WISERD DataPortal Training

Part 1: Creating an account

To access the WISERD DataPortal visit: http://data.wiserd.ac.uk
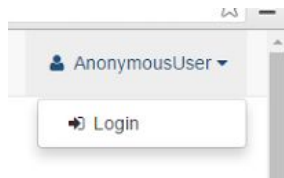
To use the full suite of DataPortal functionality you must first create an account using the **Login** button in the top right hand corner. You can either sign in straight away using an existing Google account, or create a new username and password.

Part 2: Meta-data search

One remit of the WISERD DataPortal is to try to encourage researchers to reuse secondary data. To do this meta-data about a large number of socio-economic surveys, such as the Census 2011, has been compiled into a single database.

Meta-data is a set of data which is used to describe other data, and the WISERD DataPortal splits each Survey into four related meta-data records:

Meta-data record	Description
Dublin Core	These records contain basic information about the survey as a whole. They may provide information on who produced the survey, how the survey data was collected, how many people responded and how to obtain the response data.
Survey	
Question	Details about each individual question asked as part of the survey.
Response	Details about the possible responses to a question.

The WISERD DataPortal allows users search this meta-data using keywords, encouraging them to find existing secondary data which is relevant to their research topic instead of collecting their own.

Task 1

1) Imagine you're a researcher interested in 'health' as a topic. Use the keywords search to search for 'health'.
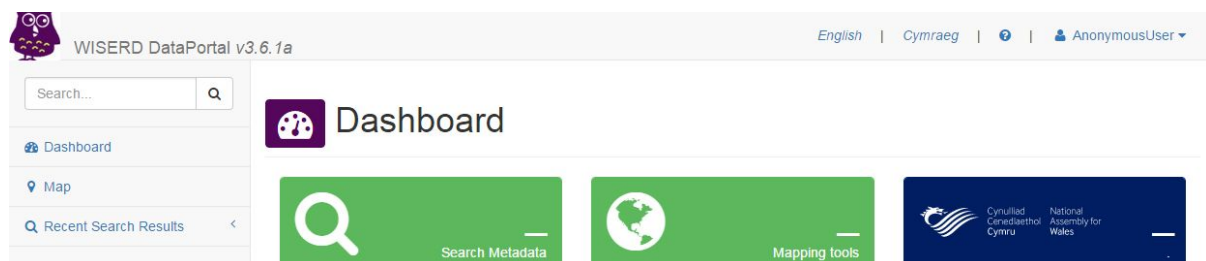
2) Looking at the search results, how many questions are there relating to the topic of health?

3) How many surveys are there relating to this topic?

You notice that WISERD DataPortal contains the Welsh Health Survey 2007 Questionnaire For Adults. Click **View** to find out more information about the Questionnaire.

Welsh Health Survey 2007 Questionnaire For Adults	Annual	Self Completion Questionnaire	2007-01-01	View	Unitary Authority ▾	Map Survey

4) Examine the meta-data record for this survey. If you decided that you wanted to download the data, where would you need to go?

5) Having found this survey, you are now interested in what questions were asked as part of it. Click on Questions to look at the questions linked to the survey.

