Training Overview

Data Viewer	Creating, Editing, Viewing and Saving Data Viewer Selections	**3**
Filter Designer	Information about Filter Designer, The Types of AdHocs and how to Manage and Export Filters.	**9**
Query Wizard	Step-by-step guide to creating AdHoc Queries and how save and share them.	**13**
Selection Editor & Pass-Through SQL	Two additional types of filters you can utilize to filter data for searches and reporting.	**24**
Troubleshooting	Frequently Asked Questions, Links, Tools and Tips.	**28**

DATA VIEWER

INFINITE CAMPUS SUMMER TRAINING
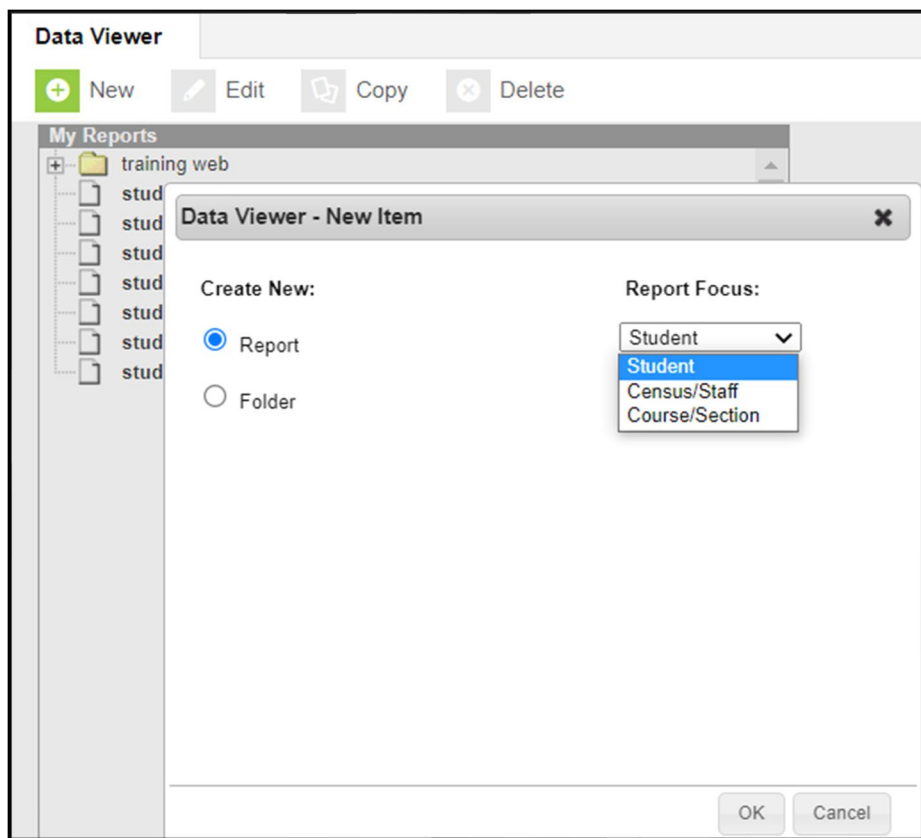
HOW TO BE A CAMPUS SUPERHERO!

Data Viewer

Reporting > Ad Hoc Reporting > Data Viewer

> Data Viewer is a user-friendly report building tool which allows users to drag and drop fields into a real-time view of the report as it is being built.
> *NOTE: Reports are user specific and cannot be shared.*

To Create a New Report

- Select the **New** button to populate the New Item editor.

- Select the **Report** radio button and choose your desired. **Report Focus:** *(Student, Census Staff, Census Section)*.

- Click **OK**

Data Viewer - Field Selection
Reporting > Ad Hoc Reporting > Data Viewer

The report preview will refresh each time a field is added to show a real-time view of the first ten records of reporting data.

Each report must have a unique name to save correctly.

Users can type in a search criteria to minimize field results

Certain fields are auto populated, based on the Report Focus selected.

Drag and drop a field name to the desired location on the report preview

*Users can also double click the field name to append the item to the far right column.

Data Viewer - Edit

* Name: Unique Name

Field Selection:

Drag selected field to Report Preview pane to add column to selected location; field will also be added to Filtering pane *Field drop-down list.

Dragging selected field to Filtering pane will add field to the filter options only.

Double clicking a selected field will append the column to the end of the Preview pane.

Teacher   Search Clear

- Course
  - Course Information
  - Section Information
    - Teacher Display
    - Teacher 2 Display
    - Teacher 3 Display
    - Teacher 4 Display
    - Multiple Teacher Code

Filtering

Add New Filter

Report Preview

Displaying the first 10 of 190 records

preview			
Course Number	Course Name	Section Number	Teacher Display
HR	Homeroom	61	
HR	Homeroom	62	
HR	Homeroom	71	
HR	Homeroom	72	

5

Data Viewer - Filtering Selections
Reporting > Ad Hoc Reporting > Data Viewer

Fields can be added to the Filtering editor by selecting the **Add New Filter** button -or- by dragging and dropping the field from the field selection section to the Filtering editor.
NOTE: Operation descriptions can be found in the resources section at the end of this presentation.

Filtering

ID *Field		Operator		Value	
1	Course Name (courseInfo) ⌄	<> ⌄		Homeroom	⌄
2	Period Start (sectionSchedule) ⌄	= ⌄		Period End (sectionSchedule)	⌄

Add New Filter

Report Preview

Displaying the first 10 of 54 records

preview						
Male Student Count	Course Name	Section Number	Period Start	Period End	Course Number	Teacher Display
11	Band	1	7 Period	7 Period	101	Teacher, Tracy *
9	Auto Body Technology II R...	1	1 Period	1 Period	06	Brave, Teacher *
8	Auto Body Technology II Lab	1	2 Period	2 Period	05	Brave, Teacher *

Data Viewer - Editing Columns
Reporting > Ad Hoc Reporting > Data Viewer

To Change the **Column Name**- double click the column header.

