home can be exciting	(41.5%)	(23.1%)	(77.4%)
6	I test myself on important topics in English class	52 (39.9%)	41 (31.5%)	51 (54.6%)
7	I work hard because I find the material use in English class interesting	40 (30.7%)	46 (35.4%)	70 (54.3%)
8	I spend a lot of my free time finding out interesting English topics	90 (69.2%)	31 (23.8%)	49 (37.6%)
9	I come to English class with questions in mind that I want answer	71 (54.7%)	32 (24.6%)	61 (47.0%)

Detailed information see Appendix 1

Shallow Engagement

The shallow engagement was assessed using 4 items as presented in table 8. The frequency and percentage in each of the item statement was computed and presented. In addition, mean and SD for each item are also presented at the end of each descriptive results for every item as well as for the variable. Mean and SD for the variable was used in drawing conclusion about the variable in the study. Thus, the results regarding shallow engagement indicate on average half of the students have shallow engagement ($m = 3.05$; $SD = 1.05$). The findings revealed that most of the students found English subject very interesting and they do not generally restrict their study to what is specifically set and they think it is necessary to do anything extra.

Table 8. Reports students' level regarding shallow engagement

SN	Item	Never	Sometimes	Always
1	My aim is to pass English subject.	43 (33.1%)	24 (18.5%)	63 (48.4%)
2	I do not find English subject very interesting.	60 (46.2%)	28 (21.5%)	42 (32.3%)
3	I generally restrict my study to what is specifically set.	48 (37%)	43 (33.1%)	39 (30%)
4	I make a point of looking at most of the suggested readings that go with the teachers.	34 (26.1%)	46 (35.4%)	50 (12.3%)

Deep and Shallow engagement and gender

The results for deep and shallow engagement among gender were obtained using mean and SD. In obtaining the results, mean and standard deviation for the sample and that population were compared in drawing conclusion. For example, mean and SD of male was compared to the total mean and SD. Table 9 below presents the degree of deep and shallow engagement among gender. The results reveal that male students have more deep engagement of ($m = 3.166$; $SD = .787$) than female counterparts ($m = 3.024$; $SD = .965$) having mean value below the average mean that is ($m = 3.08$; $SD = .898$). Besides, the results for shallow engagement show that female

435 students have shallow engagement ($m = 2.99$; $SD = .943$) with below the average of mean of 3.05
 436 ($SD = 1.05$). The overall findings indicate that male students have deep engagement than their
 437 female counterpart, while female students have shallow engagement above male students.

438 **Table 9. Reports level of deep and shallow engagement among gender**

439

Gender	Deep Engagement		Shallow Engagement	
	Mean	SD	Mean	SD
Male	3.1667	.787	3.1587	1.199
Female	3.024	.965	2.993	.943
Total	3.081	.898	3.05	1.05

440 ***Deep and shallow engagements and age***

441 The results for deep and shallow engagement with respect to ages of the respondents were
 442 obtained using mean and SD presented in Table 10. In obtaining the results, mean and standard
 443 deviation for the sample and that population were compared in drawing conclusion. Thus, table
 444 10 below presents the results for deep and shallow engagement among students. The results
 445 show that students aged 18 ($m = 3.88$; $SD = -$), 15 ($m = 3.27$; $SD = .801$), 14 ($m = 3.11$; $SD = 1.07$)
 446 and 13 ($m = 3.10$; $SD = 1.02$) have deeper engagement with a mean above the mean average of
 447 3.08 ($SD = .898$) than their counterparts aged 17 (3.02), 12 (3.00; $SD = 1.00$) and 16 ($m = 2.86$; SD
 448 $= .802$). On the other hand, results for shallow engagement showed that students aged 13 (m
 449 $= 2.95$; $SD = 1.16$), 15 ($m = 2.79$; $SD = .932$), 16 ($m = 3.00$; $SD = .964$) and 17 ($m = 2.88$; $SD = 1.13$)
 450 have shallow engagement with mean value below the average mean of 3.05 ($SD = 1.05$).
 451 Generally, the findings reveal one striking issue that all the age levels demonstrate similarity in
 452 terms of deep and shallow engagement. However, there is an exception with the results for
 453 students aged 13 and 15, which depict highly deep engagement with ($M = 3.10$ and 3.27 ; $SD =$
 454 1.02 and $.801$); and shallower engagement with ($M = 2.95$ and 2.79 ; $SD = 1.16$ and $.932$), which is
 455 consistent with finding in correlation (table 10).