Welsh Health Survey 2007 Questionnaire For Adults

Survey Metadata

Dublin Core   Survey   Questions

Dublin Core

Title   Welsh Health Survey 2007: Questionnaire for Adults

6) You are particularly interested in how frequently respondents visit their GP. How many questions are there in the survey which mention GP?
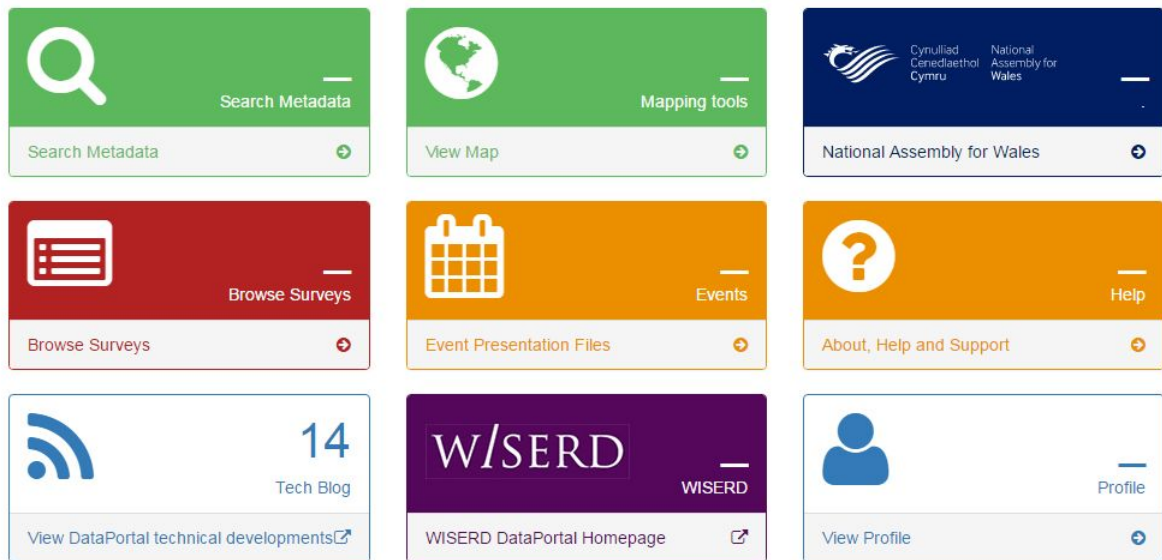
Part 3: Data mapping and download

The WISERD DataPortal can be used to find and map a variety of socio-economic data, points of interest and boundary data for Wales. You can then export the map and download the data for further analysis.

Task 2

You are now interested in finding out which areas of Wales are reported to have the worst health. This can be done using Census 2011 data, made available in the WISERD DataPortal using external data feeds.

1) Visit the WISERD DataPortal Dashboard and click **View Map**.

Dashboard

Search Metadata	Mapping tools	National Assembly for Wales
Search Metadata ➜	View Map ➜	National Assembly for Wales ➜
Browse Surveys	Events	Help
Browse Surveys ➜	Event Presentation Files ➜	About, Help and Support ➜
14 Tech Blog	WISERD	Profile
View DataPortal technical developments↗	WISERD DataPortal Homepage ↗	View Profile ➜

2) Click **Map Layers** and choose the **Remote Data** layer from the left hand menu. Use the search box to search for the keyword 'health'.
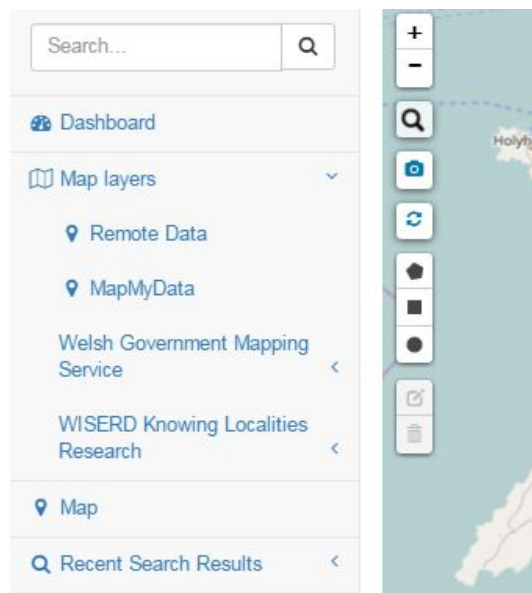
3) Scroll down the results until you see one called **QS302EW – General health**. This is a Census 2011 Quick Statistics dataset. Select this data and click **Add to Map**.

