Dean’s Dashboard Walkthrough

Goal and Objectives of the Guided Tour

GOAL:

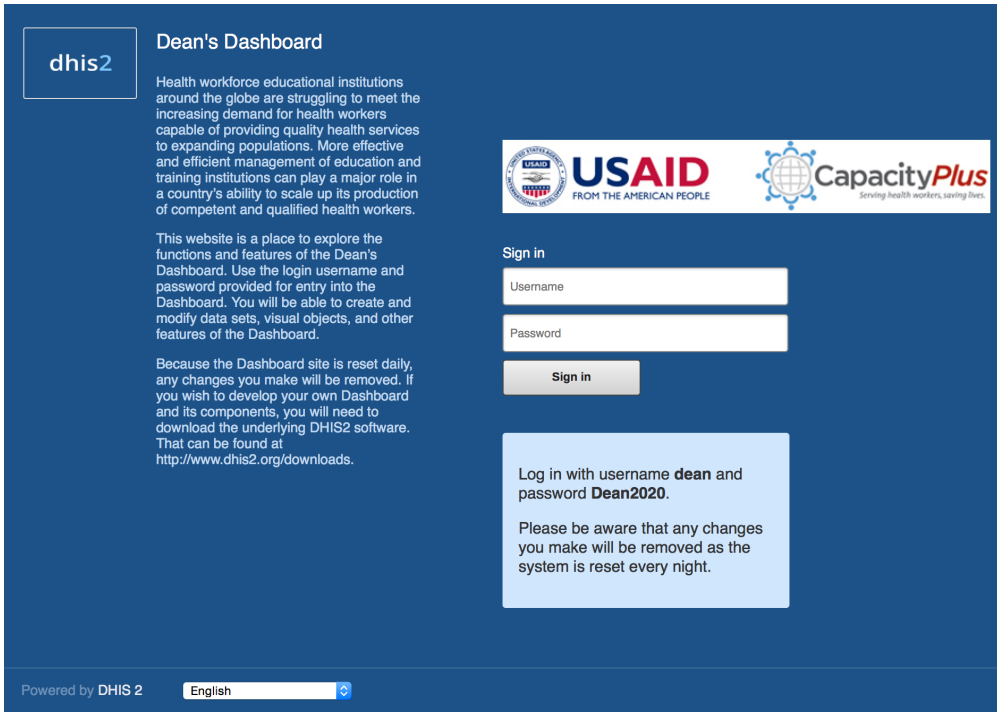
- After participating in the guided tour potential users of the Dean's Dashboard system will understand the purpose of the software and how it can be used to develop and update data visualization objects for information-based decision making.

OBJECTIVES:

This presentation will familiarize potential users with:

- The navigation structure, features, and functions of the system
- The process of designing a visual object, entering and editing data, assigning the object to a key performance area, and updating data for monitoring and decision making
- The types of decisions and actions that should be taken prior to starting to use the system
- The people, training, and resources needed to make optimal use of the system

Getting Started



How to log in

- Using the following URL in your web browser to access the Dashboard: https://apps.dhis2.org/edu
- When you are prompted for your username and password, enter “dean” for the username and “Dean2020” for the password
- The main webpage of the Dashboard will then appear