To change the **Column Order**- click and drag the column to the left or right.

To **Sort, Group, or Remove**- a column- Select the small triangle to the right of the column name.

Report Preview

Displaying the first 10 of 54 records

			preview				
Male Student Count	Course Name	Section Number	Period Start	Period End	Course Number	▼	Teacher Display
11	Band	1	7 Period	7 Period	101	▲ Sort ASC	
9	Auto Body Technology II R...	1	1 Period	1 Period	06	▼ Sort DESC	
8	Auto Body Technology II Lab	1	2 Period	2 Period	05	🔲 Group By Column	
11	Agri-Mechanical Principles	1	2 Period	2 Period	4040	✖ Remove Column	
12	Agri-Livestock Selection, Nutr	1	7 Period	7 Period	4030		Ford, Bryan J

Data Viewer – Saving & Exporting
Reporting > Ad Hoc Reporting > Data Viewer

Data Viewer

Back to Reports   Save   Print

Data Viewer - Edit

* Name: Unique Name

Field Selection:

Drag selected field to Report Preview pane to add

Filtering

ID *Field

✕ 1 Course Name

New   Edit   Copy   Delete

My Reports
- training web
  - **student** 4th grade students
  - **student** 5th grade students
  - **student** Copy of Training
  - **student** gifted
  - **student** Student123
  - **student** Training12345
  - **student** trialZ

Report Options

Report Name: 5th grade students

Created
On Unknown
By Unknown

Last U
On 07
By Ur

Ad Hoc Filter:

Report Output Format:
PDF

Which calendar(s) would you like to includ
- ⦿ active year
- ○ list by school
- ○ list by year

23-24
  23-24 META Elementary School
  23-24 META JR/SR High School

Users can generate a pdf of the report from the Data Viewer-Edit area by clicking **Print.**

Selecting the Print button will also save the report.

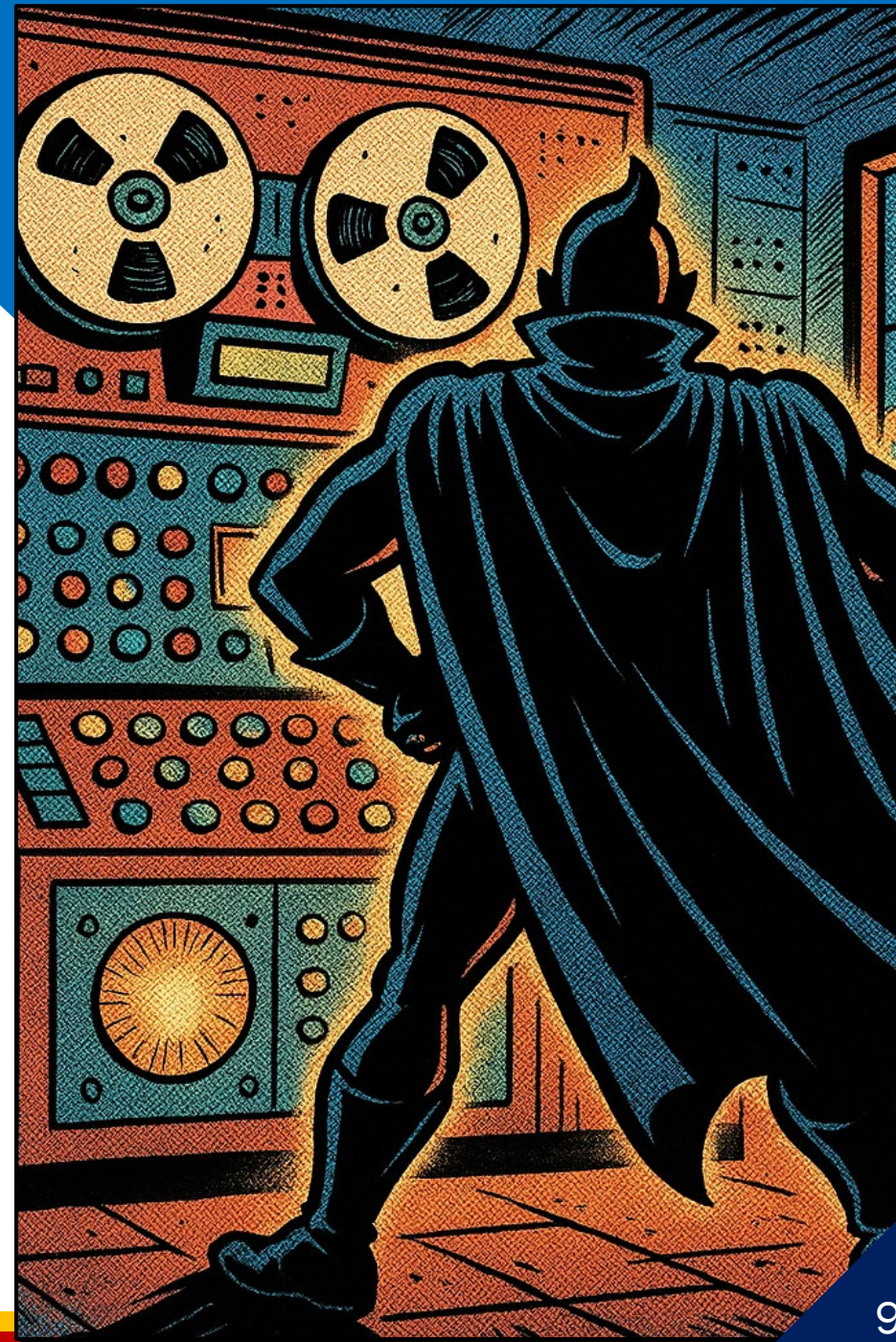Clicking '**Back to Reports**' will take you to the Data Viewer's Main Page.

Here you can:
Generate a selected report, create a **new** report, and edit, copy or delete an existing report.

FILTER DESIGNER

INFINITE CAMPUS SUMMER TRAINING

HOW TO BE A CAMPUS SUPERHERO!

