ICT Curriculum Team

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Unit: Data Handling

ICT Year 2

Overview of this Unit:
Children know that CD-ROMs, computers and the Internet hold large amounts of information. They can use ICT to find the answers to certain questions ask their own questions and predict the kind of answers. They can use Menus and Search techniques to find information from appropriate sources and are developing their awareness of different types of questions; how they can be asked and how ICT can be used to answer them.

They can complete a data capture sheet and transfer data into a prepared database and find out about things by asking questions and plotting graphs and pictograms. They can find specific answers from data by questioning and searching and know why it can be easier to use ICT to show information using various graphs than make graphs by traditional methods. They learn that some of the programs they have used so far to present data cannot provide the answers to some specific questions. They begin to realise that programs have limitations and that it is knowledge of the tools and techniques to search and locate information that help us find the answer to questions.

Expectations at the end of this unit:

Most pupils will be able to: understand that ICT can help us find information from appropriate sources. They can locate information using Menus and simple Search techniques and know that there are different programs for collecting and presenting data. They can input data into a prepared database and ask questions to find things out.

Some pupils will only be able to: input data with help into a prepared database and need help to plot graphs and find answers to questions.

Some pupils will also be able to: construct different types of questions for different purposes and use Menus and Search techniques to find information from a range of sources. They are beginning to show an understanding that programs have limitations and make choices in the ways they use the tools to find information and plot graphs.

KEY:

Personal and Social Development, Well-Being and Cultural Diversity (**PSDWBCD**)	Welsh Language Development (**WLD**)	Creative Development (**CD**)
Language, Literacy and Communication Skills (**LLC**)	Knowledge and Understanding of the World (**KUW**)	Outdoor Play (**OP**)
Mathematical Development (**MD**)	Physical Development (PD)	Role Play (**RP**)

PSEWBCD LL MD WLD KUW PD CD OP RP

Teacher Assessment: *The skills demonstrated by the children should form part of continuous assessment. Tracking and recording pupils' progress should be done in line with the schools assessment policy and used to inform future planning. Recording sheets are provided for schools as an optional part of this Scheme of work.*

Recording Sheet | Pupil Self Assessment

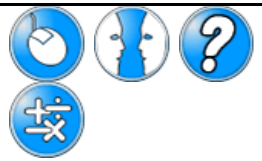
Year 2 **Find and Analyse Information**

Data Handling

ICT Skills	Areas of Learning	Suggested Activity	Vocabulary	Resources	Skills across the Curriculum
Know that CD-Roms, Computers and the Internet hold large amounts of information.	PSEWBCD LLC WLD KUW	Discuss with the children, how they can use books to find information. Show the children information books with indexes and help them to find the relevant sections. Show the children a CD-ROM/ or Internet and explain that it contains as much information as several large books. Use an appropriate web site to show the children how to navigate to find information. (*Draw their attention to common features such as back /forward arrow, home icon and menu.)*	Information CD-Rom Navigate Index World wide web	CD Rom software Computer Internet	

ICT Skills	Areas of Learning	Suggested Activity	Vocabulary	Resources	Skills across the Curriculum
Can use Search Tools and Menus to find information from appropriate sources.		Children navigate through a CD Rom to find information and can demonstrate how to locate information using menus. Ask the children which item in the menu should be selected to locate particular information, e.g. selecting 'the seashore' to locate information on crabs. Use a CD-ROM encyclopaedia to demonstrate how to locate information using the index. Demonstrate how to return to the menu/home page. Ask the children to use the index to locate particular information. Use a CD-ROM encyclopaedia to demonstrate how to locate information using a key word. Ask the children to suggest some words to try. Deliberately mistype one word to show that words must be spelt correctly. Show that words, such as 'kitty', are not recognised. Explain that some items can be found using more than one word, *e.g. information on lions could be found using 'Africa' or 'zoo'.* Ask children to work in pairs to use a CD-ROM or website to find pictures of animals, *e.g. animals with fur, three animals that live in the sea etc.* Ask them to use a key word to search by name or attribute.	Menu Information Demonstrate CD-Rom Information Database Search tools	CD-ROM Encyclopaedia Computer Sebastian Swan's Safe Search Site	

ICT Skills	Areas of Learning	Suggested Activity	Vocabulary	Resources	Skills across the Curriculum
Can find specific answers from information by questioning and searching.	LLC MD KUW	As part of a class project on animals that live in different environments, choose two contrasting areas, e.g. a pond and a field. Remind the class of the different ways of searching for information on a CD-ROM. Ask the children to work in small groups to research different habitats on a CD-ROM encyclopaedia or website. Remind the class to use the back button to retrace their steps if they get lost. Ask them to write a sentence about the animals they found. The sentence should include the key word they used. Ask the class to compare searching for information on a CD-ROM/Internet with searching for information in printed encyclopaedias. Ask them to consider which is quicker or more convenient.	Environments Encyclopaedia	CD Rom encyclopaedia Web based encyclopaedia	
Know that a data base can be used to input information.	PSRWRCD LLC KUW	Show the children a simple completed database and demonstrate how the search tool enables specific questions to be answered. Encourage children to ask their own questions and see if they can use the search tool to find out the answers. Provide a simple aide-memoire to illustrate the process of asking questions using the search tool. Draw up a short list of questions from those suggested by the children with a simple means of recording their answers. Show the children a prepared data base on topics such as homes, ourselves; my pets, favourites etc. demonstrate the choices for each field and how to input data.	Database Information	Database Relevant artefacts	

ICT Skills	Areas of Learning	Suggested Activity	Vocabulary	Resources	Skills across the Curriculum
Can complete a data capture sheet.		Create a simple questionnaire with the children about the data base. Produce a paper-based copy in the form of a data capture sheet for all children to complete. This could be in the form of pictures to circle or words to write depending on ability of the children.	Questionnaire	Data capture sheet	
Can transfer data from data capture sheet into a prepared database.		Working in pairs the children enter the information from their data capture sheet into the data base and save it as a class data base. Use the completed database to locate individual children's records in and talk about them.	Questionnaire Database Search tools	Prepared database IWB	
Can use ICT to find the answers to certain questions.		Demonstrate how to create bar charts and or pictograms to help them answer simple questions. Show the children how to create a table view *(if software allows*) and use this to answer simple questions. Show the children how to use the search tool to answer simple questions. Make a list of differentiated questions to ask about the database (*Questions prepared on different coloured cards can be an effective way of allowing children to select an appropriate level of question or task.)* Some examples could be; Plot a graph to show the types of houses. How many children live in a bungalow? How many children's homes have a brown door? How many houses do NOT have a garage? Which children live in a detached house?	Database Pictograms Bar charts Questions Graphs	Completed Database IWB	

ICT Skills	Areas of Learning	Suggested Activity	Vocabulary	Resources	Skills across the Curriculum
Can ask questions and predict the kind of answer.	LLC KUW	Discuss with the children the kind of information that might be useful when looking at houses (but any topic would do). Ask children to suggest questions to find out the information needed. Record these questions so that all children can see them. Do more people live in houses made of brick than stone? Who lives in a house with a chimney? How many more children have a brown door than a red one? etc. Encourage children to ask their own questions and see if they can use the search techniques to find out the answers. (Having paper and pencil near the computer, can act as encouragement for children to write down their questions for others.)	Information Questions		
Know why it can be better to use ICT to show information using various graphs.	LLC MD KUW	Using the previously completed databases, children can generate a series of graphs and compare them with hand made graphs on the same subject.	Graphs Data	Prepared database	