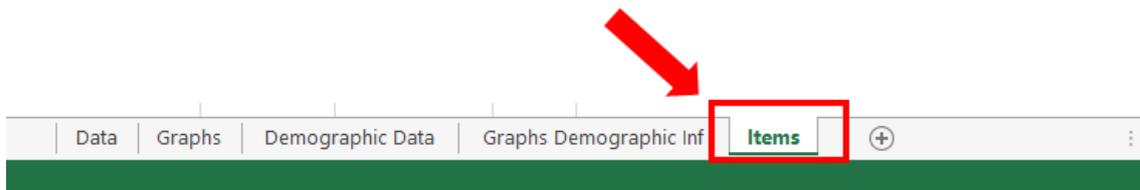


Instructions for use of MEEGA+ Data Analysis Spreadsheet

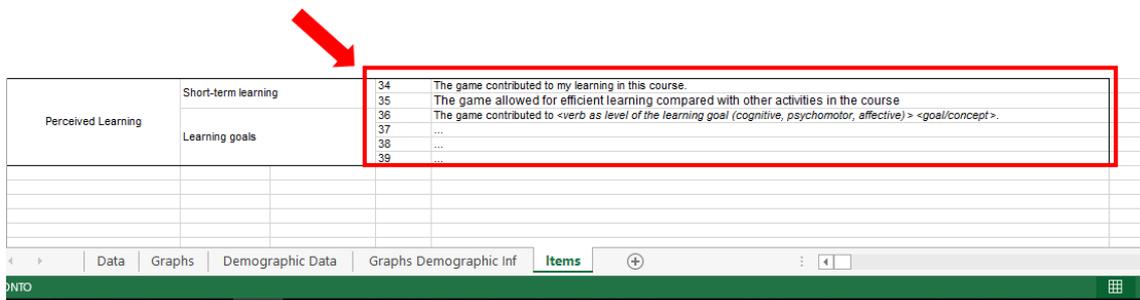
The MEEGA + data analysis worksheet uses formula and charting features available only in Microsoft Excel (desktop version). Using the spreadsheet in other software may have configuration problems.

Step 1. Insert the description of the items according to the learning goals of the evaluated game.

Select the "Items" spreadsheet.



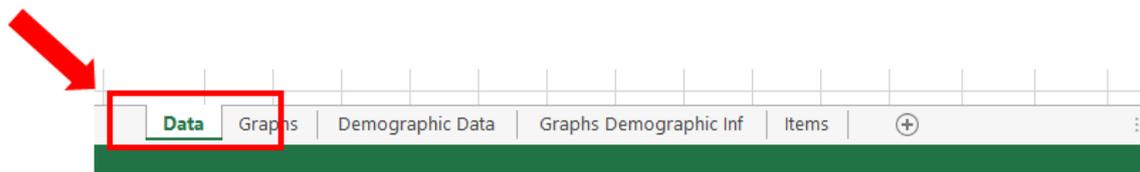
Insert from the line (33 for non-digital games and 36 for digital games) the description of the items according to the learning goals.



Step 2.

Insert the responses to the questionnaire of the items regarding Player Experience and Perceived Learning.

Select the "Data analysis" spreadsheet.



Typing should follow the following scale:

Insert -2, when the response is "strongly disagree".

Insert -1 when the response is "disagree".

Insert 0, when the response is "neither disagree nor agree."

Insert 1, when the response is "agree".

If added new columns, you must extend the formulas (average, median, frequency of responses and percentage) for the new columns.

If added new columns, in addition to already prepared (up to 36 non-digital games or 39 games to digital), should extend the formulas (average, median, frequency of responses and percentage) for the new columns.

The total number of typed questionnaires should be typed in the NUM cell. This information is mandatory, as it serves as the basis for the formulas.