456

457 **Table10. Reports deep and shallow engagement by age of students**

458

Age	Deep Engagement		Shallow Engagement	
	Mean	SD	Mean	SD
12	3.00	1.00	3.50	.946
13	3.10	1.02	2.95	1.16
14	3.11	1.07	3.42	1.18
15	3.27	.801	2.79	.932
16	2.86	.802	3.00	.964
17	3.02	.587	2.88	1.13

18	3.88	-	3.75	-
Total	3.08	.898	3.05	1.05

459

460 ***Deep and shallow engagements and grades***

461 The results for deep and shallow engagement with respect to grades of the respondents were
 462 obtained using mean and SD presented in Table 11. In obtaining the results, mean and standard
 463 deviation for the sample and that of population were compared in drawing conclusion. Table 11
 464 below presents results for deep and shallow engagement of students by their grade. The levels of
 465 students' deep and shallow engagements were examined across grade 8-11. The results
 466 indicated that students in grade 9 with (m =3.14; SD =.966) and those in grade 10 with (m =3.3;
 467 SD = .77) have deep engagement than their counterparts in grades 8 with (m =3.02; SD =1.09).
 468 Moreover, those in grade 11 depict (m= 3.03; SD =.89), which represents mean values below the
 469 average mean of 3.08 (SD= .898). More so, the results indicate that deep and shallow
 470 engagement with respect to the grades of the students show similarities except students in grade
 471 9. Specifically, the grade shows highly deep engagement with (M =3.14; SD =.996) than that of
 472 shallow engagement with (m =2.98; SD =1.21), describing that students exhibit deep than shallow
 473 engagement.

474

475

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477

478

Table 11. Reports deep and shallow engagement by grades

Grade	Deep Engagement		Shallow Engagement	
	Mean	SD	Mean	SD
8	3.02	1.09	3.25	1.10
9	3.14	.966	2.98	1.21
10	3.13	.77	3.08	.79
11	3.03	.89	3.05	1.05
Total	3.081	.898	3.05	1.05

479

480

5.1 DISCUSSION AND CONCLUSION

481 This study intended to assess both the types and levels of students' cognitive engagement at
 482 International Islamic school Gombak, in their English class. The findings reveal that all the age
 483 levels of the students almost showed similarity in terms of shallow and deep engagement. The
 484 findings also reveal that male students tended to adopt an approach in which they tried to
 485 understand the whole picture of English language and to comprehend ways to learn the
 486 language. Hence, the male students are identified with adopting a deep approach to learning. On
 487 the other hand, the findings demonstrated that female students tried to remember facts contained
 488 within the text that have been taught then focused on what they thought would be required to
 489 provide either during examination or during lesson in the class. Hence, they portrayed an
 490 approach that is recognized as shallow engagement indicating that they did not go deep as far as
 491 learning English language is concerned.

492 Learners could be classified as having deep or shallow engagement, but these are not attributes
493 of the individual learners. They are just levels of engagement and student can use both
494 engagements at different times, although he or she might have preference of one type of
495 engagement over the other. Learners with shallow engagement mostly try only to pass a course
496 and they are reluctant to go beyond that (by making extra effort, commitments such as reading
497 their notes books for pleasure). The fear of failure is the motivating factor for students who exhibit
498 shallow engagement. Students that are engaged in shallow learning tended to have experience
499 that is regarded as climbing struggle that is characterized by striking back against failure and
500 depression feelings. Both deep and shallow engagements correlate fairly with motivation but
501 intrinsic motivation is associated with deep engagement while extrinsic motivation is closely link
502 to shallow engagement.