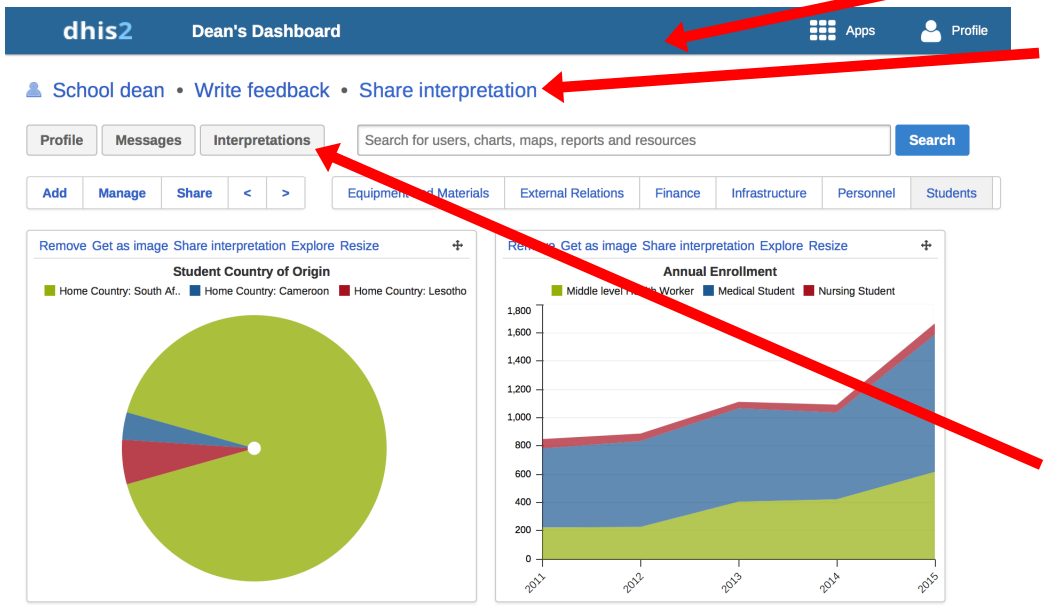
Purpose of the System

- The Dean's Dashboard system can pull aggregated data from other management information systems used by the school and display that data in visual charts and graphs. The visual charts and graphs allow the school's management to easily monitor progress and trends in information that is strategic for the successful operations of the school.
- Data can be pulled from systems such as: finance and accounting, facilities management, student information management, student records, learning management, student assessment, human resources management, alumni management, or any type of enterprise resource planning (ERP) system.
- It contains all the charts and graphs that the school is using to monitor progress in a number of key performance areas organized by category, such as
  - Equipment and Materials
  - External Relations
  - Finance
  - Infrastructure
  - Personnel
  - Students

DHIS2 Languages

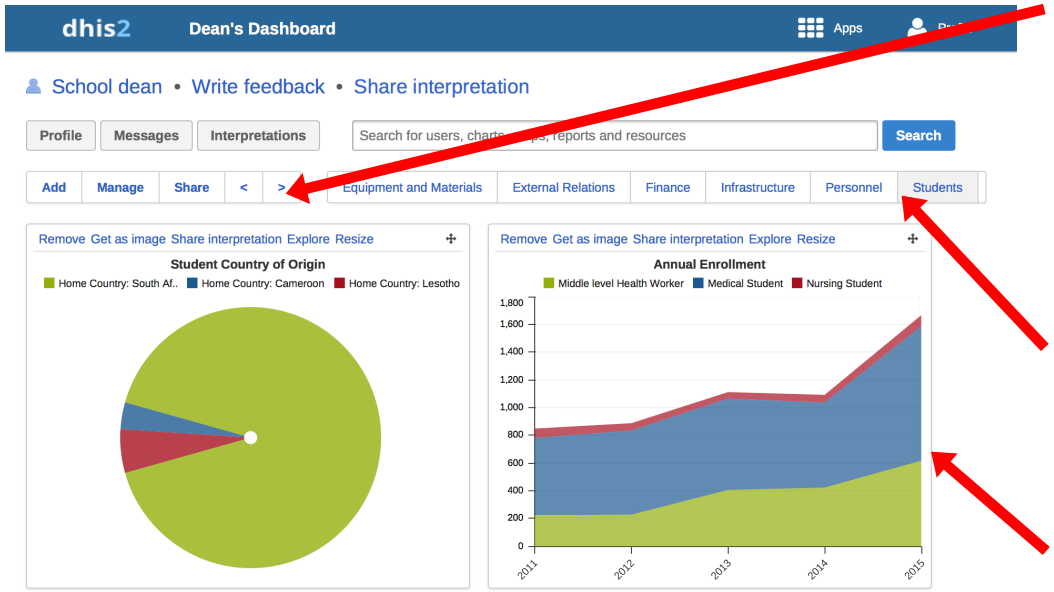
Arabic
Arabic (Iraq)
Arabic (Sudan)
Bengali
Bislama
Burmese
Chinese
Dzongkha
English
French
Indonesian
Khmer
Kinyarwanda
Lao
Nepali
Portuguese
Portuguese (Brazil)
Russian
Spanish
Tajik
Vietnamese

