Guide to Using the PASS Excel Grid

This guide is designed to take you through the steps of using the PASS Excel Grid, which are in a nutshell:

- Create and prepare a new Data Entry Form
- Enter data on the Data Entry Form
- Transfer your data to the Results Analyzer
- Use the Form Compiler in the Results Analyzer to generate graphs
- Save the results

Once you download the PASS Excel Grid, you should have two (2) separate Excel workbooks:

1. Data Entry Form: PASS Data Entry Form v27.xlsm
2. Results Analyzer: PASS Results Analyzer v8_8.xlsm

Create a new Data Entry Form

1. Take a copy of the last version of the Data Entry Form.
2. You can rename the Form as needed for easy reference; for example, “Nursing_180-311_A20”
3. Open the file. Remember to click on “Enable Editing and Content”. If you are using macOS, enable “Macros”.

Prepare the Form for your test

1. Rename the sheet called “Data entry-form-template” and give it a name more suited to your situation; for example, “Test 1.”
2. If you get a pop-up alerting you that the sheet is protected, go to the menu “File”->”Protect Workbook” and click “Unprotect”.
3. Enter your class number in cell A1.
4. Enter your semester number in cell B1; for example, “A20”.
5. Enter your exam title in cell C1; for example, “Test 1”.

Add your student list to the Form

1. Determine the number of lines you need, according to the number of students in your course.
2. You can change the number of lines to reflect the number of students you have by using the buttons in the “STUDENTS” box.
3. If you need to add more lines to the sheet, click on the cell just below the last name on the list. Click and drag the number of lines needed. Then click, “Add”. The tool will ask you to confirm the number of lines requested.
4. If you need to remove lines from the student list, click on the cell just below the last name on the list. Click and drag the number of lines that you want to remove. Then click, “Del”. The tool will ask you to confirm the number of lines that you want to remove.

5. Once you have the required number of lines, add your student identification (ID) numbers and names. You can add the student ID numbers and names one by one or copy and paste your student list from a previous Excel or Word document.
6. If you need to change a student name, click on the name that you want to modify and click on the "Edit" button. Now, change the student's name.

Adapt the Form to your test questions

1. You can add, edit or delete questions by using the buttons, "Add", "Edit" or "Del", in the "QUESTIONS" box.
2. Starting in cell D2, manually enter the weight value of each question. You may be asked to "Unprotect the sheet" again.
3. Starting in cell D3, manually enter the question number of each question on the test.

Adapt the Form to your categories

1. The sheet already has a set of common categories used on nursing tests. If you wish to add, edit or delete categories, use the buttons, "Add", "Edit", or "Del", in the "CATEGORY" box.
2. If you want to add a new category, select a cell where the categories are listed.
3. Click on the "Add" button. In the box that appears, you will be asked to name the category.
4. Once you have named the category, a second box will appear allowing you to choose the first default variable for your category.
5. In the third box that appears, enter the second default variable of your category. You can specify as many default variables as you want.
6. When you are done with adding default variables, do not enter any further variables and click, "OK". The tool will end the process.
7. If you want to remove a category, select the category that you want to remove and click the "Del" button.
8. If you want to edit a category, select the category that you want to modify, click the "Edit" button and change the name of the category.

Adapt the Form to your variables

1. If you want to change the default variables of an existing category, you will need to create a new category and redefine the default variables. You can copy and paste variables from the old category to save time. Afterwards, delete the old category.
2. When you are done, enter the variables related to your categories.
3. In D6, "Class Content", there are no defined variables. You can enter an abbreviation that identifies the class content that you are testing. For example, Oxy = Oxygenation.

Adapt the Form to your teachers

1. In cell D9, you can identify the question according to the name of the teacher. If there are several teachers contributing questions to one test, the Data Entry Form will automatically assign a different colour for each teacher.
2. To enter a teacher's name, click on the appropriate cell and type in the teacher's name. Once a teacher's name has been entered, you can copy and paste when you want to repeat a name.

Enter Data on the Form

You can enter the marks in one of two ways: manually or by copying and pasting from another Excel file.

- If you have chosen to do it manually, enter the mark for each question on the line that corresponds to the student ID number and name.
- If you have chosen to copy and paste the marks from another Excel file, make sure that you copy and paste the ***same*** number of cells and do not exceed the file boundaries as determined by your Data Entry Form.
    - If you paste more cells than the number you defined on your Data Entry Form, essential formulas will be erased. When you paste the marks, make sure that you click on "Paste Special". This ensures that you paste only the value of the marks and not the formula.
    - Pay special attention as you enter the marks. No student mark should exceed the weight of the question.