503
504 However, the level of engagement in relation to students' age revealed that with exception of
505 students aged 16, all students demonstrated satisfactory level of deep engagement. This
506 indicates that they focused on the analysis of new ideas, connecting them to concepts and
507 principles that have been known already, thereby leading to the understanding and long-term
508 retention of those concepts so that the concepts and principles retained could be used to solve
509 problems during unfamiliar contexts. Deep engagement is likely to promote understanding and
510 application for concepts and principles through learning process.

511
512 On the other hand, students with exception of those aged 13 and 15 illustrated a similar
513 engagement for both deep and shallow engagements. All other students demonstrated
514 satisfactory level of shallow engagement, indicating that students accept information about
515 English and memorize it solely for two reasons. First, is to pass examination, which is mostly the
516 primary motive of many students nowadays. Second, is to gain recognition in class by giving
517 answers whenever a teacher asks during lesson. Students who are engaged in shallow
518 engagement lack long-term retention and understanding of knowledge and information about
519 English language. In terms of engagement by grades, only students of grade 9 depicted an
520 inconsistent shallow engagement.

521
522 The findings indicated that students displayed both deep and shallow engagements, which are
523 consistent with the findings of Artherton [50] that an individual may display both deep and shallow
524 cognitive engagement at a time. Both levels of engagement relate strongly with motivation.
525 Shallow engagement correlates with extrinsic motivation while deep engagement associates with
526 intrinsic motivation [51]. Moreover, it can be seen from the result that the higher the age of the
527 students, the deeper they become in terms of their cognitive engagement. Similarly, the students
528 at the lower age have showed low engagement. Therefore, students' level of cognitive
529 engagement normally increases along with the students' age. However, both deep and shallow
530 engagements have showed inverse relationship. Additionally, Helme [52] stated that students
531 tend to be affectively and psychologically engaged if they develop interests in a course. He added
532 that, students that are motivated to perceive the relevance of a learning task to their lives tend to
533 show deep cognitive engagement in a learning process.

534
535 Generally, the findings demonstrated that deep engagement have higher mean values than that
536 of shallow engagement, indicating that there is inconsistency in the result. Moreover, this is unlike
537 other ones in which both deep and shallow engagements have mean values above the averages.
538 Similarly, students in grade 9 also have mean value that is above the average (mean=3.14; .966)
539 regarding deep engagement which is slightly higher than the mean value of shallow engagement
540 (2.98; SD=1.20). Besides, students in grade 8 show different results which is higher shallow
541 engagement (m=3.25; SD=1.10) than deep engagement (3.02; SD= 1.09).

542 **6.1 RECOMMENDATION**

- 543 1. This study investigated students' levels of cognitive engagement at International Islamic
544 school Gombak, Malaysia. Thus, future studies can be conducted to explore the influence
545 of other factors such as learning environment, teachers' qualification and motivational
546 beliefs on students' academic performance.
- 547 2. To reiterate, this study used an international school situated in urban area. Therefore,
548 future researches can use both high schools students at rural and urban areas to explore
549 differences in terms of their level of cognitive engagement; and as well propose possible
550 means to maintain high level of deep engagement.
- 551 3. More so, this study used survey method to appraise students' level of cognitive
552 engagement. Hence, future studies can use both questionnaire and interview as
553 triangulation method to explain learners' level of engagement. This process could enrich
554 the research process and make it more valid for generalization.
- 555 4. This study used International school students and the research participants, future
556 research can use conventional high schools to assess students' level of cognitive
557 engagement.