Components of the System: Main Screen



- Header with the DHIS2 logo, the Dean's Dashboard name, and Apps and profile icons
- Body header lists the **School dean** to link to the current user profile, **Write feedback** for commenting to the developers, and **Share interpretation** opens a window to link to functions:
  - From Pivot table, generate a pivot table and click 'Share' on the top menu
  - From Data visualizer, load a favorite and click 'Share' on the top menu
  - From GIS, load a favorite and click 'Share' on the top menu
  - From Data set report, generate a data set report and click 'Share' on the top menu
- Buttons for
  - **Profile** to update the user's information
  - **Messages** to write a message to the developers
  - **Interpretations** includes advanced functions for the Pivot table, Data visualizer, GIS or Data set report
  - A search box to look for components created in the Dashboard

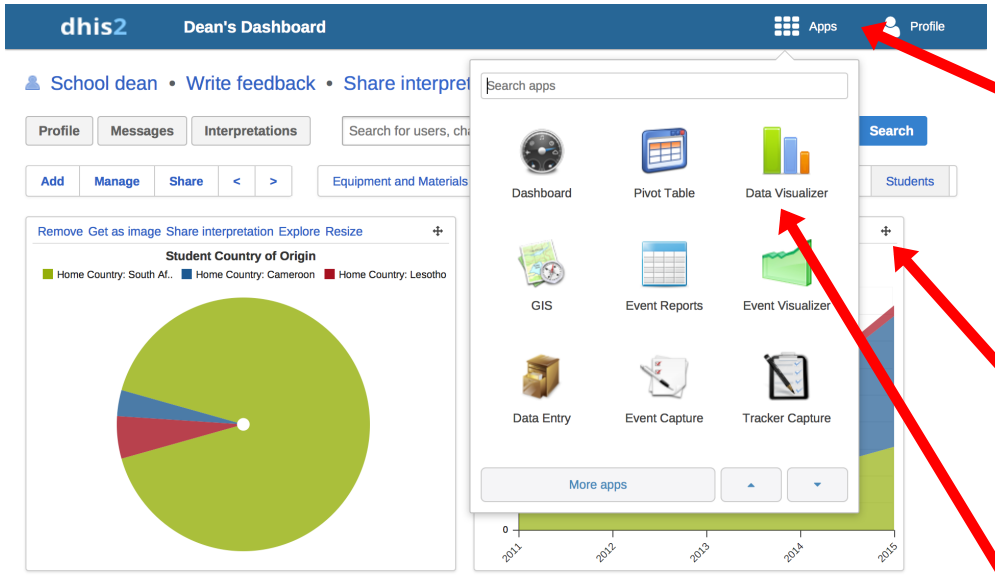
Components of the System: Main Screen (cont.)



- Add, Manage, Share, <,> Buttons
  - **Add** a new dashboard (Current ones are listed to the right of these buttons)
  - **Manage** the currently selected dashboard
  - **Share** opens a window to share access to the current dashboard
  - **<** and **>** navigate to different dashboard sets listed to the right of these buttons
- Dashboard sets are listed to the right of the navigation buttons; pressing any of them opens the dashboard relating to that topic. Pressing the category buttons reveals example charts for each key performance area, and permits the exploration of the types of information systems that were the source of data for the charts
- Data objects reside within each dashboard and may contain any number of charts, graphs, tables, and maps—all visualizing data entered or imported into the system

The standard dashboard was designed to monitor the programs at a National University, Faculty of Health Sciences

Navigation



A number of steps are required to develop visual charts and graphs, keep them up-to-date, and adapt them to the changing needs of a school

- Choose the "App" menu found in the upper right of the main dashboard screen. While it's titled "Apps", it should not be confused with the Apps you download for your smartphone or tablet. Apps in this context refer to the applications that are used within the Dean's Dashboard system to develop, maintain, and update visual objects.
- Clicking on the Apps menu opens a number of functional components. These include apps to create and edit a dashboard, create and edit pivot tables, and visualize data, among many other functions.
- Our tour will focus on the "Data Visualization" app that is used to create charts and graphs.

Example: Development of the Enrolment Dashboard Graphs

- Step 1: Meeting of the National University Faculty of Health Sciences Dean's dashboard committee.
  - Objective: To develop dashboard items.
  - Decision: Use the dashboard of monitor the implementation of the faculty's strategic plan
- Step 2: Review the strategic plan and identify which key performance areas to start with:
  - Major Goal Identified: Scaling up the production of health professionals
  - Example Key Performance Area: Teaching and Learning

Step 3: Identification of indicators to track in a key performance area

- Annual *enrolment headcounts* for the undergraduate and postgraduate courses in Nursing, Medicine and Surgery, Medical Sciences, Medical Clinical Practice, and Science in Health Promotion.
- Annual *graduation headcounts* for the undergraduate and postgraduate courses in Nursing, Medicine and Surgery, Medical Sciences, Medical Clinical Practice, and Science in Health Promotion.