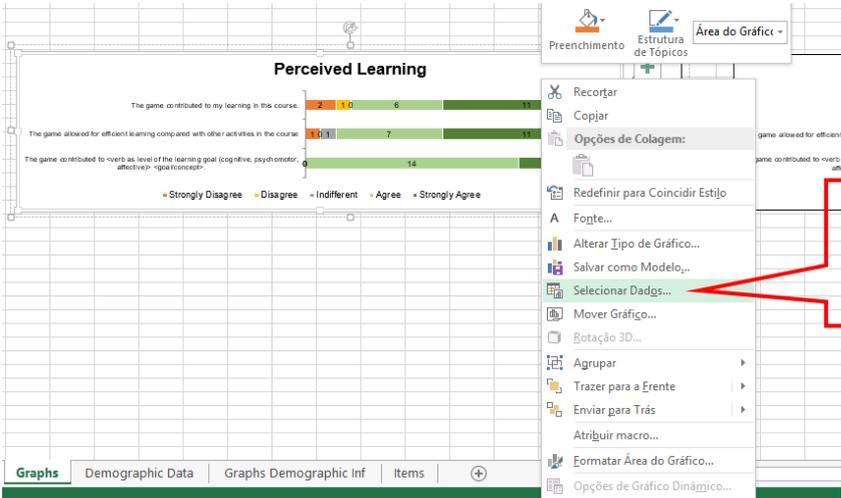
Students' resp	16	2	0	1	1	2	2	2	2	2	2	2	2	2	2
	17	1	1	1	2	1	1	1	1	0	1	1	1	1	1
	18	-1	1	1	1	2	2	2	2	2	1	2	2	2	2
	19	-1	1	1	1	0	1	1	0	0	0	1	1	1	1
	20	1	1	0	1	0	-1	0	-1	-1	0	0	0	0	0
	21														
	22														
	23														
	24														
	25														
	26														
	27														
	28														
	29														
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	31														
	32														
	33														
	34														
	35														
	36														
	37														
	38														
	39														
	40														
Average		1,54	0,90	0,93	1,43	0,80	1,10	1,35	0,25	0,20	1,35	1,35	1,1		
Median		2	1	1	1	1	1	2	0	0	2	2			
NUM		20													
		Indicate into the cell about (NUM) the total number of completed questionnaires													
Frequency of responses	2	13	4	4	10	7	6	11	3	4	11	11			
	1	3	11	11	9	7	11	5	7	4	5	5			

When you finish filling out the spreadsheet should be indicated in the cell indicated the total number of responses, in this example were 20.

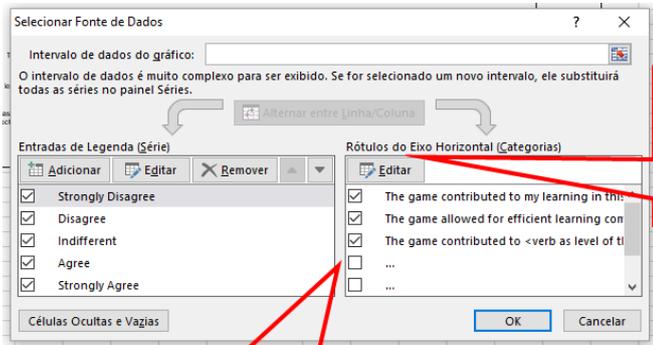
In the spreadsheet "Graphics" the graphics are automatically updated based on the data entered.

However, if you have inserted items related to learning goals in addition to the already prepared columns (36 for non-digital games or 39 games to digital). You have to edit the data set of Perceived Learning chart and select new items.

See the step by step.



The screenshot shows a spreadsheet with a chart titled "Perceived Learning". The chart displays three horizontal bars representing different learning goals. The first bar is for "The game contributed to my learning in this course" with values 2, 1, 0, 6, 7, 8. The second bar is for "The game allowed for efficient learning compared with other activities in the course" with values 1, 1, 7, 14. The third bar is for "The game contributed to <verb as level of the learning goal (cognitive, psychomotor, affective) -> <goal concept>" with a value of 14. A legend below the chart includes "Strongly Disagree", "Disagree", "Indifferent", "Agree", and "Strongly Agree". A context menu is open over the chart, with "Selecionar Dados..." highlighted. A red callout box points to this option with the text: "Select the chart and click the right button. Choose the 'Select Data' option."



The screenshot shows the "Selecionar Fonte de Dados" dialog box. It has two main sections: "Entradas de Legenda (Série)" and "Rótulos do Eixo Horizontal (Categorias)". The "Entradas de Legenda" section has a list of items with checkboxes: "Strongly Disagree", "Disagree", "Indifferent", "Agree", and "Strongly Agree". The "Rótulos do Eixo Horizontal" section has a list of items with checkboxes: "The game contributed to my learning in this...", "The game allowed for efficient learning con...", "The game contributed to <verb as level of ti...", and two empty rows. The "Edit" buttons for both sections are highlighted with red callout boxes. One callout box says: "Click Edit if you need to add new items (select new data set)".