Filter Designer

Filter Designer is used to create multi-use filters of campus data. Three tools within the Filter designer allow you to filter, search and create reports of data within Campus.

Query Wizard
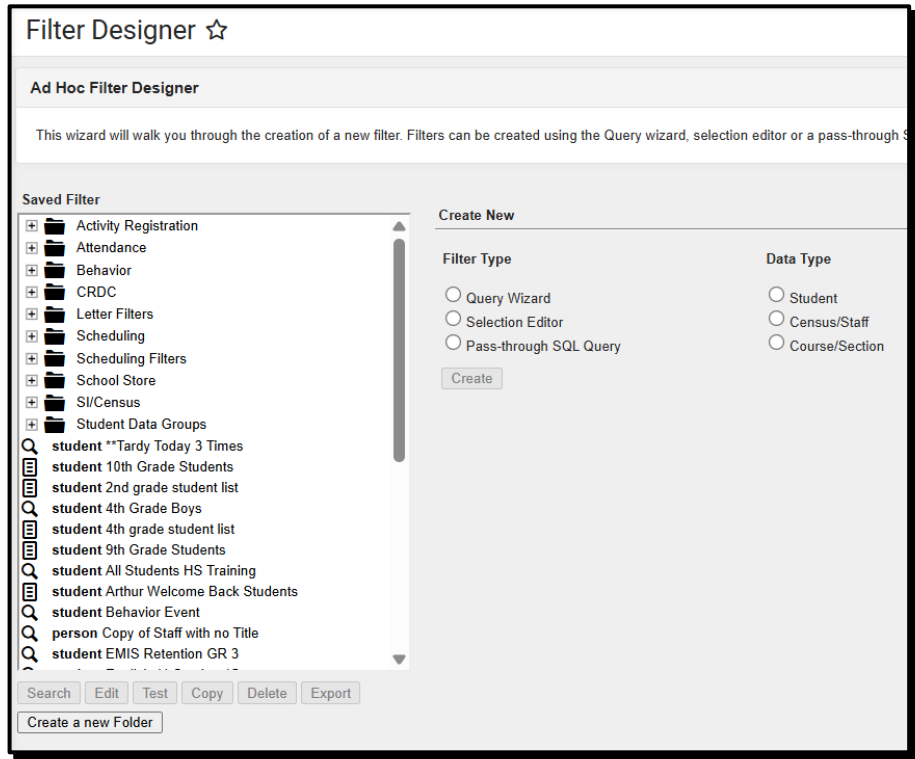
Dynamic	
Reports	Filters

Used to create dynamic filters of campus data. Responsive and does not need to be changed unless specific defining filtering is added. Information Returned is defined by the query and can be used to create custom reports.

Selection Editor

Static List
Filters

Used to create filters based on specific hand-picked selections of students, staff or courses. Must be manually changed as needed. Returns only a specific set of information that cannot be modified.

Pass-Through SQL

Dynamic
Filters

More complicated filters that use SQL scripting to filter out information. Returns only a specific set of information that cannot be modified.

Filter Designer: Managing AdHocs

Reporting > Ad Hoc Reporting > Filter Designer

Users can Search, Edit, Test, Copy or Delete AdHocs from the main Filter Designer page.
If a user edits or deletes a filter located in a shared user group, it will delete or change it for ALL users.
It is recommended to not use the main Filter Designer page to export AdHocs.

Search:

Performs a search based on query type.

Edit:

Make changes to existing filters.

Test:

Opens an HTML report, users can share this link.
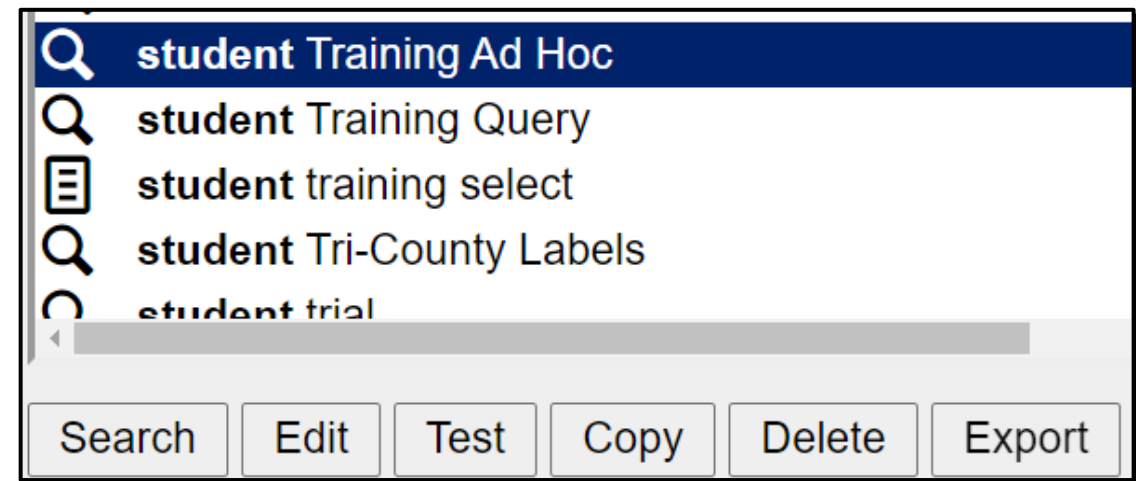
Copy:

Creates a copy of an existing filter.

Delete:

Deletes the filter from all areas. (NOT Recoverable)

Export:

Creates a quick export, (not recommended) Please use the Data Export method detailed on the next slide.

Data Export
Reporting > Ad Hoc Reporting > Data Export

The Data Export tool is the recommended method for viewing and extracting AdHoc filter reports. It can be used to extract data in multiple formats and pull data from more than one building, year and calendar at a time if desired.

