

# Ranking Simulator User Guide

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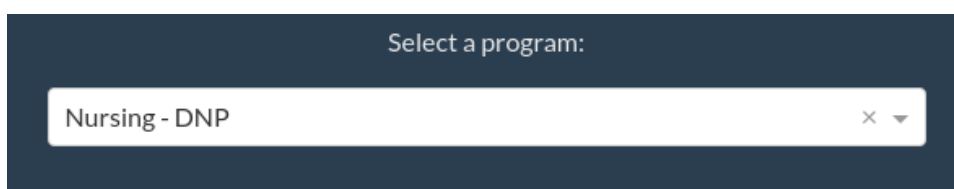
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## Introduction

The Quinnipiac Ranking Simulator simulates Quinnipiac's US News and World Report rankings in the Nursing, Medical, and Law programs. With this application, you will be able to adjust Quinnipiac's indicator stats and see how it will affect its rank in each program. Each of the indicators are ranked and graphed individually so you can see Quinnipiac's standing in a single indicator. The weights of each indicator are displayed in a pie chart. The data used for this application is US News' 2022 data.

## Program Selector



The program selector allows you to select which program you would like to view. By clicking on it, a drop-down menu will appear, allowing you to select the program. If you upload any new programs with the file uploader they will also appear here.

## Rankings

Simulated Rank: 82.0	US News Rank: 83.0	Difference in Rank: 0.0
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These are the rankings for Quinnipiac University. The table below explains what each rank is.

Rank	Explanation
Simulated Rank	This is the rank calculated by the simulator. After adjusting an indicator this value will change.
US News Rank	This is the current rank for Quinnipiac in the current selected program. This value only changes when a different program is selected.
Difference in Rank	This value is the absolute value of the original Simulated Rank minus the New Simulated Rank. This value shows how much the simulated rank has changed after an indicator has been adjusted.

## Indicator and Rank Tables

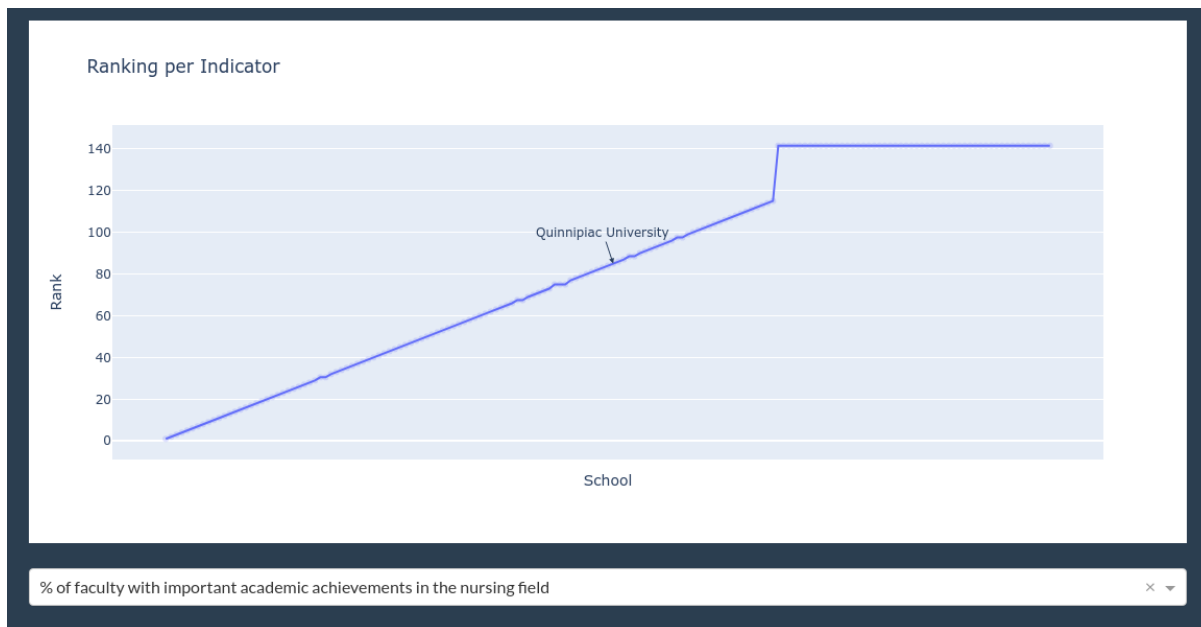
Indicator	Current	New
% of faculty with important academic achievements in the nursing field	5.19	5.19
Faculty credentials	100	100
Average federal research dollars granted to the nursing school per faculty member	0	0
Average amount of teaching grants	368.45	368.45
Master's degrees awarded per FT faculty	0.21	0.21
Peer assessment score (1 to 5 scale)	2.9	2.9
Health care professionals assessment score (1 to 5 scale)	3.6	3.6
Master's acceptance rate	0.76	0.76
Mean full-time average undergrad GPA	3.5	3.5

This table shows the indicators, current values, and new values for the currently selected program. The indicators are the areas that US News uses to calculate the rank. Each indicator is weighted differently and can be seen in the pie chart at the bottom of the web page. The “Current” column contains all the Quinnipiac’s current values for each of the indicators. This column cannot be adjusted. The “New” column also contains Quinnipiac’s current values, but they can be adjusted. Once you adjust one cell in the new column and press “Enter”, the new rank will be calculated and displayed in the “Simulated Rank” section. The “Difference in Rank” will also be updated. If you enter a value outside of the range for the indicator, a warning will appear in the top right corner telling you so.