4) The next options menu allows you to select which parameters of the data you want to include in your output. From the following options menu, choose **Bad Health** from General Health, **Annually** from Frequency Code List, **percent** from Measures, **Total** from Rural/Urban and **LSOA** (Lower Super Output Area) from Geography. Click **Render to Map**.
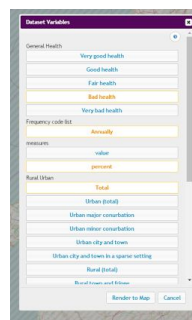
5) The following options menu allows you to select how your output will appear on the screen. Select as you see fit, give your layer an appropriate name and click **Show New Layer** to add it to the map.
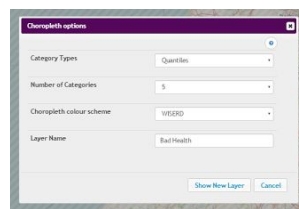
6) Navigate the map layer. Are there certain areas of Wales where health is reportedly worse than others? If so, generally speaking where are these?

7) This dataset can be downloaded for further analysis. Select an area of your choice and click **Download Dataset** in the right hand menu. *(This function is still under development).*

8) It is also possible to download a screenshot of this dataset. To do this use the **Camera** icon on the map toolbar (in the image above).

9) Use the **Remote Data** Map Layer to search for 'wimd' (the Welsh Index of Multiple Deprivation) and add Income Deprivation 2015 data for all ages by Lower Super Output Area (LSOA) (this data comes from StatsWales). Is there anything you notice about the relationship between the health layer and the income deprivation layer?


10) It is also possible to add data from other data feeds, such as those provided by the Welsh Government. Use the left hand side menu to select the **Welsh Government Mapping Service** layer and navigate to **Communities1st_Clusters** layer. Click this layer to add it to the map.

To view the new layer you may have to turn layers on and off using the Layer Manager (the brown icon in the top right hand corner of the map).
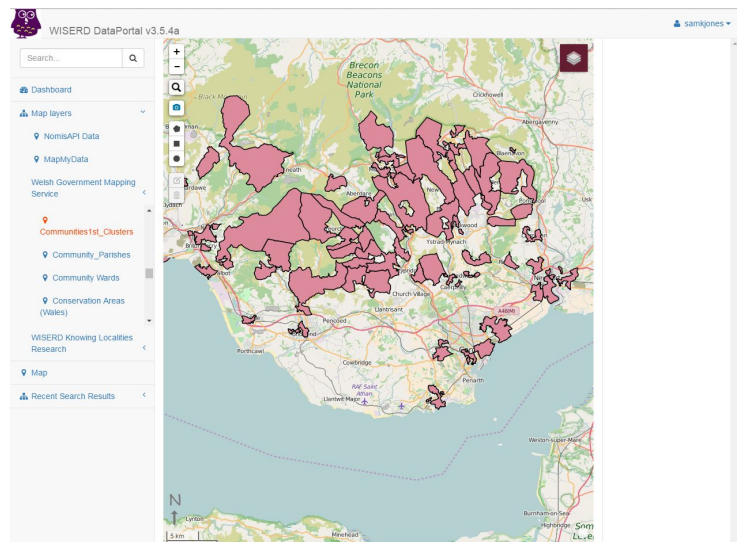
11) Are there any similarities between areas described as having poor health, high income deprivation and those which are classified as communities first clusters?
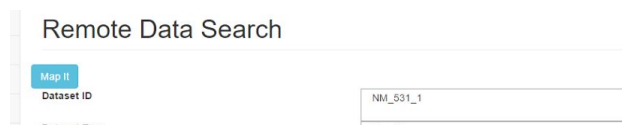
12) Once you have conducted a data search you may want to revisit again in the future. To do this click your username in the top right hand corner and choose **User Profile**.
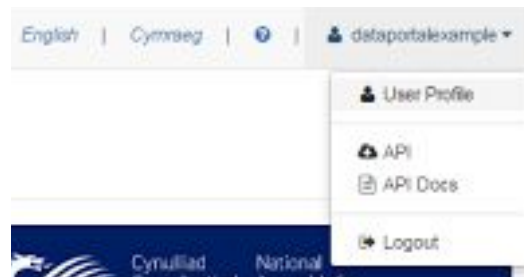
13) Your previous searches are listed on your profile page. Click the most recent 'Bad health' search to view the parameters selected.

