

Link Data Tables

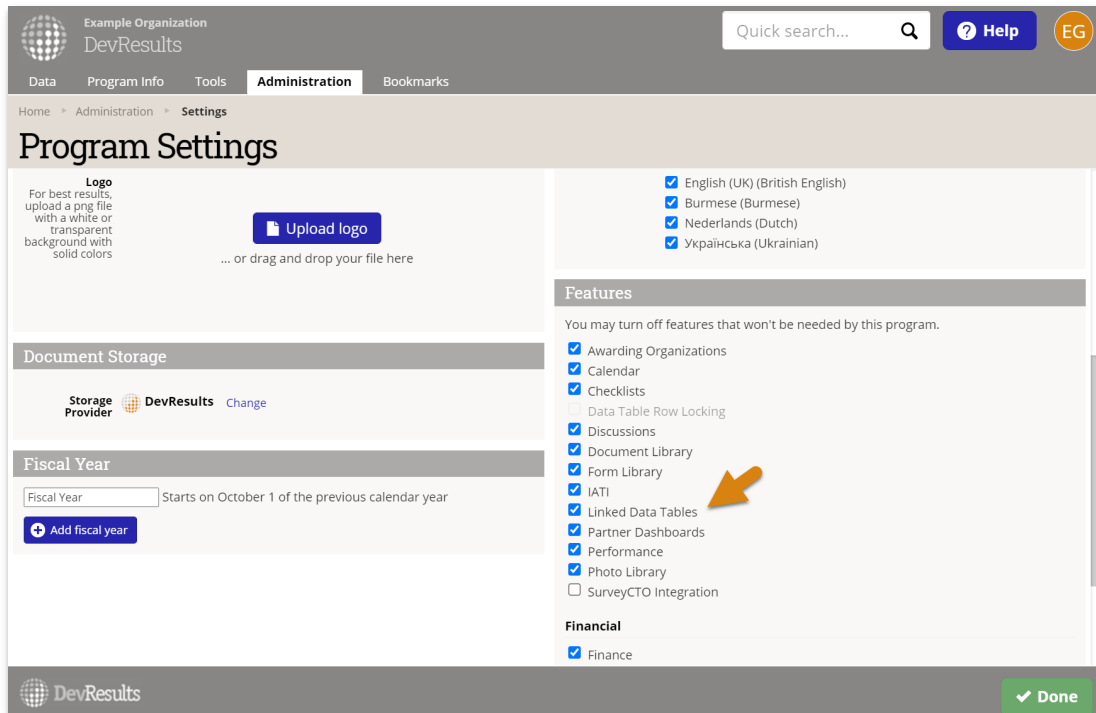
Last Modified on 08/21/2021 7:19 am EDT

Linked data tables allow you to connect one or more tables by information common to both. For example, you can have one table of schools that contains all the categorical information about each school (location, size, level, urban v rural, etc.) and a separate table of all teachers. To disaggregate teachers by the information about their schools (e.g. # teachers in urban settings) you can link teachers to their schools without having to repeat a school's categorical information for each teacher. Another term for this method of organizing information is *relational data*; the data is related by a shared column. This page includes:

- How to define the **Lookup Key**, the shared column between tables
- How to **Link Tables**
- How to **Add Data** to linked tables

Lookup Key

First, make sure you have enabled the **Linked Data Tables** feature under **Administration > Settings**.



The screenshot shows the 'Program Settings' page in the DevResults administration interface. The 'Features' section is expanded, showing a list of features that can be turned on or off. The 'Linked Data Tables' feature is checked and highlighted with an orange arrow. Other features include Awarding Organizations, Calendar, Checklists, Discussions, Document Library, Form Library, IATI, Partner Dashboards, Performance, Photo Library, and SurveyCTO Integration. The 'Financial' section is also visible, with the 'Finance' feature checked. The page includes a search bar, navigation tabs, and a 'Done' button at the bottom right.