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562 REFERENCES

563

- 564 [1] Ainlye M, Hidi S, Berndorff D. Interest, learning and the Psychological process that mediate
565 their relationship. *Journal of educational psychology*. 2002; 94(3): 543-561
- 566 [2] Archambault I, Janosz M, Moriszot J, Pagani L. Adolescent behavioral, affective and cognitive
567 engagement in school: Relationship to dropout. *Journal of school Health*. 2009; 79(3): 408=415
- 568 [3] Barbara AG, Christopher OW. The relations between students' motivational beliefs and
569 cognitive engagement in high school. *Journal of educational research*. 2009; 103(6): 463-480
- 570 [4] Archambault I, Janosz M, Moriszot J, Pagani L. Adolescent behavioral, affective and cognitive
571 engagement in school: Relationship to dropout. *Journal of school Health*. 2009; 79(3): 408=415
- 572 [5] Danielle SM. Measuring deep, reflective comprehension and learning strategies: challenges
573 and success. *Metacognition and learning*. 2011; 6(1): 195-203
- 574 [6] Archambault I, Janosz M, Moriszot J, Pagani L. Adolescent behavioral, affective and cognitive
575 engagement in school: Relationship to dropout. *Journal of school Health*. 2009; 79(3): 408=415
- 576 [7] Dennis C, John O. *Introduction to psychology: Gateway to mind and behavior*. USA:
577 Thompson Watson Corporation; 2007
- 578 [8] Douglas JL. Motivational factors, learning strategies and resource management as predictors
579 of course grades. *College student Journal*. 2006; 40(2):423-428
- 580 [9] Barbara AG, Christopher OW. The relations between students' motivational beliefs and
581 cognitive engagement in high school. *Journal of educational research*. 2009; 103(6): 463-480
- 582 [10] Ju YJ, Hyuck S, Sunyoung J, Kyung YL. The effects of academic self-efficacy, learning
583 strategies, and perceived instructional strategies on high and low achievers' in the middle school
584 Korean language. *KEDI Journal of educational policy*. 2012; 2(9): n/a
- 585 [11] Greene BA, Miller RB, Crowson HM, Duke BL, Akey KI. Predicting high school students'
586 cognitive engagement and achievement: Contributions of classroom perceptions and motivation.
587 *Contemporary Educational Psychology*. 2004; 29(4): 462-482
- 588 [12] Dewey J. *Interest and effort in education*. Boston, MA: Riverside Press; 1913

- 589 [13] Harris LR. A Phenomenographic Investigation of Teacher conceptions of students'
590 engagement in learning. *The Australian Educational Researcher*. 2008; 5(1): 57-79
- 591 [14] Williams JD. Student Engagement at school: A sense of Belonging and participation: Results
592 from PISA 2000. Paris: Organization for Economic co-operation and Development (OECD); 2003
- 593 [15] Williams JD, Friesen S, Milton P. What did you do in school today? Transforming classroom
594 through social, academic and intellectual engagement. Toronto: Canadian Education Association;
595 2009
- 596 [16] Finn JA, Blumenfeld PC, Paris AH. School engagement: Potential of the concept, state of the
597 evidence. *Review of Educational Research*. 2004; 59(3): 117-142
- 598 [17] Glanville JI, Wildhagen T. The measurement of school engagement: Assessing
599 dimensionality and measurement invariance across race and ethnicity. *Educational &
600 Psychological Measurement*. 2007; 67(6): 1019=1041
- 601 [18] Shukor AN, Tasir Z. Overcoming issues in cognitive engagement for learning computer
602 related subject through computer supported collaborative learning. *Journal of Edupres*. 2011;
603 26(1) 145-151
- 604 [19] Furlong JM, Christenson LS. Engaging students at school and with learning: A relevant
605 construct for all students. *Psychology in the Schools*. 2008; 45(3): 365-369
- 606 [20] Fredrick JA, Blumenfeld PC, Paris AH. School engagement: Potential of the concept, state of
607 the evidence. *Review of Educational Research*. 2004; 74(1): 59-109
- 608 [21] Arabzadeh M, ShfyNady M, Salami NM, Bayanati M. The effect of teaching self-efficacy on
609 students' cognitive engagement. *Journal of Education Research and Review*. 2012; 1(6):99-103
- 610 [22] Erdem DK, Ibrahim K. Motivational and learning strategies as predictors of high school
611 students' math achievement. *Faculty of education Journal*. 2013; 58(3):258-265
- 612 [23] Greene BA, Miller RB, Crwson HM, Duke BI, Akey KI. Predicting high school students'
613 cognitive engagement and achievement: Contributions of classroom perceptions and motivation.
614 *Contemporary Educational Psychology*. 2004; 29(4): 462-482
- 615 [24] Helme S, Clarke D. Identifying cognitive engagement in the mathematics classroom.
616 *Mathematics Education Research Journal*. 2001; 13(2): 133-153
- 617 [25] Helme S, Clarke D. Identifying cognitive engagement in the mathematics classroom.
618 *Mathematics Education Research Journal*. 2001; 13(2): 133-153
- 619 [26] Pearl N, Diane M. Moments of Joy: students' engagement and conceptual learning in the
620 design of hypermedia documents. *Journal of Research on Technology in Education*. 2003; 35(4):
621 402-417
- 622 [27] Wysocki Z. A study of cognitive Engagement in online learning. Unpublished Dissertation:
623 Washington state University, USA; 2007
- 624 [28] Christenson SL, Reschly AL, Appleton JJ, Berman S, Spangers D, Varro P. Best Practices in
625 fostering students' engagement. *Best Practices in School Psychology*. 2008; 5(1): 109-122
- 626 [29] Marks MH. Student engagement in instructional activity: Pattern in the elementary, middle
627 and high school years. *American Educational Research Journal* spring. 2000; 37(1):153-184
- 628 [30] Newmann FM, Wehlage GG, Lambaorn SD. The significance and sources of students'
629 engagement. New York NY: Teachers College Press; 1992