Step 1:
Select the Ad Hoc filter from the **Saved Filter** window

Step 2:
Choose which Calendar and/or school building to run the Report for
- Only calendars the user is assigned Calendar Rights to are available
- If no selection is made, the report will run based on the calendar selected in the Campus Toolbar.
- These settings do not override any parameter filters set within the AdHoc

Step 3:
Click the radio button next to the desired **Export Format** (Note: CSV opens in Excel)

Step 4:
Click **Export**

QUERY WIZARD

INFINITE CAMPUS SUMMER TRAINING

HOW TO BE A CAMPUS SUPERHERO!

Query Wizard
Reporting > Ad Hoc Reporting > Filter Designer

The Query Wizard allows users to select data fields and filter options, to create a report that will pull current information from the database.
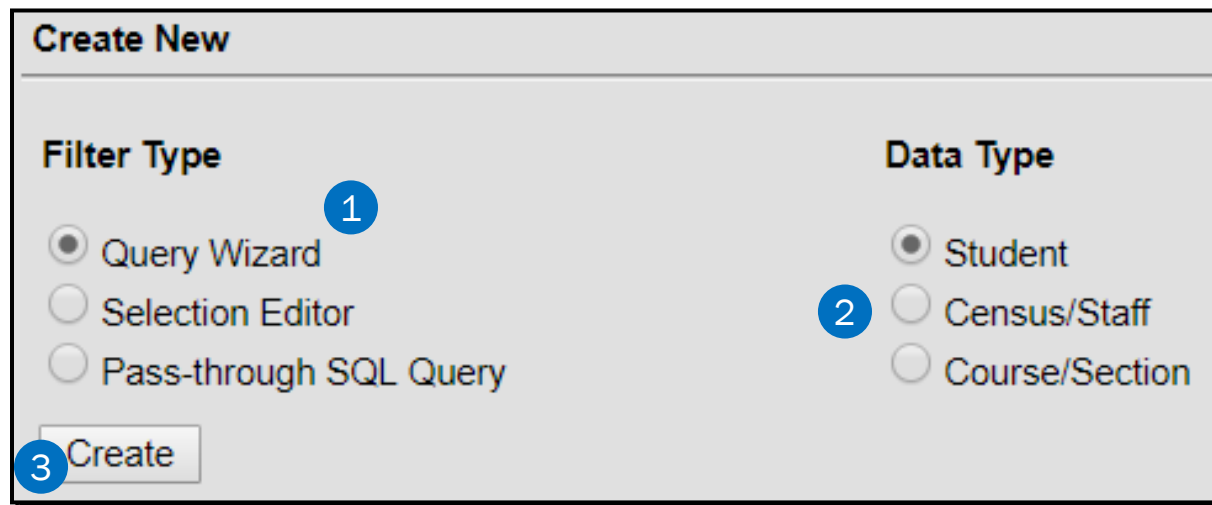
Step 1:
Select **Query Wizard** under Filter Type.

Step 2:
Select the **Data Type** You would like to gather data for.

Step 3:
Click **Create**

Create New

Filter Type

1 ⦿ Query Wizard
○ Selection Editor
○ Pass-through SQL Query

3 Create

Data Type

⦿ Student
2 ○ Census/Staff
○ Course/Section

Query Wizard: Field Selection

Reporting > Ad Hoc Reporting > Filter Designer

Step 4:

Enter a descriptive **Query Name**

The 'Short and Long Description' are *Optional* fields.

Step 5:

Expand headers under *All Fields* by clicking + icons to view fields

Use the **Filter By** search box to only show certain fields.

Query Name: Training Ad Hoc

Short Description: Optional: Place a quick description of the ad hoc

Long Description: Creators are able to place an OPTIONAL lengthy description reporting the query

Select categories & fields

Filter By [   ] [Search] [Clear]

All Fields

- Student
  - Demographics
  - School Boundaries
  - School Calendar
  - School
  - District
  - Learner
  - Counselor
  - Learner Planning
  - Gifted
  - Census
  - Health
  - Medicaid

Selected Fields
student.activeToday
student.firstName
student.lastName
student.gender

[<---]

Quick Tip: If you are wanting your AdHoc results to return active students only, make sure to include the **student.activeToday** field. You will also want to add filter parameters for it when adding those.

Step 6:

Once you *click* on a field under the **All-Fields** table it will automatically move to this **Selected Fields** section

If you accidentally add the wrong field, use the "<—" button

[< Back] [Next >]

Tip: You can use the next and back buttons to navigate between the different sections of the query wizard. Additionally, you can use the blue section links at the top of the query wizard window.

Query Wizard: Functions OPTIONAL

Reporting > Ad Hoc Reporting > Filter Designer

> *Optionally, Functions can add additional logic to queries not present in the filter area and can be added in the field selection area.*

Function Editor

The Function Editor allows the application of logic to columns that are output when the Ad Hoc Data Export too function allows outputting a new column that is not based on any field selection - this will output the Constant V record returned. The Concatenate function allows appending selected fields. The Coalesce function allows for results if the first field would return a null. Both Concatenate and Coalesce will apply logic in the order the para

Behavior
Attendance
Assessment
Grading
Learner Portfolio
Standards Portfolio
Locker
Fee
Transportation
Activities
Activity Registration
Early Warning

Add Function

*Name: Student Name   (a)
*Function: Concatenate ▼   (b)

Constant value: [   ] Add

Filter By Name Search Clear
All Fields:

Student
  Demographics
    lastName
    firstName
    middleName   (c)
    legalFirstName
    legalLastName
    legalMiddleName
    calendarName
    teamName
    Federal Race
    Identity History
    Impact Aid
    Military Connections
    Guardian Military Connections
  School Boundaries
  School Calendar
  School
  District
  Learner
  Counselor
  Learner Planning
  Census

Parameters:
student.firstName
,
student.firstName

<---

(d) ave Cancel

Step a:
Enter a descriptive **Function Name**

Step b:
Select which Function to use (see next slide for details on each function and their uses)

Step c:
Click the fields you would like to utilize with the function. The selected fields will show in the Parameters box. You can use the ← button to remove fields if needed.