Below the name of the last student on the list, the Data Entry Form is formatted to generate the following statistics for each question:

- Average
- Difficulty Index
- Discrimination Index

Following the last question on the test, the Data Entry Form is formatted to generate the following marks for each student:

- Total
- Total weighted
- Total on 100%

Transfer your Data to the Results Analyzer

1. Open the last version of the Results Analyzer.
2. Remember to click on "Enable Editing and Content". If you are using macOS, enable "Macros".
3. Open the Data Entry Form that contains the sheet(s) that you want to analyze.
    - If you are on **Windows**, use the shortcut Ctrl + t.
    - If you are on **macOS** use the shortcut Option + Command + t. (The Option and Command buttons are located at the left side of the keyboard.)
4. At this point, you should see a message confirming that the sheet was successfully moved to the Results Analyzer.

You will notice tabs at the bottom of the Results Analyzer form. Once you transfer data from the MS Excel Data Entry form, the first tab(s) will always be the test(s) that you are working on. Here is a brief definition of each tab and its use:

Form compiler: contains all the steps you need to generate Test Blueprints and SPAG.

RAW DATA: contains the raw data from all tests that have been transferred to the Results Analyzer. You do not need to use this tab.

TEST BLUEPRINT: contains the Test Blueprint. Use this tab to visualize and print it.

STUDENT SELECTOR: contains the list of students. Use this tab to select individual student graphs to be visualized and/or printed.

STUDENT COMP SELECTOR: contains the list of students when generating comparison graphs.

STUDENT GRAPHS: contains individual student graphs. Use this tab to visualize, save, and/or print the graph(s).

STUDENT COMP GRAPHS: contains individual student comparison graphs. Use this tab to visualize, save, and/or print the graph(s).

Use the Form Compiler in the Results Analyzer

Now that your sheet is in the Results Analyzer, you are able to compile it. Go into the sheet named "Form Compiler" and click on the steps as indicated. You will see a message telling you if each step was successfully completed. Make sure you scroll left to see all of the steps.

Step 0 – Clear Raw Data

Take note that Step 0 is not mandatory. This step clears the form of any previously compiled data:

- If you are compiling data for a single test, you can use this step to clear all previously compiled data.
- If you want to keep the data previously compiled, so that you can compare data between tests, then skip this step.

Step 1 – Which sheet do you want to process?

When you click on "Update list", the compiler will automatically update the sheet(s) that are to be analyzed. Verify that there is a "Y" next to the sheet(s) that you want analyzed.

Step 2 – Start the compiler

This step begins the compiler. It takes a few minutes. Make sure that you wait for the full message telling you that the step is completed before proceeding.

Step 3 – Connect the graphs

This step prepares the data to create the graphs.

Step 4 – Create the sheets

This step generates the Test Blueprint and SPAG.

Generate Test Blueprint

By clicking on this step, you can visualize the blueprint and print a copy. If you want to save the blueprint, go to the Test Blueprint tab at the bottom of the Results Analyzer form. You can now access and save a copy of the blueprint.

Student Performance Assessment Graphs

By clicking on this step, you can visualize and print all of the SPAG.

If you want to select individual students, you have to tell the Results Analyzer what to do:

- Click on the "STUDENT GRAPHS" tab at the bottom of the Results Analyzer.

- Click on the filter button, located beside “Student Name” in Column B and unselect “Select All”.
- Click on the names of the students that you wish to print and click “OK”.

Now, go back to the “Form Compiler” tab and click on ***Step 4, Generate Student Performance Assessment Graphs***. Only the graphs of the first student selected will show on the screen.

To visualize the graphs of subsequent students that you have selected, close “Print Preview” and a message will pop up, “Do you want to print the next student?” If you do, click on OK and the next student’s graph will be displayed.

Continue this process for each student that you had selected.

Use the Form Compiler to Generate Comparison Graphs

Once you have transferred data from subsequent test(s) to the Results Analyzer, you can use the program to compare student performance among a maximum of three tests.

Repeat the same steps to transfer the data from the Data Entry Form to the Results Analyzer. **You need to tell the program to compile the data for each test separately**.

Step 5 – Create the sheets (for selected tests)

This step generates comparison graphs among the selected tests. Click on “Generate comparison graphs”.

Comparison Graphs

By clicking on this step, you can visualize and print all of the SPAG.

If you want to select individual students, you have to tell the Results Analyzer what to do.

1. Click on the “STUDENT COMP SELECTOR” tab at the bottom of the Results Analyzer.
2. Click on the filter button located beside “Student Name” in Column B.
3. Select the names of the students that you wish to print and click “OK”.
4. Now, go to the “Form Compiler” tab and click on Step 5, “Generate comparison graphs”.

Save the Results

Give your Results Analyzer file a meaningful name and save it until you are ready to analyze the next test.

Technical support

Please direct any issue you may encounter to the CCDMD technical support at:

soutien@ccdmd.qc.ca

514 873-7823

Skype : Soutien-CCDMD