To link tables, find the **Lookup Key** section in the **Design** tab of the table that contains the information you'd like to pull into a different table. In our example, we want to add a **Lookup Key** to the **Schools** table so that we can pull information about schools into our **Teachers** table.

Example Organization
DevResults

Quick search... 25

Data Program Info Tools Administration Bookmarks

Home > Results > Data Tables > Schools

Schools

Data Design

Columns

Column	Type
School ID	Unique ID
School Location	Geography: Location
Urban/Rural	Disaggregation: Urban vs Rural
# classroom	Number: Whole
School's partner NGO	Activity

Definition

Table Name: Schools

Linked Indicators

This data table is not linked to any indicators.

Lookup Key

Configure how rows from this table are shown in other tables.
Lookup key is required for this table to be referenced by other tables and must produce a unique value for each row in the table. [Learn more](#)

Enter the lookup key with column names in [brackets]

Permissions

Define what access partner users have to this table

No Access

Created by Leslie Sage (13 Aug 2018)

The Lookup Key serves two functions:

1. It produces a unique value for each row in a table that is used to link each row of a table to a row in another table.
2. You can configure it to display information in a different table in a specific format.

To begin entering a Lookup Key, click in the text box and add a bracket. This will give you a dropdown menu of all columns in your table. You can continue typing the name of the column or click on the column name to select it.

In the following example, we've created a unique Lookup Key by combining School ID and School Location. The Lookup Key in this case is [School ID][School Location].

Example Organization
DevResults

Quick search... 25

Data Program Info Tools Administration Bookmarks

Home > Results > Data Tables > Schools

Schools

Data Design

Columns

Column	Type
School ID	Unique ID
School Location	Geography: Location
Urban/Rural	Disaggregation: Urban vs Rural
# classroom	Number: Whole
School's partner NGO	Activity

Definition

Table Name: Schools

Linked Indicators

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Lookup Key

Configure how rows from this table are shown in other tables.
Lookup key is required for this table to be referenced by other tables and must produce a unique value for each row in the table. [Learn more](#)

Enter the lookup key with column names in [brackets] [School ID][School Location]

Permissions

Define what access partner users have to this table

No Access

Created by Leslie Sage (13 Aug 2018)

If we were to link a row in this table with a row in a different table, a row where School ID is "123" and School Location is "Washington DC" will now display as "123Washington DC".

To configure the Lookup Key in a specific format, users can add spaces and special characters between column names. In the example below, we've made the Lookup Key and display more readable by adding a comma between the School ID and School Location.

The screenshot shows the 'Schools' table configuration page in DevResults. The 'Columns' section contains the following table:

Column	Type
School ID	Unique ID
School Location	Geography: Location
Urban/Rural	Disaggregation: Urban vs Rural
# classroom	Number: Whole
School's partner NGO	Activity

The 'Lookup Key' section is configured with the text: `[School ID], [School Location]`.

NOTE: If a Lookup Key cannot produce a unique values for all rows, you will receive an error message asking you to add additional columns to the Key until each value is unique. Similarly, if data is being added to the table that will render the Lookup Key not unique, you will be prompted to fix the duplicate data.

Linking Existing Data Tables

To link a data table to another, navigate to the data table you want to link. In this example, we'll be connecting the **School** table to a table of **Teacher Records**.

Example Organization
DevResults

Quick search...