Step d:
Click **Save**

For more information on Functions, check out Campus Community:
https://kb.infinitecampus.com/help/query-wizard#functions

16

Query Wizard: Function Information
Reporting > Ad Hoc Reporting > Filter Designer

Function Descriptions	
Constant	Will output the constant value entered on each record (need to enter constant value desired)
Coalesce	Defines multiple fields where it pulls the first field, but if NULL, the second field is pulled and so forth. Until a value is found
Concatenate	Will append the field values (combine two fields into one… e.g. firstname lastname)
Add, Subtract, Multiply and Divide	Allows field values to be added, subtracted, multiplied or divided to output a single result
Record Count	Reports a record count for the field selected (counts all instances regardless of what data is present)
Distinct Count	Reports a distinct count for the field selected (counts only instances that are unique and does not count instances with duplicate field information)
MIN	Reports the minimum value for selected field (only works for numerical fields)
MAX	Reports the maximum value for selected field (only works for numerical fields)
SUM	Adds the value of selected fields (only works for numerical fields)
AVG	Reports the average value for selected field (only works for numerical fields)

Query Wizard: Filter Parameters

Filter Parameters Limit the data that appears in your query

Logical Expressions also allow the user to incorporate conditions between multiple fields and limit data even further.

Filter the data

ID *Field	Operator	Value
1 student.activeToday	= TRUE	
2 student.gender	=	M
3 student.grade	=	07
4 student.grade	=	06
5 student.gender	=	F

7 **8**

Use **Add** if you need to filter by the same Field more than once

Add

Logical Expression (Optional):
1 AND ((2 AND 3) OR (4 AND 5))

If logical expression is left blank, all operators will be applied.
Allowed symbols: AND OR NOT ( ) IDs
Example Syntax: (1 AND (2 OR 3) AND 4 AND (NOT 5 OR 6))

Step 7:
Select operators and values for fields you want to filter.
Additional information about operators can be found on the next slide

Step 8:
Add logical expressions as needed.

Logical expressions can only be added for fields with all filter columns filled in. It uses the ID number to differentiate between the different set up filters.

Parenthesis ( ), AND, NOT & OR can be used in **logical expressions** to limit data.

In the example image to the left, the logical expression is including all active male 7th grade students and all active female 6th grade students.

Query Wizard: Filter Parameter Operators
Reporting > Ad Hoc Reporting > Filter Designer

Operator	Description
=	Returns an exact match of value
<>	Results not equal to the value
IN / NOT IN	IN: Includes Value NOT IN: Excludes Value
BETWEEN	Filters data between two specified values (Works for numbers, dates and strings)
LIKE	Searches for test string in field
SOUNDS LIKE	Returns names with similar sound patterns
CONTAINS	Searched for strings that include the same data entered by the user in the field.
STARTS WITH/ ENDS WITH	STARTS WITH: Searches for strings that begin with the same data entered Ends With: Searches for strings that end with the same data entered
IS NULL	Returns fields that are completely NULL- 0
IS NOT NULL	Returns all fields that are not NULL- 0
=TRUE/ =FALSE	=TRUE: Returns checkbox values of True =FALSE: Returns checkbox values of false

Query Wizard: Output Formatting
Reporting > Ad Hoc Reporting > Filter Designer

Output Formatting allows the user to control how each field is reported and displayed when exported.

Format the output file/report

☐ Output distinct records

Field	Output	Seq	Sort	Direction	Column Header	Alignment	Formatting	Length
student.activeToday	☐			⌄		⌄	⌄	⌄
student.gender	☑	2	1	Ascend ⌄	Gender	Center ⌄	⌄	⌄
function.Student Name	☑	1		⌄	Student	Left ⌄	Upper Case ⌄	10
student.grade	☑	3	2	Ascend ⌄	Grade Level	Center ⌄	⌄	

Output	Seqs	Sort	Direction	Column Header	Alignment	Formatting	Length
If you do NOT want the field to show during output, **Uncheck** the box next to the specific field.	Enter the number in which the fields should appear. *If Blank the fields will output the current order	Enter a number to determine which fields will be sorted.	To specify how the field should be sorted. *A number must be in the Sort column for this area to populate	To change the header that will appear on the report. *If left blank the field name will be used.	Can decipher the alignment of the text: Left, Right, Center	Specifies how the data will be formatted. The options can vary based on the field.	Enter the maximum number of characters to show during output.

TIP: The **Output Distinct Records** checkbox allows data to output unduplicated records based on field values

Query Wizard: Grouping and Aggregation (optional)
Reporting > Ad Hoc Reporting > Filter Designer

Optional: *Places results into groups and calculation can be performed on the results.*

Select the field(s) to group together in the **Group By** dropdown list and determine the order under the **Group Order** column.

Determine how you would like calculations applied to the groups by selecting the applicable fields in the **Aggregate/Sub Total By** column and the type of calculation under the **Aggregate Type** column

Group the data into sections that can have aggregates/sub-totals

Grouping	Group by	Group Order
Tier 1	student.grade	Ascending
Tier 2		Ascending
Tier 3		Ascending
Tier 4		Ascending
Tier 5		Ascending

Aggregate/Sub Total by	Aggregate Type
student.grade	Record Count

Record Count
Distinct Count
MIN
MAX
SUM
AVG
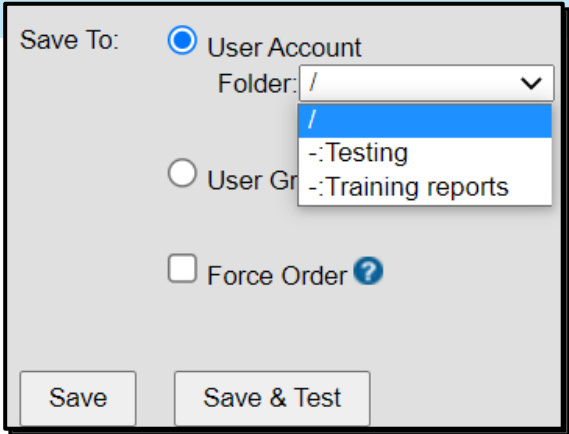
Save To: ○ User Accou
Folder:

Query Wizard: Saving (User Account)
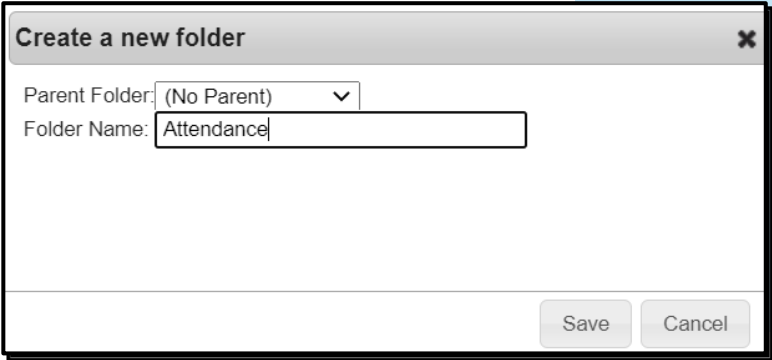
It is recommended to save a copy of the filter under your user account first and then make a copy of the filter for any user groups that need access to it.

At the bottom of the Query Wizard screen, users can select a specific User Folder to Save their newly created report.
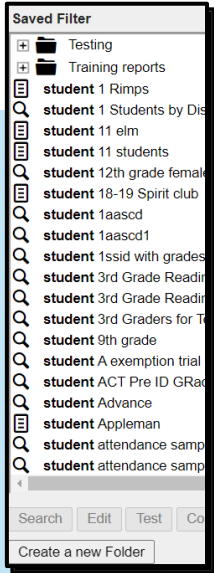
Folders are created on the Main Filter Designer screen. Users can see an alphabetized list of their saved AdHoc filters. Folders display at the top of this list. To create a New Folder, select **Create a New Folder.**

Enter a **Name** for the Folder you would like to create.

To make this a sub-folder, select a previously created folder in the **Parent Folder** dropdown.

Query Wizard: Saving (User Group)

While users can save filters directly to User Groups, it is suggested they save filters to their accounts first, then save copies of the filters to the User Groups. These will then be shared between all members of that user group.

1) Highlight the report you want to copy
2) Click the **Copy** button
3) A copy of the ad hoc will be created with "Copy of" in front of the report title, select the copied report.
4) Click **Edit**
5) Select User Group and choose a user Group to save the report to.
6) Click **Save**
   Note: You may want to edit the report name to remove 'Copy of'

TIPS:
Users can only save filters into groups they are in.

Users can only use filters that are saved under their user account or are saved in groups that they are in.

Filters saved into groups can be edited by anyone in that group.

23
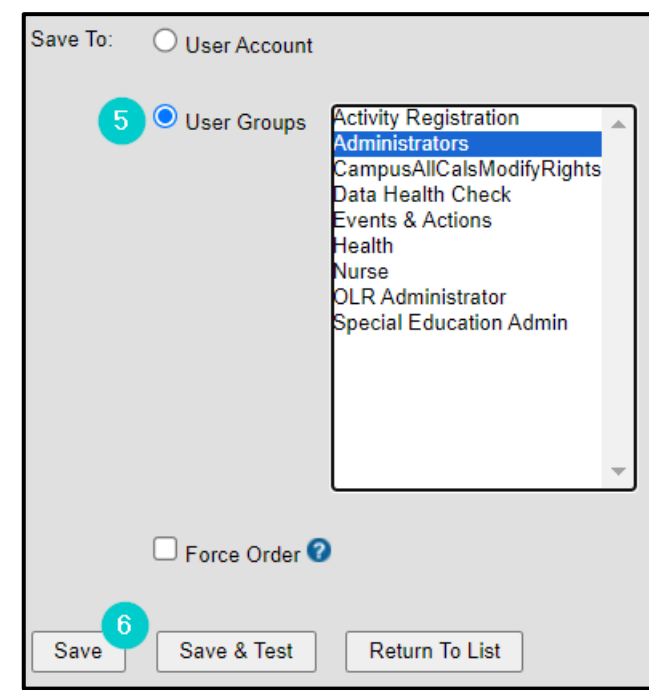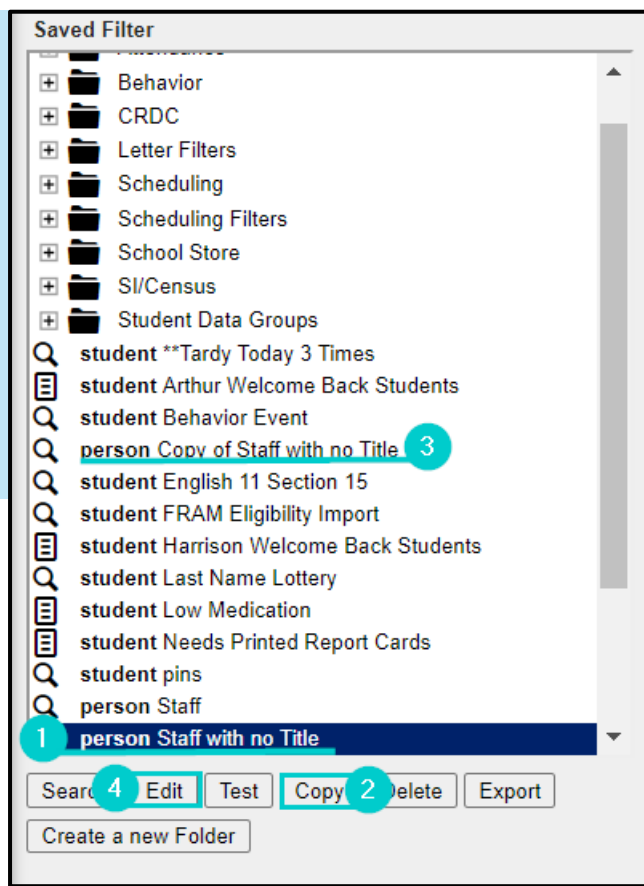
SELECTION EDITOR *AND* PASS-THROUGH SQL

Reporting > Ad Hoc Reporting > Filter Designer

Selection Editor

Reporting > Ad Hoc Reporting > Filter Designer

> **Selection Editor** is used to create hand-picked lists used for filtering data. These lists must be updated manually when changes are needed.