- 630 [31] Nunan D. *The learner-centered curriculum*. Cambridge: University Press; 1988
- 631 [32] Zhu X, Chen A, Ennis C, Sun H, Hopple C, Bonello M, Bae M, Kim S. Situational Interest,
632 cognitive Engagement, and Achievement in Physical Education. *Contemporary Educational*
633 *Psychology*. 2009; 2(34): 221-229
- 634 [33],[34] & [35] Danielle SM. Measuring deep, reflective comprehension and learning strategies:
635 challenges and success. *Metacognitive and learning*. 2011; 6(1): 195-203
- 636 [36] Entwistle NJ, Waterson S. Approaches to studying and levels of processing in university
637 students. *British Journal of Educational Psychology*. 2000; 58(3):258-265
- 638 [37]] Erdem DK, Ibrahim K. Motivational and learning strategies as predictors of high school
639 students' math achievement. *Faculty of education Journal*. 2013; 58(3):258-265
- 640 [38] Newmann FM, Wehlage GG, Lamborn SD. *The significance and sources of student*
641 *engagement*. New York, NY: Teachers college Press; 1992
- 642 [39] Zhu E. Interaction and cognitive engagement: An analysis of four asynchronous online
643 discussions. *Instructional Science*. 2006; 34(1): 451-480
- 644 [40] Ma WWA. Computer-supported collaborative learning and Higher order thinking skills: A case
645 study of Textile studies. *Interdisciplinary Journal of E-learning and learning objects*. 2009; 5(2):
646 145-167
- 647 [41] Zhu E. Interaction and cognitive engagement: An analysis of four asynchronous online
648 discussions. *Instructional Science*. 2006; 34(1): 451-480
- 649 [42] Lorch PE, Milich R, Astrin CC, Berthiaume SK. Cognitive Engagement and story
650 comprehension in typically developing children and children with ADHD from preschool through
651 elementary school. *Development Psychology*. 2006; 4(6):126-139
- 652 [43] Archambault I, Janosz M, Morizot J, Pagani L. Adolescent behavioural, affective, and
653 cognitive engagement in school: Relationship to dropout. *Journal of School Health*. 2009; 79(3):
654 408-415
- 655 [44] Baranik LE, Barron KE, Finney SJ. Examining specific versus general measures of
656 achievement goals. *Human Performance*. 2010; 2(3): 155-172
- 657 [45] Lorch PE, Milich R, Astrin CC, Berthiaume SK. Cognitive Engagement and story
658 comprehension in typically developing children and children with ADHD from preschool through
659 elementary school. *Development Psychology*. 2006; 4(6): 126-129
- 660 [46] Archambault I, Janosz M, Morizot J, Pagani L. Adolescent behavioural, affective, and
661 cognitive engagement in school: Relationship to dropout. *Journal of School Health*. 2009; 79(3):
662 408-415
- 663 [47] Saunders M, Lewis P, Thornhil A. *Research methods for business model of 4th ed*. Pearson
664 education limited: Watson
- 665 [48] Krejcie RV, Morgan DW. Determining sample size for research activities. *Educational and*
666 *Psychological measurement*. 1970; 2(3): 607-610
- 667 [49] & [50] Atherton JS. *Learning and teaching: Deep and surface learning*. Retrieved from
668 <http://www.learningandteaching.info/learning/deepsurf.htm>. 2015; 13 December
- 669 [51]] Erdem DK, Ibrahim K. Motivational and learning strategies as predictors of high school
670 students' math achievement. *Faculty of education Journal*. 2013; 58(3):258-265

