

Building a VLOOKUP Function

- To build the VLOOKUP Function, we need
 - The value to lookup (SSID from Grad_Cohort_EOC_Path_Req)
 - The range of cells on the Demographic (GI) file to find the values
 - The column number within the selected range that contains the value to return (from the Demographic (GI) file)
 - Exact Match (FALSE)
- The next series of slides will demonstrate the VLOOKUP function step by step and then will demonstrate the VLOOKUP Wizard

VLOOKUP Step One

Pathway File Needing Names

Select Cell H2 on the pathway report and type =VLOOKUP(

	E	F	G	H	I	J
	Severity	L2_rec_type	ssid		cohort_year	grad_points_ALG1
s		GRAD_0004	AA1234567	=vlookup(2018	3
s		GRAD_0004	AA1234568	VLOOKUP(lookup_value, table_array, col_index_num, [
s		GRAD_0004	AA1234569		2018	3
GR0000	Current graduation status	GRAD_0004	AA1234570		2018	3
GR0000	Current graduation status	GRAD_0004	AA1234571		2018	4
GR0000	Current graduation status	GRAD_0004	AA1234572		2018	3
GR0000	Current graduation status	GRAD_0004	AA1234573		2018	1
GR0000	Current graduation status	GRAD_0004	AA1234574		2018	4
GR0000	Current graduation status	GRAD_0004	AA1234575		2018	2
GR0000	Current graduation status	GRAD_0004	AA1234576		2018	3
GR0000	Current graduation status	GRAD_0004	AA1234577		2018	3
GR0000	Current graduation status	GRAD_0004	AA1234578		2018	5
GR0000	Current graduation status	GRAD_0004	AA1234579		2018	3
GR0000	Current graduation status	GRAD_0004	AA1234580		2018	3

D_cohort-EOC-path-req



VLOOKUP Step Two

Pathway File Needing Names

	G	H	I	VLOOKUP(lookup_value, table_array, col_index_num	
1	ssid		cohort_year	grad_points_ALG1	grad_points_GEOM
2	AA1234567	=vlookup(G2,		3	2
3	AA1234568		2018	4	4
4	AA1234569		2018	3	2
			2018	3	2
			2018	4	3
			2018	3	2
			2018	1	1
			2018	4	2
			2018	2	1
11	AA1234576		2018	3	3
12	AA1234577		2018	3	3
13	AA1234578		2018	5	4

In this step we want to find the State Student ID, Cell G2 value in the demographic file. Add a Comma after the G2 value.

VLOOKUP Step Three

Demographic (GI) File

VLOOKUP X ✓ fx =VLOOKUP(G2, [DEMO_student_demographic_record_GI.csv]DEMO_student_demograph

	A	B	C	D	E	F	G	H	I	J	K	L
	State	Reportin	Building	EMIS			Middle	Date of		Summative	Native	Student
1	Student ID	g Period	IRN	Student ID	Last Name	First Name	Name	Birth	Gender	Racial/Ethnic	Language	Home
2	A1234567	S	111111	000012391	Smith	Jonhnnny	*	00000000	M	W	ENG	***
8	S		111111	000012366	Appleseed	Johnny	*	00000000	M	W	ENG	***
9	S		111111	000012378	Smith	Thomas	*	00000000	M	B	ENG	***
10	S		111111	000012351	Doe	Johnny	*	00000000	M	W	ENG	***
11	S		111111	000012389	Doe	Sally	*	00000000	F	W	ENG	***
12	S		111111	000012363	Smith	Jane	*	00000000	F	W	ENG	***
13	S		111111	000012356	Jones	Davy	*	00000000	M	W	ENG	***
14	S		111111	000012367	Jones	Dale	*	00000000	M	B	ENG	***
15	S		111111	000012390	Smith	Sally	*	00000000	F	W	ENG	***
16	S		111111	000012377	Rogers	Sarah	*	00000000	F	W	ENG	***
17	S		111111	000012379	Troyer	Harry	*	00000000	M	W	ENG	***

DEMO_student_demographic_record

Point

Place your cursor in cell A2 and drag over and down to select all values on the Demographic file

VLOOKUP Step Four

Pathway File Needing Names

The VLOOKUP values will automatically appear in the formula bar on the Grad_Cohort_EOC_Path_Req report based on the value range selected from the demographic spreadsheet

`=vlookup(G2, [DEMO_student_demographic_record_GI.csv]DEMO_student_demographic_record!A1:O50,`

VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])

	M	N			
grad_points_ALG1	grad_points_GEOM	grad_points_MTH1	grad_points_MTH2	grad_points_ELA1	grad
ent_demographic_record_GI.csv]DEMO_student_demographic_record!\$A\$1:\$O\$50,					3
8	4	4			4
8	3	2			4
8	3	2			4
8	4	3			4
8	3	2			3
8	1	1			1
8	4	2			3
8	2	1			1
8	3	3	3	3	3
8	3	3	3	3	3
8	5	4			4
8	3	3			3
8	3	3			3

Enter a comma after the last value in the formula

VLOOKUP Step Five

Indicate the column on the Demographic file that contains the value to bring back. In this case it is column number 6. Add a comma after the 6

To bring back the exact value from column 6, add "FALSE" and then close the function with a parenthesis ")"

