# TIDE Assessment for distance learning (ADL) 1: Example teaching text: Recording your personal water use activity and report writing

*Recording your personal water use* is a teaching activity adapted from an OU course. Students are asked to estimate and record their water use and write a report on this for their assessment. This document is the teaching text on the water activity and on report writing.

In the TIDE residential school, you will evaluate the assessment of this activity. This document is background information, it will be helpful if you read it before the residential school. There’s no need to measure your water use!

## Learning outcomes

After completing this section you should be able to:

* Demonstrate aspects of measuring, collecting and recording data.
* Write a report following standard conventions.

# 1 Student activity: Recording personal and daily water use

In this activity you will take measurements and collect data to estimate how much water you use in your home in an average day. Some water-using activities are not daily tasks so you should keep records of your water use for a minimum of three days but no more than seven days.

You will write a report based on this activity for the assessment.

This is what you are asked to do:

* Identify the activities you do at home that use water.
* Estimate the volume of water used for each activity.
* Note how many times you do them over a period of 3 to 7 days.
* Record your results in a table.
* Use the data to determine your water use in litres per day.

You are investigating your personal water use so if you live with other people you need to take account of this for any joint water-using activities. Your measurements should include all your personal water usage at home and in your garden, if you have one, but excludes any water you use away from home. You should record your results in a table, you can use the template table provided below or create one of your own.

Table 1 – template table for recording your water use

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activity | Volume used each time (litres) | Number of times each day | | | | | | | Total number of times | Total (litres) | Average litres used per day |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Washing hands / face |  |  |  |  |  |  |  |  |  |  |  |
| Bath |  |  |  |  |  |  |  |  |  |  |  |
| Shower |  |  |  |  |  |  |  |  |  |  |  |
| Brushing teeth |  |  |  |  |  |  |  |  |  |  |  |
| Toilet flushing |  |  |  |  |  |  |  |  |  |  |  |
| Food prep / cooking |  |  |  |  |  |  |  |  |  |  |  |
| Drinking |  |  |  |  |  |  |  |  |  |  |  |
| Dish washing |  |  |  |  |  |  |  |  |  |  |  |
| Garden watering |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |
|  | Total | | | | | | | | |  |  |

### 1.1 Identify the activities

Start by simply listing the things you do that use water. The template table sets out the most likely household tasks that use water so you can use that as a starting point for your list.

Keeping clear and accurate records of what you do is an important part of any investigative or experimental procedure so you are advised to use a notebook for this activity or use some other way to keep all your notes in one place.

When keeping notes make sure you include all the details so that they make sense when you come back to them later, this includes the unit of measurement and the date.

### 1.2 Estimate the volume

You should try to measure the volumes as accurately as you can. Using estimates is acceptable as long as you recognise they are not precise measurements. An important aspect of gathering data in any context is to be aware of the limitations of your procedures and to consider the possible sources of error and inaccuracy in your measurements.

For collective household activities like food preparation, washing dishes and washing clothes you should divide the volume of water used by the number of people involved.

**Note** - in the original module materials students are given instructions on how to measure water from several activities, including running a tap, taking a bath, flushing a toilet, using a dishwasher and washing machine. Just the example of running a tap is given here for illustrative purposes.

#### Measuring water from a tap



For drinking, brushing teeth, cooking and food preparation, washing, showering, watering the garden, washing the car and several other activities. When making these measurements, try not to waste the water that you use in the process!

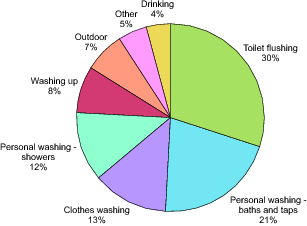
* You will need a measuring jug or bucket calibrated in litres or other container of known volume and a watch or clock that measures seconds.
* For small volumes you can measure the actual volume used e.g. a glass of water for drinking, filling the kettle, brushing your teeth.
* For larger volumes you will need to estimate the flow rate from the tap. Turn the tap on so the water comes out at the rate you would normally use and then time how long it takes to fill the container or let the water run into the container for a known time, say 30 seconds.
* Calculate the flow rate in litres per minute.

Once you have established your standard flow rate for each activity, then each time you use the tap, use the watch/clock to measure how long the tap is running. Then calculate the volume of water used.

Alternatively, for activities that involve filling a sink, basin or bowl, you can fill to the usual level and scoop out the water in measured quantities using a measuring jug into another container and count the number of scoops.

## 1.3 Water use in the UK

On average each person in the UK uses approximately 150 litres of water a day for domestic purposes (Waterwise, 2012). This is divided between activities according to the pie chart below.



**Figure 1** Average domestic water use per person in the UK (adapted from Waterwise, 2012)

The figure of 150 litres per person per day is an average that masks a wide variation in individual behaviour and circumstances. How does your water use compare with this average data? If it differs significantly, can you think of any possible reasons? One reason might be that you are from a larger than average household, whether or not you have a garden, or that you live in another country.

## 1.4 Summary

This section has focused on the practical activity of taking your own measurements to enable you to estimate your daily water use. The data for the UK provides some context for comparison of your use with other UK water users.

## 2 Teaching text: Reports and how to write them

You will encounter reports in many different contexts – at work, in the news, in official documents - as well as in your academic studies and in your assessments. This section focuses on report writing, which is an important skill you will develop through your studies.