Data Program Info Tools Administration Bookmarks

Home » Results » Data Tables

Search data tables

Name	# Rows	Columns
Beneficiaries	1	Date, Activity, Location, Beneficiary ID, Age, Sex, Ethnicity, Service Type, Is eligible?, Describe in your own words any positive outcome of the service you
Certifications	2,043	Teacher, Certification Partner, Certification Location, Certification Date
Classrooms	828	Classroom ID, School ID, Grade, Well-supplied?
Cohorts	100	Cohort ID, Intervention Type, Duration of intervention per cohort (hours)
Crop Sales	8,520	Date, End of Quarter, Farmer, Crop Type, \$ value of sale (USD), # kg crop sold, USD per kg
Farmers	1,064	Activity, Farmer ID, Sex, Ethnicity, Farm Location, Land Type
Organizations	1,646	Contract Start Date with Organization, End of Fiscal Year, Activity, Prefecture, Organization Name, Organization Type, Is organization a CSO?, Did organ
Schools	128	School ID, School Location, Urban/Rural, # classroom, School's partner NGO
Teacher Records	0	Sex, # years as teacher, # years post-training, Assessment date, Start date of school year, Country
Teachers	987	Teacher ID, Classroom ID, Sex, # years as teacher, # years post-training, Assessment Score, Assessment date, Start date of school year, Cohort, Countr
Teachers post-training	2	Teacher ID, Duration
Training Table	6,650	Date, Last Day of RP, Activity, Location, Trainee ID, Sex, Age, Training Topic, Training Type, Initial Test Score, Final Test Score, Points Improved, Commer

DevResults

Click on the **Design** tab.

Example Organization
DevResults

Quick search...

Data Program Info Tools Administration Bookmarks

Home » Results » Data Tables » Teacher Records

Teacher Records

Data **Design**

0 rows

No data has been added to this data table. [Add a row](#) or [import data](#) to get started.

DevResults Created by Anika Shuster 03 May 2016

This table already has several columns added, including the # years as a teacher, # years post-training, when the school year started, and where they are based. To pull in information about their school from the Schools table, click on **(+) Add new column**.

Example Organization
DevResults

Quick search... [?] Help 25

Data Program Info Tools Administration Bookmarks

Home > Results > Data Tables > Teacher Records

Teacher Records

Data Design

Columns

+ Add new column Save changes

Column	Type
Sex	Disaggregation: Sex
# years as teacher	Disaggregation: Duration
# years post-training	Other Text
Assessment date	Date
Start date of school year	Date
Country	Geography: Guinea

Definition

Table Name: Teacher Records

Linked Indicators

This data table is not linked to any indicators.
+ Add an indicator mapping

Lookup Key

Configure how rows from this table are shown in other tables.
Lookup key is required for this table to be referenced by other tables and must produce a unique value for each row in the table. [Learn more](#)

Enter the lookup key with column names in [brackets]

Permissions

Define what access partner users have to this table

No Access

Created by Inika Shaver (23 May 2019) Delete this data table Done

In the popup, you can specify what the column should be called. Click on the dropdown for **Type** and select Table. You can now click on the Table dropdown and select which data table you would like to connect.

Example Organization
DevResults

Quick search... [?] Help 25

Data Program Info Tools Administration

Home > Results > Data Tables > Teacher Records

Teacher Records

Data Design

Columns

+ Add new column Save changes

Column	Type
Sex	Disaggregation: Sex
# years as teacher	Disaggregation: Duration
# years post-training	Other Text
Assessment date	Date
Start date of school year	Date
Country	Geography: Guinea

Definition

Table Name: Teacher Records

Linked Indicators

This data table is not linked to any indicators.
+ Add an indicator mapping

Lookup Key

Configure how rows from this table are shown in other tables.
Lookup key is required for this table to be referenced by other tables and must produce a unique value for each row in the table. [Learn more](#)

Enter the lookup key with column names in [brackets]