14) Choose **Map it** to re-add it to the map

Part 4: Mapping your own data

The WISERD DataPortal allows users to map their own data for areas in Wales and to export this as a publishable map. This function has been specially designed so that all the mapping occurs inside the user's browser rather than on the WISERD DataPortal server. This means that potentially sensitive data does not leave the user's machine.

Task 3

1) Sample datasets are available at the bottom of the page at the following link: http://data.wiserd.ac.uk/help_support. Download the data called School Data 100.XLS. This contains a subset of 100 schools in Wales alongside the proportion of pupils who are eligible for free school meals (FSM). Once downloaded, open this dataset to examine the fields. One field contains the postcode, one contains the school name and one contains proportion of pupils eligible for free school meals (FSM).

2) To map this data close the Excel spreadsheet visit the WISERD DataPortal Dashboard and click **View Map.**

3) Using the left hand menu click the **Map My Data** layer.
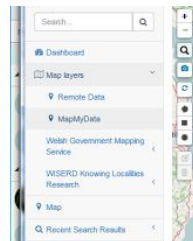
4) Navigate to the school_data.xlsx datafile you downloaded and add it to the DataPortal and click **Save**.

5) Give your dataset a name and select **postcode** as the Geography ID, **fsm** as the Data Value and **name, postcode and fsm** as the Secondary data values. Click **Save**. Your data will now be processed by the DataPortal. This may take some time.
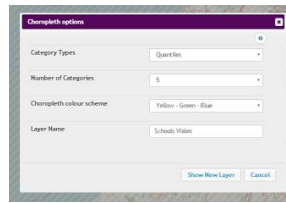
6) Once the data has processed, choose an appropriate Layer Name and value for displaying the data. Click **Show New Layer**.

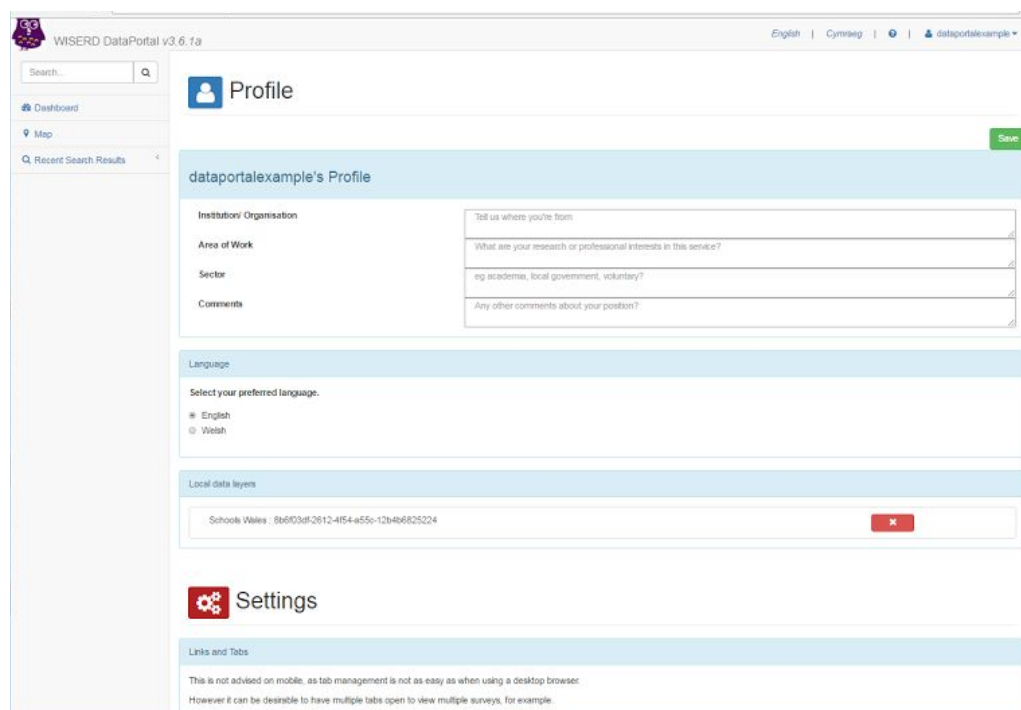7) Your new layer, which displays the locations of a subset of schools in Wales by postcode, will display on the map. Schools with higher proportions of pupils eligible for free school meals are displayed in darker colours and schools with low numbers of pupils are displayed in lighter colours as referred to in the legend in the bottom right hand corner.
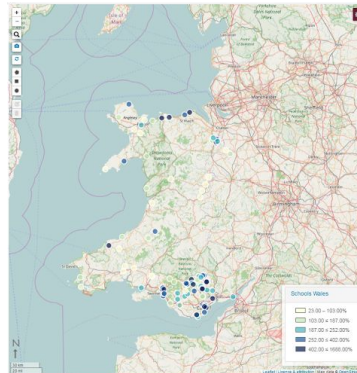
8) This will remain on the map until you choose to delete it. To turn the layer off use the Layer Manager (the brown icon in the top right hand corner of the map). To completely remove the layer, navigate to your User Profile and remove the local layer.