### 2.1 What is a report?

There are many different types of reports. For example, they can be for business (such as annual reports, market research or sales reports), about research or an investigation (such as scientific or technical reports), government reports on social, economic or environmental issues, and lots more.

Business or information reports are usually written for a specific audience such as a senior manager, or advisory board, or team of colleagues, or for public information. Some reports include recommendations or proposals. For example, a business report could contain a marketing proposal supported by suitable background research, or a consultant hired by a firm to look into options for some future decision or activity would probably conclude their report with a recommendation for the preferred option.

Scientific reports describe an investigation or experiment. They explain why and how it was carried out, what the results were and what they mean. Conclusions are drawn from the results but you would not usually expect to see recommendations or proposals in a scientific report.

**Note** - in the original module materials this section is accompanied by an online activity that directs students to look at specific reports. They are asked to comment on the structure, style and content of the reports, and outline the features they have in common.

### 2.2 Report structure and style

Reports are usually used to communicate facts, findings or results and may include recommendations. They have a defined structure, and are divided into sections and use sub-headings, which may be numbered. The type of writing and language used in reports is generally more concise, direct and formal than other types of assessment questions such as essays and discussions. Reports may use short sentences and bullet points and may also include diagrams, tables and charts.

The structure of a report will depend on its purpose and who it is written for, and you should keep this in mind when writing a report. If the assessment gives you specific guidance for the required report structure you should follow it. A typical report structure is summarised in Table 2.

**Table 2** Typical report structure

|  |  |  |
| --- | --- | --- |
| **Section** | **Purpose** | **Description** |
| Title | Briefly describes what the report is about | Clear, brief and relevant to the content |
| Introduction | Defines the purpose and scope of the report | This gives essential background information to enable the reader to understand the context of the report. It focuses on, and perhaps defines, any key words. It should also outline how the report is organised. |
| Main body | Presents a description, and sometimes data, that includes all the relevant information required to meet the purpose of the report | The main body of a report should be divided into sections under headings and possibly subheadings. Normally you will need to devise your own headings as appropriate to your report – don’t use ‘Main body’ as a heading.  Each section should have its own purpose and be organised around a key aspect of the description.  Where appropriate, data, evidence and examples should be used to support the points you make. |
| Conclusion(s) | Summarises in a few sentences the main points made in the report | Conclusions should refer back to the purpose of the report, as stated in the introduction. No new information should be introduced at this stage. Conclusions are drawn from what has gone before. |
| Citations and references | To identify the sources used | Reports should have in-text citations to the sources used with full references listed at the end. |

The details of the subheadings in the ‘main body’ will vary depending on the report. In a scientific report, typical section headings are ‘Aims’, ‘Method’ and ‘Results’ but in other types of report they can vary considerably.

Traditional advice on the grammar for report writing is to use a formal style and avoid use of the first person – first person means using the pronouns ‘I’, ‘me’ and ‘my’. However, sometimes you may need to express a personal opinion or report on your own individual activity. In these circumstances, you should use your judgement to decide what is appropriate, or follow any guidance that is given.

Several aspects of good report writing are shared with other pieces of formal written work. You need to write in proper sentences and paragraphs unless otherwise specified. Try to keep your sentences reasonably short because long sentences can be difficult to follow. As a general rule, each sentence should express just one idea. As in any assignment, you should always take great care that the answer you provide really does answer the question asked.

Selecting and using evidence is frequently required for answering assessments. For example, you may be asked to discuss a statement or hypothesis, in which case you would need to present different sides of the issue with supporting evidence on both sides. For a report question, you may need to make a recommendation or present an argument or make a case to support a particular view. For all of these, you would need to include evidence that supports or refutes the recommendation, argument or case. In the context of academic writing, evidence means relevant information that backs up the points you are making. It could be illustrative examples or data that supports or justifies the point. Evidence needs to be verifiable information from a reliable source and not just your own opinion.

Presentation, spelling and grammar are important. It is always worth taking some time at the end to read through your report, looking for any errors and checking that it all makes sense. It helps to leave it for a while – perhaps a day or more – and look at it again with fresh eyes.

**Note** - in the original course this section is accompanied by an online activity that develops students’ understanding of report structure.

### 2.5 Report writing checklist

When writing a report it is useful to always keep in mind **why** you are writing it: **what** its purpose is, **what** information you need to communicate to achieve that purpose and **who** are you writing the report for.

* Is the title appropriate and meaningful?
* Does the report meet the given purpose?
* Is the purpose or objective clear?
* Does the Introduction set the background to the report?
* Does the Introduction outline the way the report is organised?
* Have you checked all facts and figures?
* Are all sources that you have referred to (cited) also in the References?
* Are all the sources in the References cited in the report?
* Do the sections have appropriate headings?
* Does the report flow logically?
* Is the writing style concise?
* Are all diagrams and images labelled?
* Have you checked your spelling and grammar?

### 2.6 Summary

This section has focused on report writing. The main purpose of reports has been explained and some examples used to illustrate their key features. A typical report structure has been summarised and a report writing checklist provided, you should find it helpful to refer back to these when writing a report.

## References

Waterwise (2012) 'Water – the Facts' [Online]. Available at www.waterwise.org.uk/data/resources/25/Water\_factsheet\_2012.pdf (Accessed 22 August 2016).