Permissions

Define what access partner users have to this table

No Access

Created by Inika Shaver (23 May 2019) Delete this data table Done

Add New Column

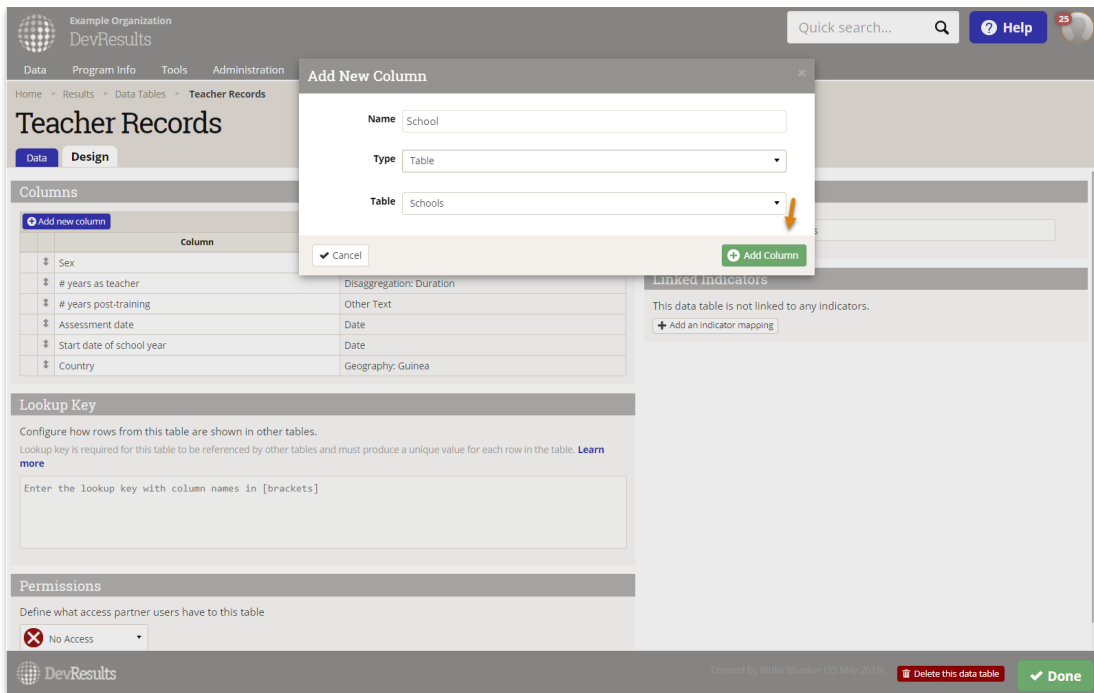
Name: School

Type: [Dropdown menu open]

- Other Text
- Unique ID
- Date
- Number
- Yes/No
- Activity
- Geography
- Disaggregation
- Table