Simulated Rank	School
1	Johns Hopkins University
2	Emory University
3	Duke University
4	University of Pennsylvania
5	Vanderbilt University
6	Columbia University
7	Yale University
8	Ohio State University
9	University of California--Los Angeles
10	University of California--San Francisco
11	Rush University
12	University of North Carolina--Chapel Hill
13	University of Michigan--Ann Arbor
14	University of Washington
15	Case Western Reserve University
16	University of Alabama--Birmingham

This table shows all the schools and ranks calculated by the simulator. Quinnipiac's rank is adjusted based on the inputs in the "New" column. You can scroll up/down to see all the rankings.

## Rankings per Indicator Graph



This graph shows Quinnipiac's position compared to other schools. The graph only uses Quinnipiac's current data and not the modified data under the "New" column. The Y axis is the rank of the school for the indicator while the X axis is the school. Every mark on the line graph is a school in the data set. Hovering over the mark will display the school name, rank, and value for the indicator (Figure 1). You can zoom into sections of the graph by clicking the magnifying glass on the top right corner of the graph (Figure 2) and then selecting the area you want on the graph. This can be done by dragging the mouse over the desired area (Figure 3). The camera button left of the zoom button allows you can create a picture of the graph saved as a png. You can choose an indicator for the program in the drop-down menu below the graph.

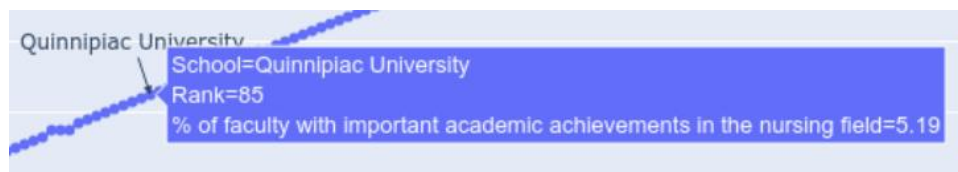


Figure 1 - Mark info

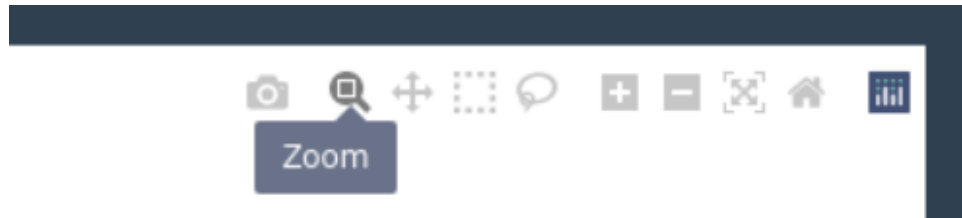
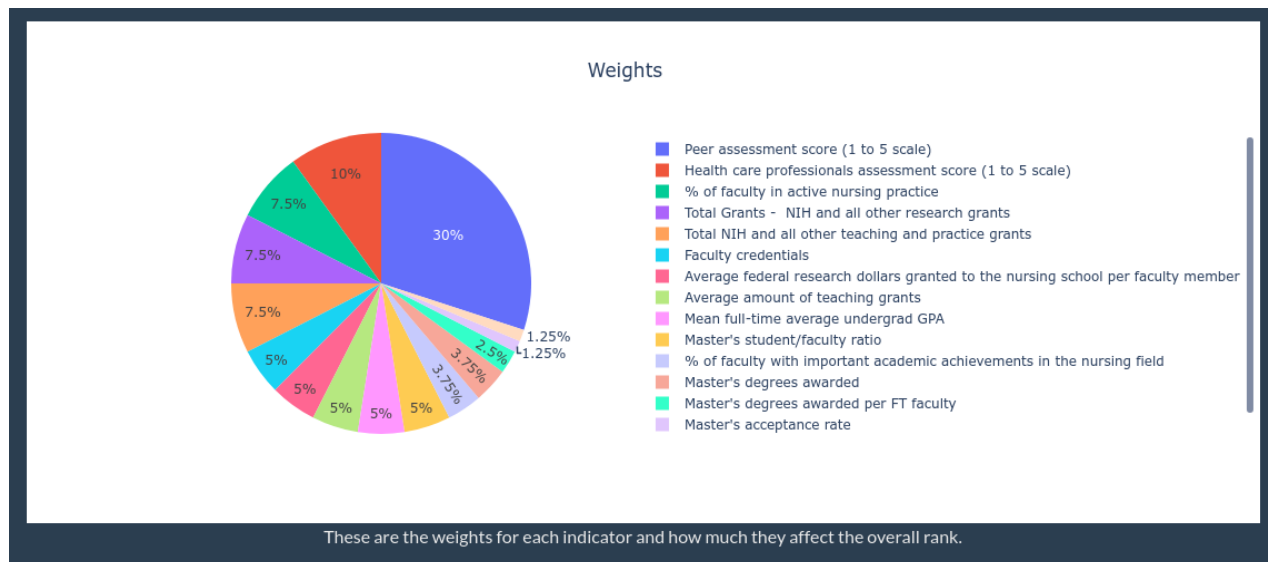