If the items are already in the prepared cells (36 or 39) just select the check box for the item appears on the chart.

6					
7		Fun	25	I had fun with	
8			26	Something h	
9		Focused Attention	27	There was s	
0			28	I was so inv	
1			29	I forgot abou	
2		Relevance	30	The game co	
3			31	It is clear to	
4			32	This game is	
5		Short-term learning	33	I prefer learning with this game to learning through other ways (e.g. other teaching methods).	
6			34	The game contributed to my learning in this course.	
7	Perceived Learning	Learning goals	35	The game allowed for efficient learning compared with other activities in the course	
8			36	The game contributed to <verb as level of the learning goal (cognitive, psychomotor, affective)> <goal/concept>.	
9			37	...	
0			38	...	
1			39	...	

Rótulos do Eixo ? X
 Intervalo do rótulo do eixo:
 =Items!SES35:SES40
 = The game contr...
 OK Cancel

If you have exceeded the prepared cells (36 or 39).
 Select the new data set. E
 Click OK.

Step 3. Insert the responses to the questionnaire regarding the Demographic Information.

Select the "Infos Demographic" spreadsheet.

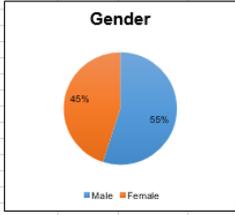
Again, each line corresponds to a questionnaire answered by a student. Must be respected typing as standard set for each item.

DEMOGRAPHIC INFORMATION						
	Course/Date ?	Age group:	Gender:	How often do you play digital games?	How often do you play non-digital games (card or board games, etc.)?	
		1 - Under 18 years 2 - 18 to 28 years 3 - 29 to 39 years 4 - 40 to 50 years 5 - Over 50 years	M - Male F - Female	1 - Never 2 - Rarely: from time to time 3 - Monthly: at least once a month 4 - Weekly: at least once a week 5 - Daily: every day.	1 - Never 2 - Rarely: from time to time 3 - Monthly: at least once a month 4 - Weekly: at least once a week 5 - Daily: every day.	
1		2	M	1		3
2		2	M	1		3
3		1	M	1		3
4		1	M	3		3
5		2	F	3		3
6		2	F	3		3
7		1	F	3		2
8		1	M	2		2
9		3	M	5		2
10		4	F	5		4
11		4	F	4		4
12		5	F	4		4
13		5	M	5		4
14		1	M	2		4
15		1	F	3		5
16		3	M	3		5
17		3	F	4		5
18		2	M	4		5
19		2	M	4		5
20		2	F	4		1
21						
22						
23						
24						
25						
26						
27						

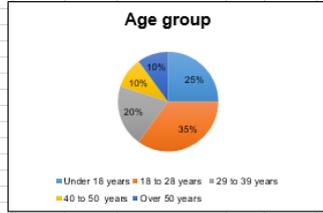
Each line corresponds to a student. The responses of each questionnaire are typed in a line. See the examples.

After typing, graphics on spreadsheet "Graphics Info demographic" will be updated automatically.

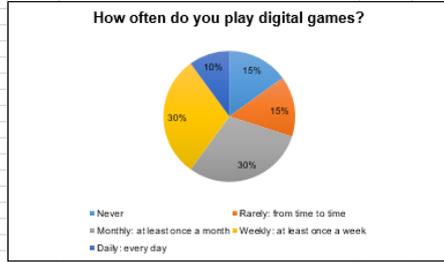
Gender	
Male	11
Female	9



Age group		
1	Under 18 years	5
2	18 to 28 years	7
3	29 to 39 years	4
4	40 to 50 years	2
5	Over 50 years	2



How often do you play digital games?		
1	Never	3
2	Rarely: from time to time	3
3	Monthly: at least once a month	6
4	Weekly: at least once a week	6
5	Daily: every day	2



How often do you play non-digital games (card or board)		
1	Never	1
2	Rarely: from time to time	3
3	Monthly: at least once a month	6
4	Weekly: at least once a week	5