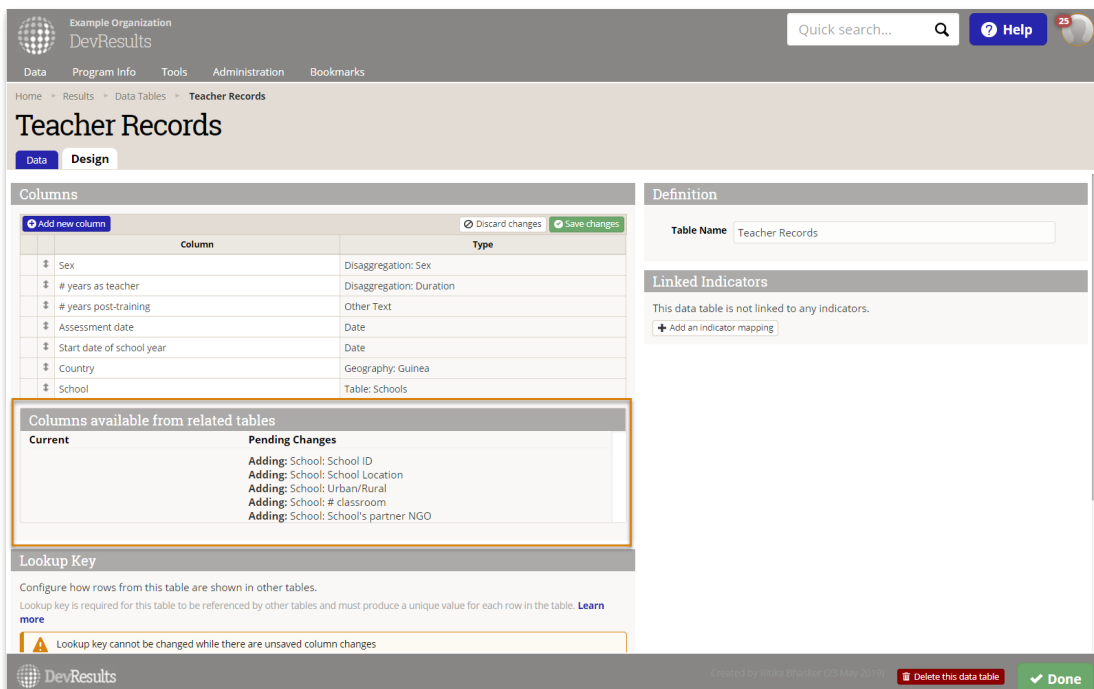
Cancel

Click on **(+) Add Column**.



Note: Tables will not show up in the dropdown if a Lookup Key is not specified for that table. Tables will also now show up in the dropdown if you have not enabled the **Linked Data Tables** feature under **Administration > Settings**.

Once you've added the column, DevResults will display all columns available from related tables, including those currently available and ones that are pending.

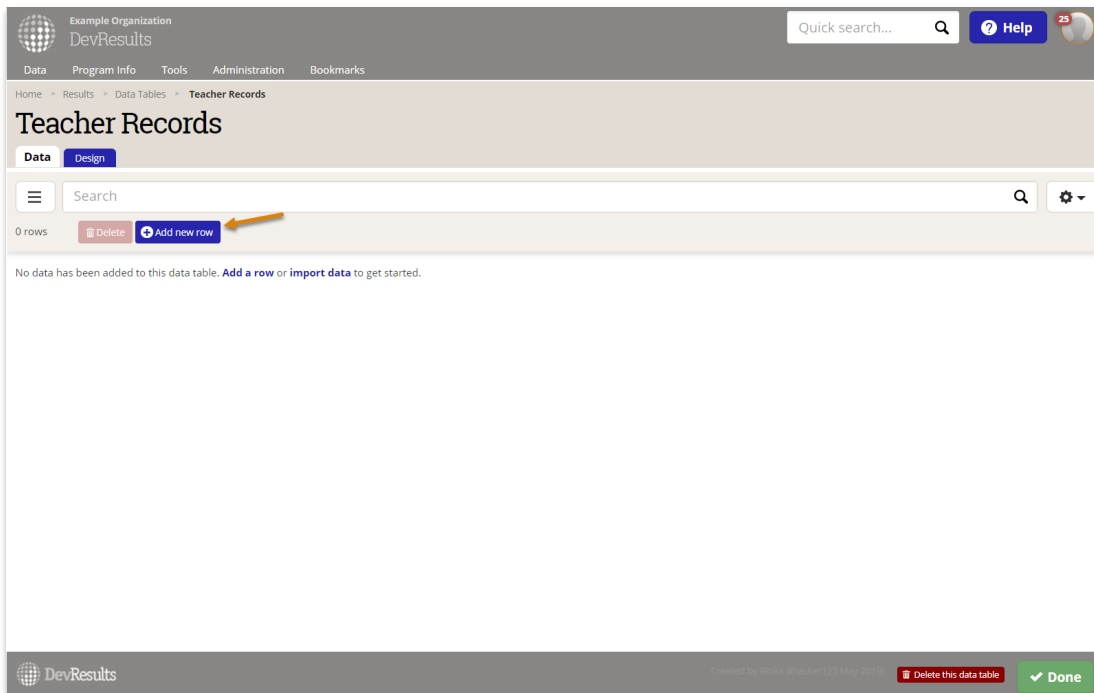


Once you've reviewed the pending changes, click on **Save changes** to link the tables.