Step 4: Identify the sources of the required data:

- The undergraduate enrolment data was obtainable from the University Bureau of Planning and Institutional research. It was also obtainable from the heads of the schools of medicine, nursing, and allied health sciences.
- The postgraduate enrolment data was obtainable from the heads of the programs carrying out postgraduate training – Biochemistry, Physiology, Microbiology, Chemical Pathology, and Nursing.
- The enrolment data for the clinical registrar (residency) training was obtainable from the postgraduate office and from the coordinators of registrar training in district hospitals.
- The annual graduation data was obtainable from the University examinations office. The data was also obtainable from the office of the administrator of the Faculty of Health Sciences

Step 5: Collect the required data

Task specific persons to collect the required data (over a 4 week period) from the identified sources:

- University Bureau of Planning and Institutional Research
- University Examinations office
- Heads of Schools in the Faculty
- Heads of Departments in the Faculty
- Coordinators of Clinical Registrar Training at the Training Hospitals
- Office of the Administrator of the Faculty of Health Sciences

Step 6: Collected Data

The dashboard project manager collated all the data collected. With the help of two task members, they tabulated the data, and then aggregated them into overall annual enrolment and graduation headcounts for the years 2011, 2012, 2013, 2014 and 2015.

Table 1. Enrolment by Degree Program

	Years				
Program	**2011**	**2012**	**2013**	**2014**	**2015**
Nursing	263	253	265	234	230
Medicine and Surgery	520	520	545	534	603
Medical Sciences	34	50	51	48	52
Medical Clinical Practice	78	84	97	85	108
Science in Health Promotion	197	174	130	92	87

Table 2. Graduates by Degree Program

Program	**2011**	**2012**	**2013**	**2014**	**2015**
Nursing		230	254	215	219
Medicine and Surgery		421	447	491	513
Medical Sciences		49	49	46	50
Medical Clinical Practice		82	95	83	107
Science in Health Promotion		167	124	90	86

Step 7: Final data review

The National University Faculty of Health Science dashboard team reconvened to

- Review the collected primary data
- The aggregated data
- Approve the coding of the aggregated data
- Approve the graphic presentation of the aggregate data.

