



Visualising and Interpreting Data

Session summary		Pupil context
This session aims to develop the pupil's ability to research data and represent this in a suitable chart. The pupils will learn how data representation is used as an effective tool to communicate findings on social research.		Suitable for KS3 pupils who have an understanding of different types of charts and graphs, and have some experience in creating their own.
Session aims	Resources needed	Link to English curriculum
<ul style="list-style-type: none"> ▸ Discover relevant and up to date information about the LGBT+ community ▸ Develop skills in researching data and representing this data in a suitable chart ▸ Learn how data representation can be used as an effective tool to communicate findings 	<ul style="list-style-type: none"> ▸ Presentation ▸ Raw datasets 	<p>"Use language and properties precisely to analyse numbers ... and statistics"</p>
Link to Welsh curriculum	Link to Scottish curriculum	Link to NI curriculum
"Construct a wide range of graphs and diagrams to represent the data and reflect the importance of scale"	"I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs, making effective use of technology"	"Interpreting mathematics involves pupils reflecting on mathematical solutions or results, and interpreting them in the context of a real-life problem or challenge"
Preparation ahead of the session		
<ul style="list-style-type: none"> ▸ You may need to let pupils know about School Diversity Week: you can find explainer slides in our resource library. ▸ Our intro slides contain information explaining the acronym LGBT+ ▸ Pupils should have a good idea of how to draw different charts, e.g. bar chart, pie chart, scatter diagram. ▸ Make sure the pupils have access to graph paper, ruler, pencil and protractors. 		

Timing	Activity	Suggestions for differentiation
0-5	Introduction <ul style="list-style-type: none"> ▸ Introduce the session and its main objectives. 	
5-15	Where does this data come from? <ul style="list-style-type: none"> ▸ Explain the context of the LGBT+ survey and other pieces of research to be referenced in the lesson. 	Explanation of survey will need simplifying - you could give pupils a quick survey to show what it is.
15-25	Choose your data! <ul style="list-style-type: none"> ▸ Ask the pupils to choose the information which they find most interesting from the data sets they have been given. 	Question wording will need simplifying.
25-30	How can you represent data? <ul style="list-style-type: none"> ▸ Ask pupils to match the names of the charts and graphs to the examples. ▸ Outline the importance of picking a suitable chart or graph for their data. 	Select examples the pupils with familiar with - remove histogram, box plot, etc.
30-40	Represent the data <ul style="list-style-type: none"> ▸ Pupils must represent their data in a suitable chart. 	Data will require simplifying - for example leaving only the 'total' column on one of the tables. Table 4, 'feeling comfortable in the UK' may be the most appropriate choice.
40-45	How has it helped? <ul style="list-style-type: none"> ▸ Ask pupils to explain to each other - in no more than a minute - as to how representing it in this way helped them understand it more easily. 	
45-55	What should we do now? <ul style="list-style-type: none"> ▸ Pupils role-play a meeting with a person at Just Like Us. They need to use their data representation to conduct a meeting with their partner and advise them on what they should do in their programmes. 	Give some examples of the kind of things a charity might do help people, like supporting teachers to help their pupils, providing information and support services, and changing public opinion.
55-60	What would you like to find out? <ul style="list-style-type: none"> ▸ Ask pupils one thing they would like to discover about the 	

	LGBT+ community which wasn't represented in the data given today.	
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