Add data

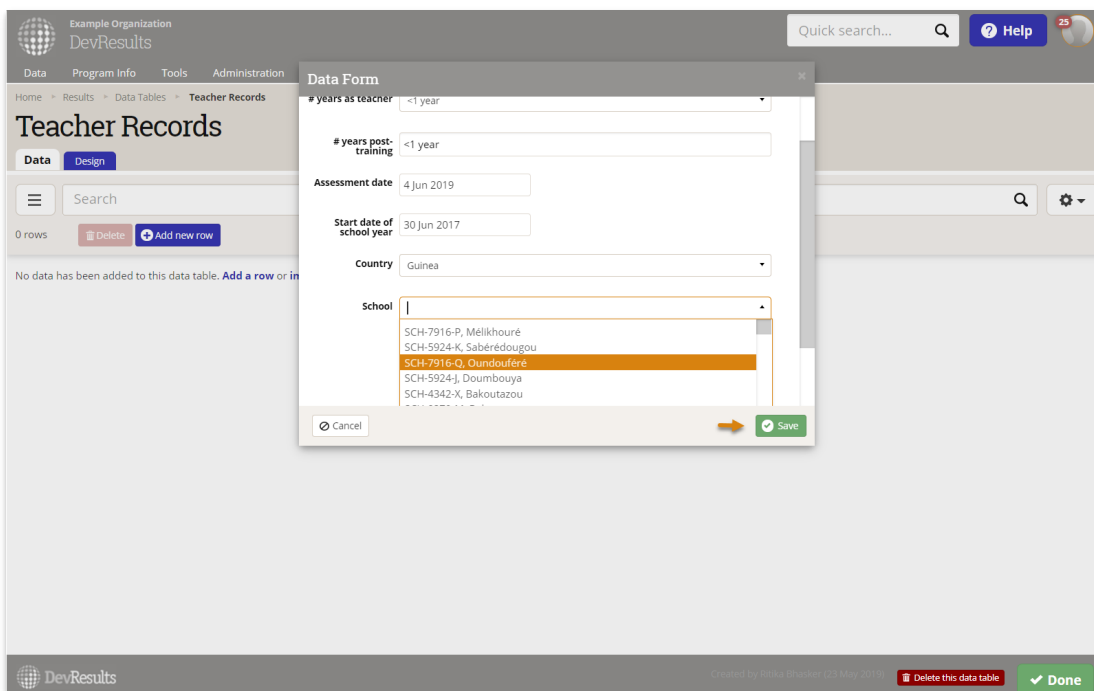
You can now navigate to the **Data** tab to begin adding data, including information stored in the "Schools" table.

Click on **(+) Add new row**.



You'll notice that adding information to the new row remains the same.

When adding information from the "Schools" table (column: School) to a row, you can click on the dropdown and select the School ID and Location you want to include in that specific column.



Click **Save** to add the new row.

If you want to display the School ID and Location separately, you can do so by clicking on the gear icon on the top right corner of the table.

Example Organization
DevResults

Quick search... [?] Help

Data Program Info Tools Administration Bookmarks

Home > Results > Data Tables > Teacher Records

Teacher Records

Data Design

Search [Q]

0 rows [Delete] [Add new row]

	Key Value	Sex	# years as teacher	# years post-training	Assessment date	Start date of school year
	988	Female	<1 year	<1 year	4 Jun 2019	30 Jun 2017

- Import History
- Download all
- Download empty template
- Import data
- Recalculate linked indicators
- Columns
 - Search Columns...
 - Key Value
 - Sex
 - # years as teacher
 - # years post-training
 - Assessment date
 - Start date of school year
 - Country
 - School
 - School: School ID
 - School: School Location
 - School: Urban/Rural
 - School: # classrooms

DevResults [Delete this data table] [Done]

In the list of columns below, you can choose to display any columns in the table you linked to this one. In our example, we can choose to display **School: Urban/Rural**, **School: # classrooms**, etc. If we want to remove the Lookup Key from the table, we can uncheck the box next to it. In our example, that would be the **School** column.

TIP: If you are creating a new data table by uploading an example that links to another table, values in one of the columns in the data table should match the generated Lookup Key in the second data table. In the example above, we would have added **School** as a column, with all values in the column formatted as **School ID, School Location**

Once you've created a linked table, you can start [populating indicators with this data](#).

Didn't answer your question? Please email us at help@devresults.com.

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