# Assessment for distance learning (ADL) 2**Handout 4**: Example student answer with tutor feedback

The student answer is black text; the tutor feedback is in ***red italics*** in the text and in the comment boxes on the right hand side.

Report To Show My Personal Daily Water Use At Home by Andrew Smith

***Introduction***

This report has been compiled to show the results of three days of testing my own personal water use in the home. The measurements were recorded to show my daily use across a range of different water uses, ranging from drinking to brushing my teeth. The data was limited to three days and the actual data used had to be drawn from the standard data list.

The aim of this investigation was to take measurements of every day usage of water to ascertain what sort of amounts I was using day to day. The report is intended to show results of normal everyday usage of water that would be typical of someone living on their own.
***Good points – well done for stating the aim***

***Methods***

The methods used were varied as I did not have time to accurately measure each activity as I was in and out a lot. As I have had to use the standard data I can only describe what I managed to do and the correct procedure for doing it if I had been able to do it physically.

Brushing teeth- This was one of the easier ones to measure as it did not contain a continuous flow of water and the amounts used is easily calculable. Each time I brushed my teeth I would run the water needed into a measuring jug. This would mean that each rinse of the toothbrush, the water from the tap could be run into the jug. The cumulative amount of water in the jug at the end of brushing would give me the number of millilitres used. These measurements were recorded on a pad that I kept next to the sink.

With other activities it would have been necessary to calculate the amount used by using the flow rate of water. This would be done by running a tap for 10 seconds at full flow into a measuring receptacle. Then I could divide the amount in millilitres by 10 to give me the flow rate of the tap. For example, if 10 seconds of water gave me 1000ml of water, then 1000/10 would give me a flow rate of 100ml per second.

With subsequent tap runnings I would need to ensure that the tap was always fully open and then I could multiply the amount of time it was running by the flow rate. For example, 1 minute of running a bath would give me 6000ml of water, or 6 litres.

***Results***

***Remember that a Table and Figure always needs a title.
You should state the units of measurement in column headings***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ACTIVITY | DAY 1 | DAY 2 | DAY 3 | NUMBER OF TIMES | VOLUME USED PER TIME  | TOTAL  | AVRAGE USED PER DAY |
| Washing hands/face | 5 | 7 | 6 | 18 | 1.5 | 27.0 | 9.0 |
| Bath | 1 | 0 | 0 | 1 | 74 | 74.0 | 24.7 |
| Shower | 1 | 2 | 1 | 4 | 100 | 400 | 133.3 |
| Brushing teeth | 2 | 2 | 2 | 6 | 0.75 | 4.5 | 1.5 |
| Toilet flushing | 5 | 4 | 6 | 15 | 9 | 135.0 | 45.0 |
| Food preparation | 2 | 1 | 1 | 4 | 2 | 8.0 | 2.7 |
| Drinking | 7 | 7 | 10 | 24 | 0.5 | 12.0 | 4.0 |
| Clothes Washing | 0 | 0 | 1 | 1 | 60 | 60.0 | 20.0 |
| Dish washing | 2 | 1 | 3 | 6 | 15 | 90.0 | 30.0 |
| ***Add a row for totals***  |  |  |  |  |  | ***810.5*** | ***270.2*** |

Total Number of Days Measured – 3

Total Volume of Water Used (Litres) – 810.5

Average Litres Used Per Day – 27.2 ***Your calculation for the total volume of water used is correct based on the figures in your table. However, your average daily use is incorrect as you have the decimal point in the wrong place, the correct answer should be 270.2 litres used per day.***

***Discussion***

Although the results of this investigation are limited, as I was not able to carry out all practical assessments personally, by using the standard data I was able to form a good picture of my own daily water use. The standard data allowed me to put figures next to my own personal water use and populate a results table.

Unfortunately, my data, most obviously the average litres per day, seems to be at great odds with the UK national average. This may be due to the amount of activities I recorded or that my measuring procedure was not accurate enough. However, the results table gives me a good indicator of the activities that use the most water. It also gives me an insight into how I could possibly reduce my water usage.

Although I don’t think water is particularly wasted in my household, I could make some cut backs. Most notably on showering and dishwashing. As regards showering it would be possible to limit my time spent in the shower. Time in the shower is not all spent washing and by showering quicker, some water could be saved. As far as dishwashing is concerned, considering I live alone, it would not be unfeasible to wash up once a day. Maybe stockpiling dirty dishes until one big wash in the evening.

***Conclusion***

***Remember to quote your numerical finding – that was the aim of the exercise***

The results of this report have quantified my daily water use and shown how reliant I am on clean fresh water. It shows that my water usage is not that high, lower than the UK average, but also that the results may not be reliable. I would conceive that better results could be obtained by carrying out a longer investigation, say 1 month, and also covering a far wider amount of activities.

***This last point, to carry out a longer investigation, is a good one, but a new idea and should be in the discussion. The conclusion is not the place to introduce new ideas.***

***Word count about 720 words, the word limit was 1000, so you had space to explain your points in more detail.***

***You should state the word count.***

# **Overall summary from tutor**

***Well done for engaging with this activity, Andrew.***

***You have partially achieved the learning outcomes.***

***Although you had some good ideas for saving water the brevity of the report meant that you could have expanded the discussion sections with some more detailed comparisons to average UK water usage.***

***Marks:***

|  |  |  |
| --- | --- | --- |
| ***Section***  | ***Maximum mark***  | ***Your mark***  |
| ***Title and introduction***  | ***8*** | ***5*** |
| ***Method***  | ***8*** | ***5*** |
| ***Results***  | ***8*** | ***5*** |
| ***Discussion***  | ***18*** | ***4*** |
| ***Conclusion***  | ***4*** | ***1*** |
| ***Presentation***  | ***4*** | ***1*** |
| ***Total***  | ***50*** | ***21*** |