Step 8: Derived data elements

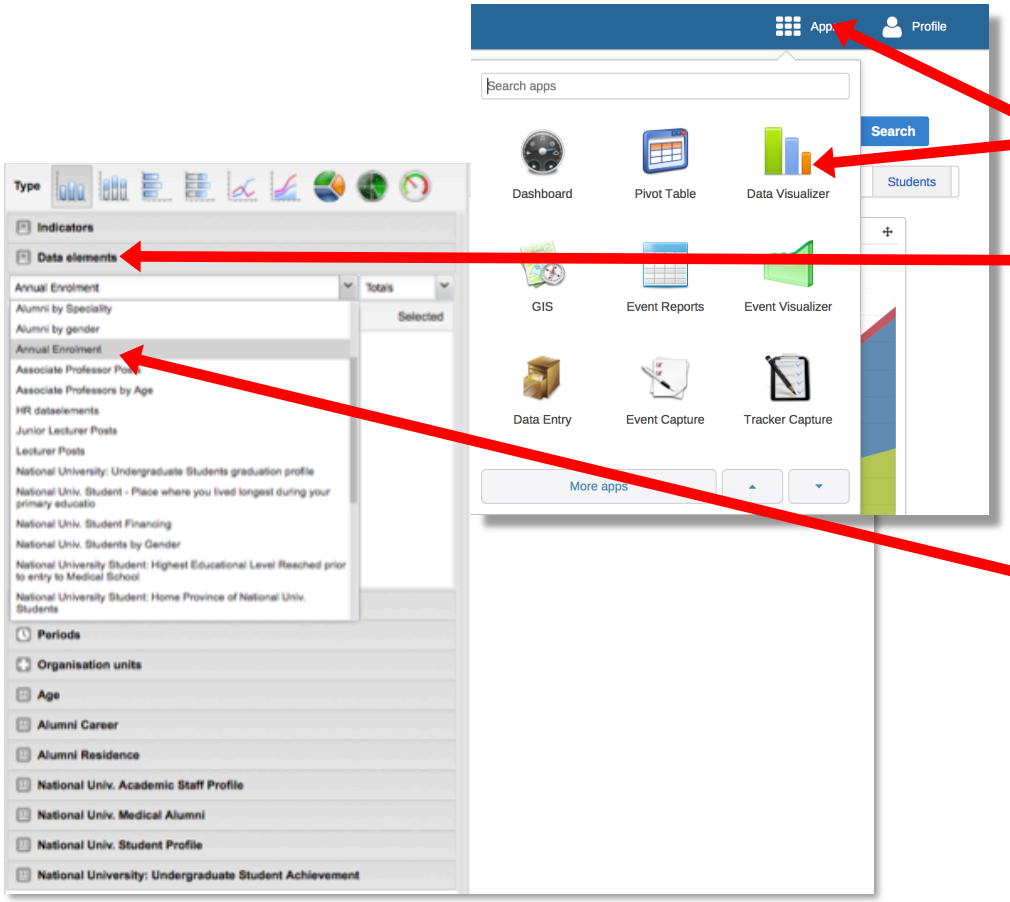
Table 3. Percent Graduating by Year

Percent Graduating	2012	2013	2014	2015
Nursing	91%	96%	92%	95%
Medicine and Surgery	81%	82%	92%	85%
Medical Sciences	98%	96%	96%	96%
Medical Clinical Practice	98%	98%	98%	99%
Science in Health Promotion	96%	95%	98%	99%

Step 9: Data entry

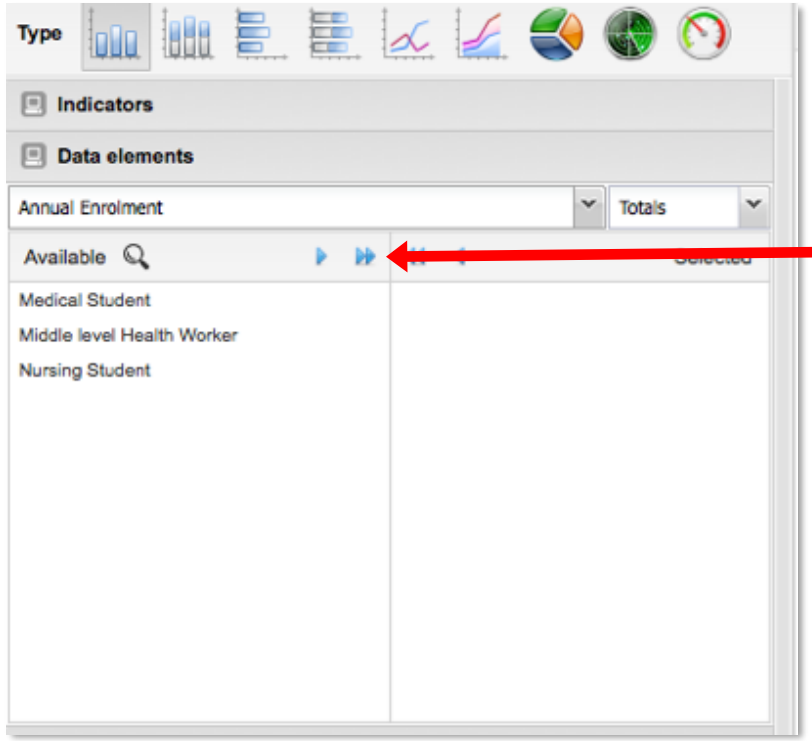
- To get started, login to the Deans Dashboard. Observe that the username and password is case-sensitive!

Step 10: Data Visualizer



- Once logged in, from the “Apps” menu, click on “Data visualizer”.
- Once the data visualizer loads, click on the “Data elements” panel to activate it, since we will be making a graph of data elements as opposed to indicators.
- Then select “Annual Enrolments” from the drop-down, which appears in the “Data elements” panel.