Part 5: Administrative functions

Admin users of the WISERD DataPortal have access to a range of additional functionality that allows them to edit the application's database. These functions can be accessed via the User Options menu in the top right hand corner. There are two main tools, the **Admin Panel** and the **SQL Explorer**.
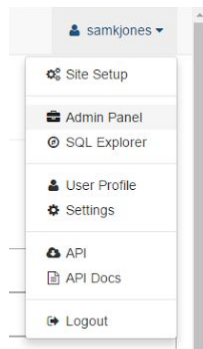
Admin Panel

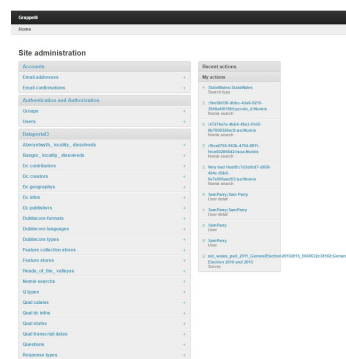The Admin Panel gives you access to every table in the WISERD DataPortal database. This allows you to add, edit and delete data from the database. It might be helpful to explore some of these tables to better understand what they contain. Particularly the **DC Infos**, **Surveys** and **Questions** tables as these contain the bulk of the WISERD DataPortal meta-data.

SQL Explorer

Here, administrators can use SQL to query the database and identify and amend errors in the data on mass. Previously used queries are saved for future use. Please familiarise yourself with this interface. There is a 'Playground' menu which allows the user to write experimental SQL. To protect the database only SELECT queries should be used. UPDATE or DELETE queries should not be used without further discussion with the Software Engineer.

10 Most Recently Used

Query	Last Run	CSV
survey without dc	06/28/2016 8:13 a.m.	⊕
N/A Thematic Tags From DropDown Field	06/28/2016 7:58 a.m.	⊕
questions without link_from	06/27/2016 1:49 p.m.	⊕
question with null survey	06/27/2016 1:45 p.m.	⊕
questions without links by survey	06/27/2016 1:45 p.m.	⊕
thematic group	06/27/2016 9:35 a.m.	⊕
null dc_infos	06/27/2016 9:34 a.m.	⊕
count responses	06/27/2016 9:34 a.m.	⊕
England	06/23/2016 9:29 a.m.	⊕
responses without questions	06/22/2016 1:54 p.m.	⊕

All Queries

Search

Query	Created	CSV	Play	Delete	Run Count
count responses	06/01/2016 by ubuntu	⊕	⬏	🗑	7
England	06/05/2016 by SamParry	⊕	⬏	🗑	7
Find UKIP Layer	06/15/2016 by samkjones	⊕	⬏	🗑	6
N/A Thematic Tags From DropDown Field	06/27/2016 by samkjones	⊕	⬏	🗑	9
null dc_infos	06/01/2016 by ubuntu	⊕	⬏	🗑	23
questions without link_from	06/01/2016 by ubuntu	⊕	⬏	🗑	96
questions without links by survey	06/01/2016 by samkjones	⊕	⬏	🗑	17
Question Thematic Tags	06/01/2016 by ubuntu	⊕	⬏	🗑	8