

**Table 1 : Different values of the variables integrated in the computation of the Difficulty Index D**

Variables / Values	0	1	2	3	4	5	6	7
Game's mode		exploring	training	evaluating	creating			
Text length		3 sentences	4 sentences	5 sentences	6 sentences	7 sentences	8 sentences	9 sentences
Layout		Bullet points	1 paragraph	2 paragraphs				
Targeted vocabulary frequency		common connectors	quite common connectors	uncommon connectors				
Overall vocabulary frequency		very frequent vocabulary, close environment, school or familiar	Frequent vocabulary	Quite frequent vocabulary	up to 5 uncommon words	more than 5 uncommon words		
Genres and numbers		masculine singular	feminine singular	masc / fem / plural	masc / fem /singular / plural			
Verbal tense(s)		1 simple verbal tense	passé composé + présent	présent + futur	passé composé + imparfait	passé simple + imparfait	all composed verbal tenses	
Linear information (spatial)	not applicable	yes	no					
Linear information (temporal)	not applicable	yes	no					
Number of items		5	6	7	8	9	10	11
Useless information	0	1	2	3	4			
Linguistic disrupters	0	1	2 or more					

**Table 2 : A Learning Pathways Example on GamesHUB with computation of Difficulty Index D**

Exercise	1	2	3	4	5	6	7	8	9	10	11	12
Targeted skill (S) or knowledge (K)	S : Understand the links between 2 or more explicit information (location)	S : Understand the links between 2 or more explicit information (location)	S : Understand the links between 2 or more explicit information (location)	K : vocabulary - location connectors	S : Understand the links between 2 or more explicit information (location)	S : Understand the links between 2 or more explicit information (location)	S : Understand the links between 2 or more explicit information (location)	S : Understand the links between 2 or more explicit information (time)	S : Understand the links between 2 or more explicit information (time)	S : Understand the links between 2 or more explicit information (time)	S : Understand the links between 2 or more explicit information (location and time)	S : Understand the links between 2 or more explicit information (location)
Variable 0	Game	PIL	PIL	PIL	unplugged activity	PIL	PIL	Q&C	Q&C	Q&C	Q&C	PIL
Variable 1	Game's mode	1	2	3	x	3	3	2	2	2	3	3
Variable 2	Text length	1	1	1	x	2	2	1	2	2	2	according to instructions
Variable 3	Layout	1	1	1	x	1	2	1	2	2	2	according to instructions
Variable 4	Targeted vocabulary frequency	1	1	1	x	1	1	2	2	2	2	free
Variable 5	Overall vocabulary frequency	1	1	1	x	2	2	2	2	2	2	according to instructions
Variable 6	Genres and numbers	1	2	1	x	2	1	2	3	3	3	according to instructions
Variable 7	Verbal tense(s)	1	1	1	x	1	1	1	2	2	2	according to instructions
Variable 8	Linear information (spatial)	1	1	1	x	1	1	0	0	0	0	2
Variable 9	Linear information (temporal)	0	0	0	x	0	0	1	1	2	2	according to instructions
Variable 10	Number of items	1	1	2	x	2	3	2	2	2	2	according to instructions
Variable 11	Useless information	0	0	0	x	0	0	0	0	0	0	0
Variable 12	Linguistic disrupters	0	0	0	x	0	0	0	0	0	0	0
Difficulty Indicator D		9	11	12		15	16	14	18	19	20	22