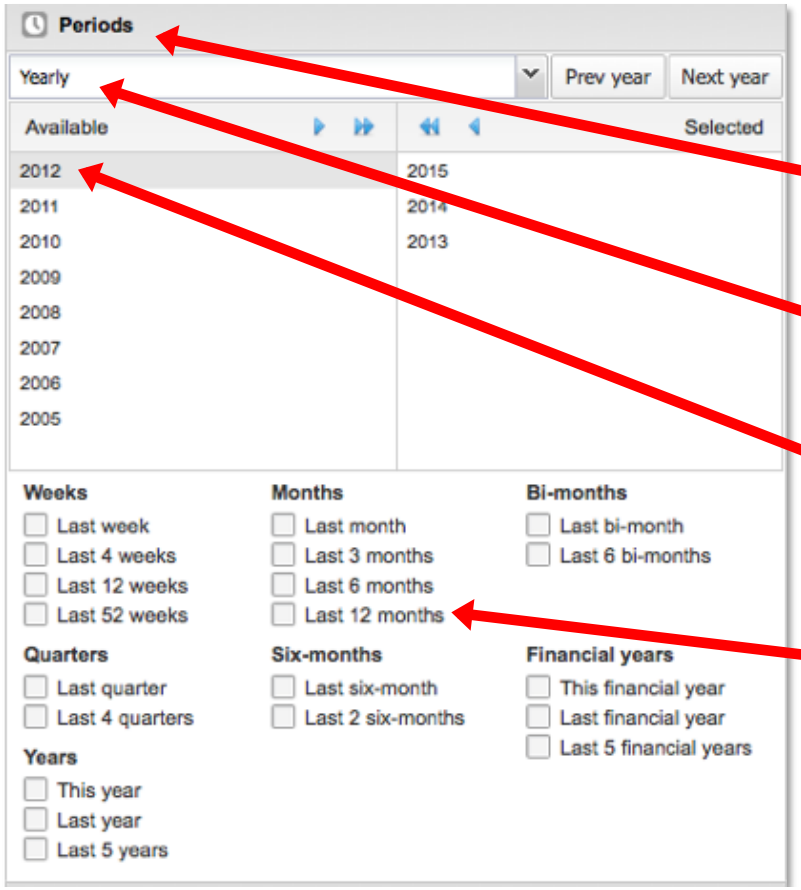
Step 11: Data Elements List



We now see a list of data elements, which belong to the group “Annual Enrolment”.

- Using the double-arrow, we can move all of these data elements into the “Selected” column.