Step 1:
Add a descriptive Selection name
Optional: add short and long description

Step 2:
Add items to the selection list using the arrows.
- Items can be filtered and sorted using the quick search area.

Step 3:
Save the Selection, note that the same settings for saving under the user account and groups apply to selections.

Filter Designer ☆

Ad-Hoc Selection Editor

Selection Name: _____ **1**

Short Description: _____

Long Description:

Quick Search:
Active today:	Yes
Grade:	All
Name:	_____ (last name, first name)
Sort:	Grade, Name

All Students
- 02 Garcia, Marty #231000003
- 02 Hoffknecht, Ria #117520
- 02 Hoge, Yoshio #117549
- 02 Hohl, Liffey #117568
- 02 Holden, Christopher #117585
- 02 Holder, Eloise #117591
- 02 Howitt, Rose #118045
- 02 Howse, Cane #118069
- 02 Hufeland, Katy #118105
- 02 Huggins, Vere #118116
- 02 Jetschmann, Calvin #118690
- 02 Jewson, Kinsey #118706
- 02 Johmann, Sheridan #118758
- 02 Johnson, Marty #231000001
- 02 Jollye, Leila #118780

2
--->
<---

Selected Students

Save To:
● User Account
  Folder: /
○ User Groups

3

Save   Return To List

Pass-Through SQL

Advanced Filter useful when you need to apply advanced logic not available in Query Wizard.
Only returns basic information, Cannot be used to create custom reports. Used for searching and filtering only.
Requires some basic understanding of SQL scripting.

Ad-Hoc Pass-through SQL Query Editor

Filter Name: No guardian

Short Description: This will return student for whom there is no guardian listed

Long Description:

Create a Student Pass-through Query
SELECT DISTINCT student.personID
FROM student

```
LEFT OUTER JOIN RelatedPair rp ON rp.personID1 =
student.personID
AND rp.guardian = 1
```

WHERE 1=1 AND student.calendarID = <selected Calendar>
AND student.endYear = <selected Year>
AND student.structureID = <selected Schedule>

```
AND rp.personID2 IS NULL
```

Test Query Results

Save To: ○ User Account

Campus Community has Pass-Through SQLs you can try

Some modifications may be needed before they run correctly in your district. Any areas colored RED in a Campus Community Pass-Through SQL report need to be modified before it will run correctly.

Student Queries:
kb.infinitecampus.com/help/student-pass-through-queries

Census or Staff Queries:
kb.infinitecampus.com/help/census-staff-pass-through-queries

Course or Section Queries:
kb.infinitecampus.com/help/course-section-pass-through-queries

Troubleshooting: Frequently Asked Questions
Reporting > Ad Hoc Reporting

An ad hoc was shared within my user group, but I am receiving an error when I am attempting to open the report.

Tool Rights - You and the creator of the ad hoc may have different tool rights assigned. Keep in mind: Users can only pull ad hoc fields in conjunction with the rights they have access to throughout Campus.

I am seeing duplicate data in my Query Wizard AdHoc reports.

Filtering or Output Distinct Records - Depending on your query, you may need to add additional filters or filter logic to reduce the amount of data returned. In addition, it is suggested that you select the **Output Distinct Records** checkbox in the output formatting area to avoid duplicate data.

I need multiple types of data in my report, student, course, or staff and I can't seem to get them all in one report.

There are limitations to AdHoc, and sometimes there are reports that are too complicated or that reach to too many areas to create within AdHoc. We suggest trying to find ways to split these reports up into separate reports that can later be combined in Excel.