Pathway File Needing Names

Formula Bar: `=VLOOKUP(G2, [DEMO_student_demographic_record_GI.csv]DEMO_student_demographic_record!A1:I50, 6, FALSE)`

I	J	K	L	M	N
cohort_year	grad_points_ALG1	grad_points_GEOM	grad_points_MTH1	grad_points_MTH2	grad_points_ELA1
2018	4	4			4
2018	3	2			4
2018	3	2			4
2018	4	3			4
2018	3	2			3
2018	1	1			1
2018	4	2			3
2018	2	1			1
2018	3	3	3		3
2018	3	3	3	3	3

Demographic (GI) File

	A	B	C	D	E	F	G	H	I					
	State	Fiscal	Reportin	Building	EMIS			Middle	Date of		Summative	Native	Home	Hispanic
1	Student ID	Year	g Period	IRN	Number	Last Name	First Name	Name	Birth	Gender	Racial/Ethnic	Language	Language	/Latino
2	AA1234567	2018	S	111111	000012391	Smith	Johnny	*	00000000	M	W	ENG	***	N
3	AA1234568	2018	S	111111	000012366	Appleseed	Johnny	*	00000000	M	W	ENG	***	N
4	AA1234569	2018	S	111111	000012378	Smith	Thomas	*	00000000	M	B	ENG	***	N
5	AA1234570	2018	S	111111	000012351	Doe	Johnny	*	00000000	M	W	ENG	***	N
6	AA1234571	2018	S	111111	000012389	Dr	Sally	*	00000000	F	W	ENG	***	N
7	AA1234572	2018	S	111111	000012353	S	Jane	*	00000000	F	W	ENG	***	N
8	AA1234573	2018	S	111111	000012366	Jo	Davy	*	00000000	M	W	ENG	***	N



VLOOKUP Step Six

After pressing “Enter” the student’s last name appears in the search

Click at the bottom right of the H2 cell and get a + symbol and then drag down or double click to populate the same function into the cells below

The same process can be done to bring in first and middle names into the Prep for Success report

	B	C	D	E	F	G	H	I
1	BLDG_IRN	Result	Result_Description	Severity	L2_rec_type	ssid		cohort_year
2		GR0000	Current graduation status	I	GRAD_0004	AA1234567	Smith	2018
3		GR0000	Current graduation status	I	GRAD_0004	AA1234568		2018
4		GR0000	Current graduation status	I	GRAD_0004	AA1234569		2018
5		GR0000	Current graduation status	I	GRAD_0004	AA1234570		2018
6		GR0000	Current graduation status	I	GRAD_0004	AA1234571		2018
7		GR0000	Current graduation status	I	GRAD_0004	AA1234572		2018
8		GR0000	Current graduation status	I	GRAD_0004	AA1234573		2018

	F	G	H	I	J
1	L2_rec_type	ssid		cohort_year	grad_points_ALC
2	GRAD_0004	AA1234567	Smith	2018	
3	GRAD_0004	AA1234568	Appleseed	2018	
4	GRAD_0004	AA1234569	Smith	2018	
5	GRAD_0004	AA1234570	Doe	2018	
6	GRAD_0004	AA1234571	Doe	2018	
7	GRAD_0004	AA1234572	Smith	2018	
8	GRAD_0004	AA1234573	Jones	2018	
9	GRAD_0004	AA1234574		2018	
10	GRAD_0004	AA1234575		2018	

VLOOKUP Wizard

To use the Wizard for the VLOOKUP click on the Function icon, then choose VLOOKUP and click ok

The screenshot shows the 'Insert Function' dialog box in Microsoft Excel. The 'Search for a function' field is empty. The 'Or select a category' dropdown is set to 'Most Recently Used'. The 'Select a function' list shows 'VLOOKUP' selected. Below the list, the function signature is displayed: `VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)`. A description follows: 'Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.' The 'OK' button is circled in red. The background shows a spreadsheet with columns labeled 'L2_rec_type', 'ssid', and 'cohort', and rows containing 'GRAD_0004' and various 'AA1234567' IDs. The 'fx' icon in the formula bar is also circled in red.

VLOOKUP Wizard, cont'd

1. Lookup_value = G2
2. Table_array = Select from demographic file to populate (Key F4 after selecting the table array to make the range absolute)
3. Col_index_num = Which Column in source file? 6
4. Range_Lookup = False

Function Arguments

VLOOKUP

Lookup_value = any

Table_array = number

Col_index_num = number

Range_lookup = logical

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Lookup_value is the value to be found in the first column of the table, and can be a value, a reference, or a text string.

Formula result =

[Help on this function](#)

OK Cancel

Year	Value	Year	Value
2010	3	2010	3
2018	3	2018	3
2018	4	2018	4

VLOOKUP Wizard, cont'd

VLOOKUP Wizard will preview the value it will bring back

If the preview doesn't bring back the correct value, check your formula. If the formula is correct, then that student may not be in the demographic file.

Function Arguments

VLOOKUP

Lookup_value: g2 = "AA1234567"

Table_array: hnic_record!\$A\$1:\$O\$50 = {"State Student ID","Fiscal Year","Repo"

Col_index_num: 6 = 6

Range_lookup: false = FALSE

Formula result = Smith

Help on this function

OK Cancel

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Range_lookup is a logical value: to find the closest match in the first column (sorted in ascending order) = TRUE or omitted; find an exact match = FALSE.