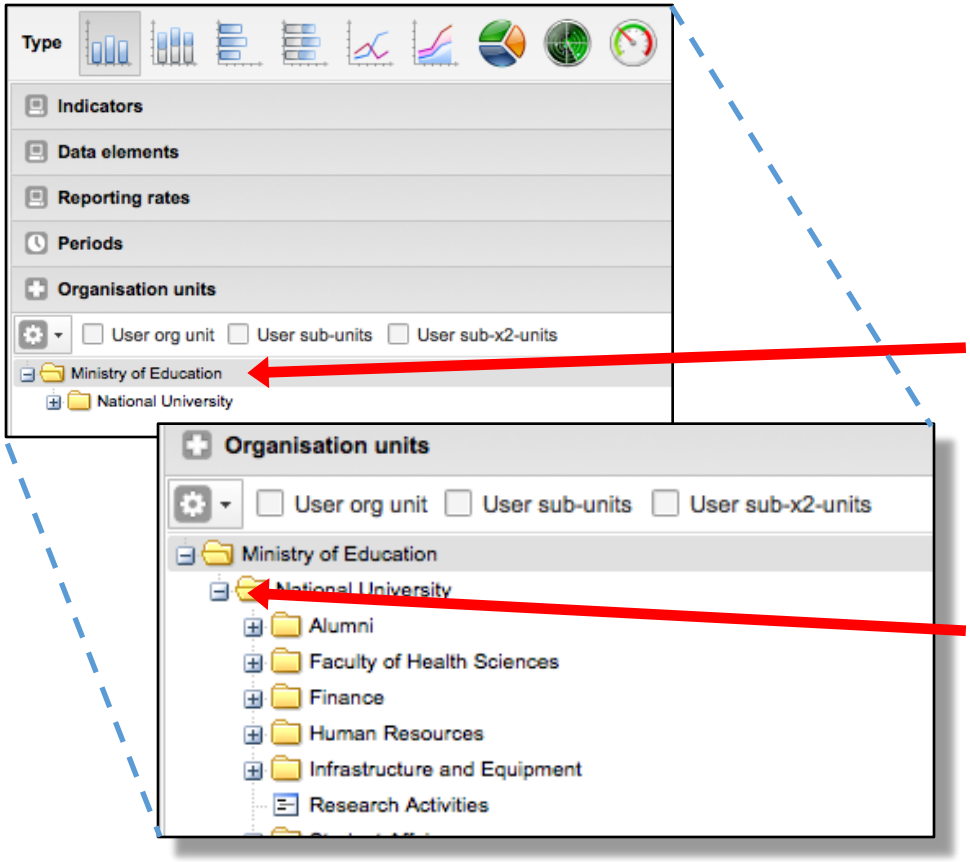
Step 12: Time Period



Select the time period for which we want to visualize the data over.

- Click on the “Periods” panel to open it
- Select “Yearly” from the period type menu
- Double-click each year to move it to the right column
- Be sure to untick “Last 12 months”

Step 13: Organisational Unit

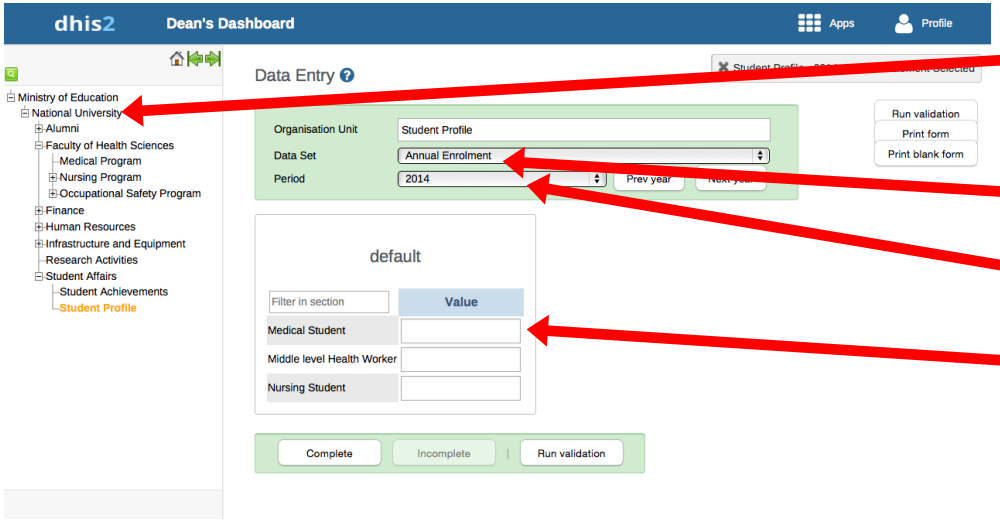


Once the period is selected, then proceed to selecting the organisational unit, in this case "National university".

- Click the "Organisational units" panel, and expand the organisation unit tree by clicking on the "+" icon to the left of "Ministry of Education", then
- Click on the "+" icon next to "National University" to open the dropdown list