TROUBLESHOOTING

INFINITE CAMPUS SUMMER TRAINING

HOW TO BE A CAMPUS SUPERHERO!
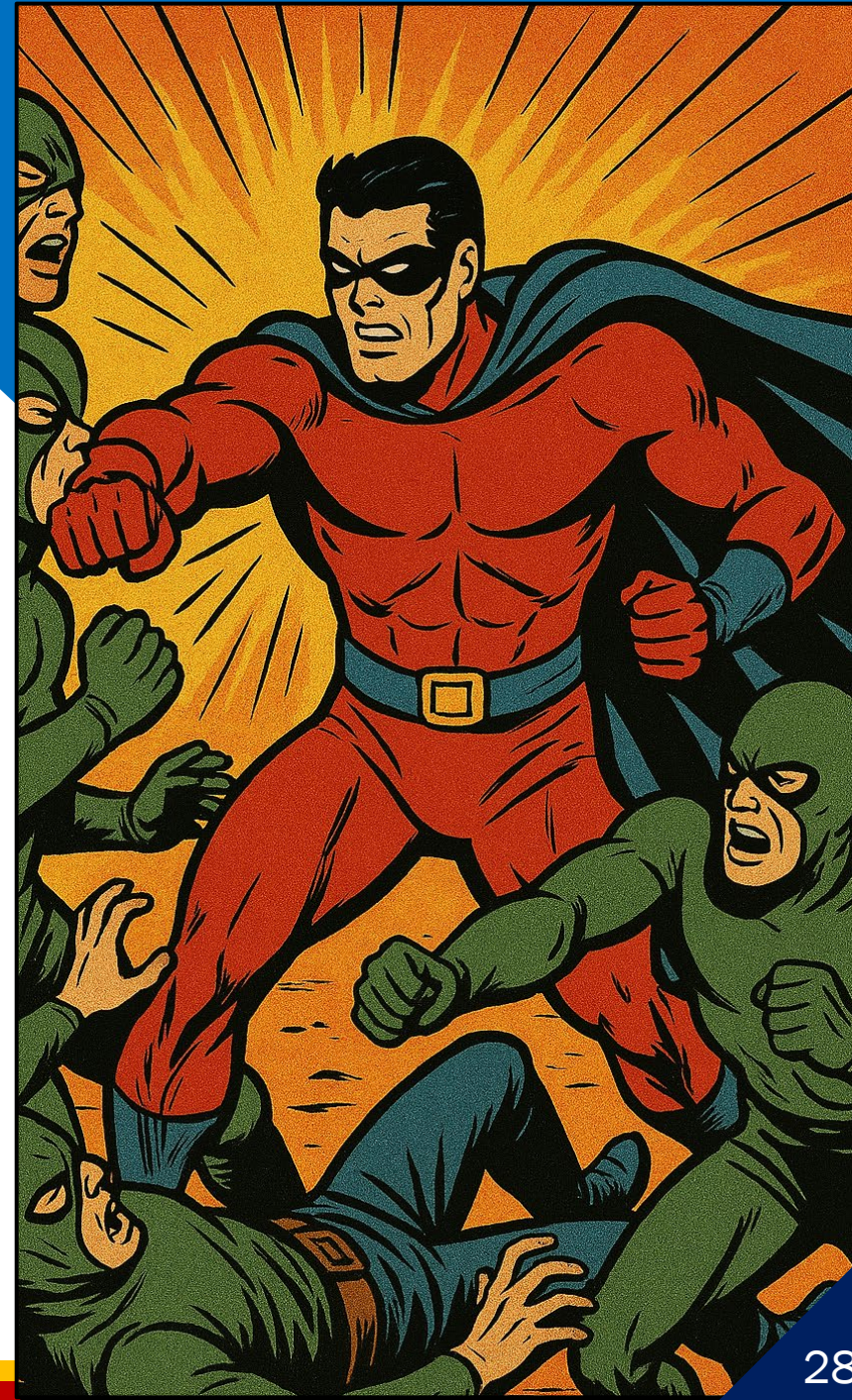
Troubleshooting: Finding Filter Fields

Reporting > Ad Hoc Reporting

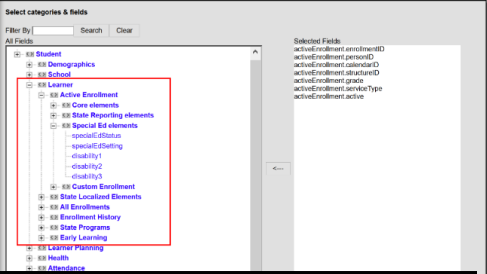Having issues finding the correct filter field? *Check the Campus Community Knowledge Base*

Knowledge Base includes complete listings of all Query Filters.

(You can use Ctrl-F to search in your browser)

Student Filter	https://kb.infinitecampus.com/help/student-filter-fields-for-ad-hoc-reporting
Census-Staff Filter	https://kb.infinitecampus.com/help/census-staff-filter-fields-for-ad-hoc-reporting
Course/Section Filter	https://kb.infinitecampus.com/help/course-section-filter-fields-for-ad-hoc-reporting
Fees Filter	https://kb.infinitecampus.com/help/fees-filter-fields-for-ad-hoc-reporting

Enrollment Information in Ad hoc Query Wizard

Student Enrollment information is available in the Query Wizard for Student data types. When building Student data type filters, the fields are available in the **Learner > Active Enrollment, All Enrollments and Enrollment History** folders.

- Use the Active Enrollment fields to report current year enrollment information. These fields are labeled as **activeEnrollment.XXX.**
- Use the All Enrollments fields to report information for all enrollment records - current year enrollments, past enrollments and future enrollments. These fields are labeled as **histEnrollment.XXX.**
- Use the Enrollment History fields to report enrollment information that was added using the New Enrollment History icon. These fields are labeled as **enrollmentHistory.XXX.**

Many Knowledgebase articles also include information on where their fields are located when creating AdHocs.

Troubleshooting: Attribute Dictionary

System Admin > Custom > Attribute/Dictionary

> Still can't find the filter you are looking for? Check the **Core Attribute Dictionary.**

Look through the attribute dictionary for the field you are looking for in the query wizard.
Attribute dictionary is sorted by areas, similarly to the query wizard.

Once you locate your field, click on it and look at the '**Field Name**' area in the **Campus Attribute Detail** area.

In this example, to pull **How Received** information from the enrollment screen, you will need to use the **stateAid** field in the query wizard.

Core Attribute/Dictionary

Save

Campus Attributes/Dictionary Editor

- Home School IRN
- Home School Name
- How Received
  - Dictionary (36 Entries)
- How Received IRN
- Immigrant
- Legal District of Residence
- Local End Status
- Local Start Status
- Majority of Attendance IRN
- Mathematics
- Mathematics Grade 3-8

Campus Attribute Detail

*Display Name	*Screen Location
How Received	Enrollment
*Field Name	*Data Type
stateAid	drop-down list

Max Size	Seq		Hide	Required	Copies Forward
	0		☐	☐	☑

Default Value
*

Commonly used Fields with different Query Field Names

Sent Reason 1: servingDistrictStatus	**How Received IRN:** servingDistrict
District % of Time: admOverride	**Building % of time:** percentenrolled
Core Area for Credit: transcriptField1	**Dual Credits:** transcriptField2

INFINITE CAMPUS SUMMER TRAINING

HOW TO BE A CAMPUS SUPERHERO!

Please help us help you, by filling out a training survey.

www.metasolutions.net/campussurvey

Need More? Get More!

META IC Support: infinitecampushelp@metasolutions.net

META IC Training Videos & Docs: metasolutions.net/campustraining

META IC Website: metasolutions.net/infinitecampus

THANK YOU!