Figure 2 - Zoom button



Figure 3 – Zooming in on a section

## Weights



The weights graph shows what makes up the rank for the selected program. Like the Rankings per Indicator graph, you can save an image of the graph by clicking the camera button on the top right corner of the graph as a png.

## Uploading File

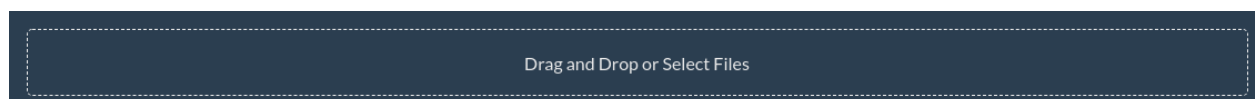


Figure 4

At the bottom of the webpage is the upload feature (Figure 4). This feature supports only xlsx, xls, and csv file types. These files need to have a specific format shown in Figure 5.



	A	B	C	D	E
1	Rank	School	Peer assessment score (1-5 scale)	Assessment score, residency directors (1-5 scale)	Faculty/student ratio
2			0.15	0.15	0.15
3					1
4			1	1	0
5			5	5	100
6	1	University of Washington	4.1	4.5	2.9
7	2	University of California--San Francisco	3.7	4.6	4.0
8	3	University of North Carolina--Chapel Hill	3.9	4.2	2.3
9	4	Oregon Health and Science University	3.8	4.2	3.1
10	5	University of Minnesota	3.4	3.9	2.0
11	6	University of Colorado	3.6	4.1	6.4
12	6	University of Nebraska Medical Center	3.3	3.6	2.0
13	8	Harvard University (MA)	3.2	3.9	14.2
14	9	University of Kansas Medical Center	3.2	3.6	1.3
15	10	University of Massachusetts--Worcester	3.1	3.6	1.9
16	11	University of California--Davis	3.5	3.7	3.3

Figure 5

## Steps to Upload a proper file:

1. Read the methodologies for the data sets you are about to upload. They contain information on what columns/indicators you will need, weights for each column/indicator, and if columns/indicators need to be logarithmically transformed. You will need this information to set up the data set in the following steps.
2. Open the data set in Microsoft Excel.
3. Make sure there is a "Rank" and "School" column spelled exactly as shown in the yellow cells of Figure 5. The rank column contains the rank of each school on US News Ranking website. You will need at least Quinnipiac's rank in Quinnipiac's row for this column. Other school ranks are not required.
4. Delete any columns that are not required according to the methodology read in step 1.
5. Insert 4 rows below the column headers. These rows are color-coded blue, orange, green, and red in Figure 5 for a reference. You **do not** need to color them.
6. The blue row contains the weights for each column. Type in the weight percentage for each indicator/column specified in the methodology read in step 1. In Figure 5, you can see that the "Rank" and "School" columns do not have weights and need to be left empty.
  - Ex: The "Peer assessment score (1-5 scale)" is given a weight of 0.15 as shown in the blue row below the column.
7. The orange row tells the program which columns need to be logarithmically transformed. Enter a 1 in each cell for each indicator/column that needs to be logarithmically transformed according to the methodology read in step 1.
  - Ex: In Figure 5, you can see that only the indicator/column "Faculty/student ratio" needs to be logarithmically transformed. All other columns are left blank.
8. The green row contains the minimum value you can enter for that indicator/column. Enter the minimum value for each column. Make sure the only columns that are empty are the "Rank" and "School" columns.
  - Ex: The "Peer assessment score (1-5 scale)" the minimum value you can enter is 1 as shown in the green row below the column.

9. The red row contains the maximum value you can enter for that indicator/column. Enter the maximum value for each column. Make sure the only columns that are empty are the "Rank" and "School" columns.
  - Ex: The "Peer assessment score (1-5 scale)" the minimum value you can enter is 5 as shown in the red row below the column.
10. Save the excel file.
11. Open your browser and navigate to the ranking simulator application.
12. At the bottom of the page, either drag the excel file into upload section shown in Figure 4 or click on it and find the file in the file explorer that pops up.
13. Go to the top of the page and click the program selector drop-down menu and select your uploaded file at the bottom of the drop-down menu.