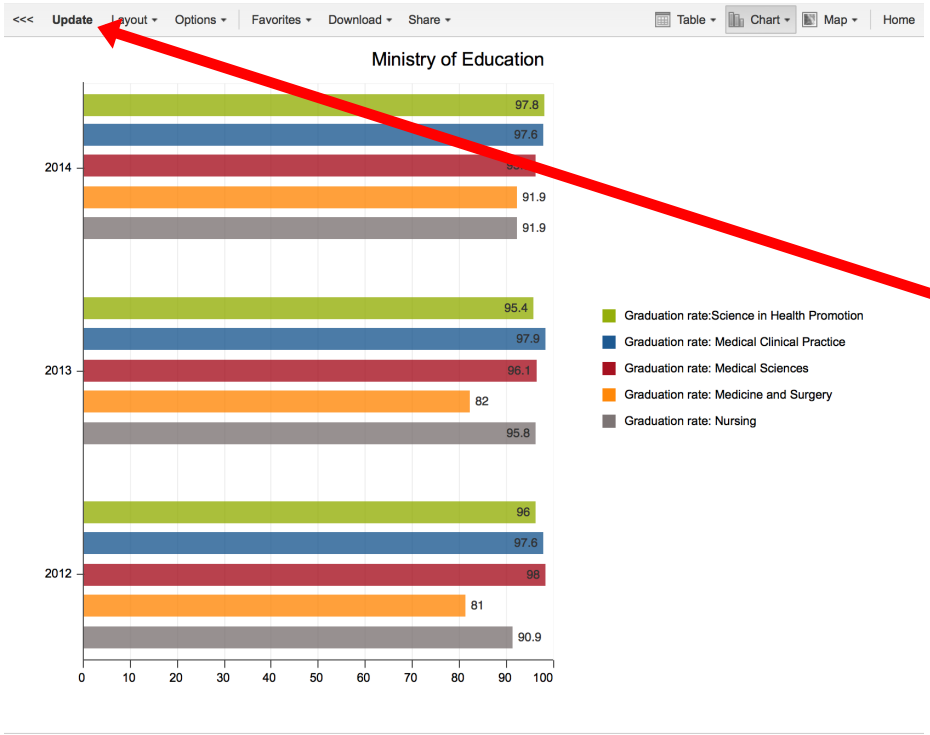
Step 13a: Enter Data

Data Entry



- Use the Data Entry app
- Select the appropriate organizational unit
- Choose Annual Enrollment
- Choose the Year
- Enter values

Step 14: Update

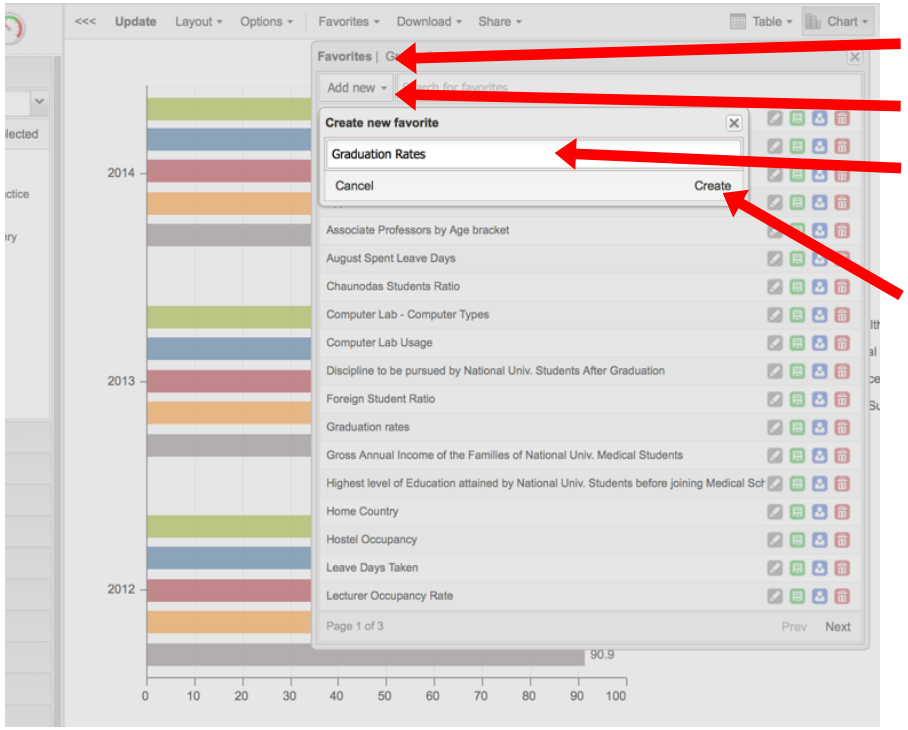


Data Visualizer

Return to the Data Visualizer app
At this point, all of the options should be set to generate the graph. Press "Update" causes the graph to be displayed.

- Click "Update" to update the graph

Step 15: Favorite



- Click “Favorites” and then
- Click “Add new”,
- Type the name of the favorite into the dialog box and
- Press “Create” to save the new favorite.

Once the graph is saved as a favorite, it can be added to a dashboard and recalled for later use in the data visualizer.

System Users

- The Institutional leadership ideally should appoint an implementation team, comprised of
  - A project manager – ***overall manager who should be familiar with all aspects of the Dashboard and will have unlimited access***
  - An information technologies (IT) expert – ***Technical expert, data management***
  - A representative of the institution administration, and
  - A representative from each of the educational programs offered in the institution. ***Source of data and consumers of the product***
- Several resources exist to support dashboard users
  - Step by step user's manual
  - Expert community support group
  - Training