671 [52] Helme S, Clarke D. Identifying cognitive engagement in the mathematics classroom.
672 Mathematics Education Research Journal. 2001; 13(2): 133-153

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فوتبريستى: ابتداءً ابتكاراً نجيباً ملقمتياً

675

APPENDIX 1: QUESTIONNAIRE

Assalamu alaikum warrahmatullahi wabarakaatuh

676

677

678

679

680 Dear Brother / Sister,

681 My name is Abubakar Sani, currently undertaking my Master research in *students learning*
682 *strategies and cognitive engagement: A case study at the International Islamic school Gombak*
683 *(IIS)*, under the supervision of Assoc. Prof. Dr. Che Noraini Hashim.

684 The main objective of my study is to investigate the relationship between students learning
685 strategies and cognitive engagement among secondary level students of International Islamic
686 school Gombak. I would be very grateful if you could help me by answering all the questions in
687 this questionnaire.

688 Certainly, the information provided will be treated with confidentiality. Your participation is very
689 important as well as valuable.

690 Thank you for your cooperation

691

692 Yours truly,

693 Abubakar Sani

694 Mobile: +60102422835

695 Email: a.sani64@yahoo.com

696

STUDENTS' LEVELS COGNITIVE ENGAGEMENT QUESTIONNAIRE

697

SECTION A: Demographic Information (Tick where appropriate)

698

699

Gender: Male <input type="radio"/>	AGE: _____	NATIONALITY
Female <input type="radio"/>		Malaysian <input checked="" type="radio"/>
		Non-Malaysian
		Specify: _____
Grade: _____	Class: _____	

700

701

702 **Section B: Levels of Cognitive Engagement**

703

704

705

Please circle the best option that represents your opinion in each of the question below.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Always

SN	Item (s)	NV	R	ST	O	AL
1	I find that at times studying in English class gives me a feeling of deep personal satisfaction	1	2	3	4	5
2	I feel that almost any topic in English class can be highly interesting once I get into it	1	2	3	4	5
3	I find new topics in English class interesting	1	2	3	4	5
4	I often spend extra time trying to obtain more information about many topics related to English class	1	2	3	4	5
5	I find that reading my English books at home can at times be as exciting as a good novel or movie	1	2	3	4	5
6	I test myself on important topics in English class until I understand them completely	1	2	3	4	5
7	I work hard at my studies because I find the material use in English class interesting	1	2	3	4	5
8	I spend a lot of my free time finding out more about interesting topics which have been discussed in the English class	1	2	3	4	5
9	I come to English class with questions in mind that I want answer	1	2	3	4	5
10	My aim is to pass English subject while doing as little work as possible	1	2	3	4	5
11	I do not find English subject very interesting, so I keep my work to the minimum	1	2	3	4	5
12	I generally restrict my study to what is specifically set, as I think it is unnecessary to do anything extra	1	2	3	4	5
13	I make a point of looking at most of the suggested readings that go with the teachers	1	2	3	4	5

706