TEACHING & LEARNING SEQUENCE

1. INTRODUCTION
The vet is coming and needs to know how many dogs need her services
i. Discussion: what does a community that is good for dogs look like?
ii. Posing the problem

1.1 Discussion: why is the vet coming?
The vet is coming to keep our dogs happy and healthy. What does this mean?
What does a community look/sound/feel like that is ‘good’ for dogs? Bad for dogs?

Activity: complete ‘Healthy Dogs, Healthy Community’ Y-diagrams
What can a vet do to make a good environment for dogs? What can people in the community do?

1.2 Posing the problem:
Can we help?
There are a number of things we can do before the vet arrives that will make her task much easier. What are they?
Read this email request from AMRRIC first:

Dear students,
My name is Dr Sophie. I’m going to be sending one of our vets out in a few weeks to your community. She is looking forward to meeting you all.
Her job when she is with you is to help keep the dogs healthy. She will have medicines that stop dogs getting ticks and mange. She can also do surgery on dogs to stop them having puppies.
I need to know how much medicine the vet needs to bring for all of this, so I thought I’d ask for your help.
Kind regards,
Dr Sophie Constable
### Introduction (continued ...)

The vet is coming and needs to know how many dogs need her services and where to find them.

- **c. Pose questions**

### 1.3 Questions to answer:

- **a.** How many dogs are in the community?
- **b.** What treatments will the dogs need and how will we know?
- **c.** How will the vets know how to find the dogs that need treating?
- **d.** What would be the best way to find out and record this information?

**Teacher note:** These are the questions that the vet would ask in order to do her job.

### 2. PREPARE THE MAP

**Introduce:** the map of the local community as a means to help organise household visits

- **a.** Identify the main places: shop, council office, clinic, oval etc.
- **b.** Locate each student’s house
- **c.** Identify the houses that aren’t lived in and mark them with a cross

**Discuss:** using the map. Make a plan for visiting each household to carry out the dog census. Divide the task into sections (of the town) and teams (of students)

**Preparation:** Obtain a town map from the local council office.

### 3. PLAN THE CENSUS

**Introduce:** the spreadsheet as a tool to help carry out the dog census.

**Discuss:** what fields (information) should be recorded in the spreadsheet. Why is this information necessary? Remind students of the questions in 1.3

*(See sample spreadsheet – D3 ‘Dog Census for Schools’)*

**Introduce/discuss:** the D4 ‘Dog Census Visual Guide’

**Teacher note:** There are two complex and separate skills here – understanding a spreadsheet and how it works; and designing the census itself.

Start with the census and its design. Ensure that students understand the fields and why they are included then have them design a simple table on paper.

Later, when students use the spreadsheet application, you may prefer to provide a ready-made spreadsheet for all or some of your students.
4. **ANALYSE THE VETERINARY SERVICES**

**Question:** what services can the vet offer? What might owners like to know before they decide if they want their dog treated?

**Activity:** Students compile a list of things owners need to know so they can make an informed decision. First, teacher reads the following excerpt of an email from the vet.

The vet will have medicines for the dogs and can do de-sexing surgery too. The medicine kills mites, ticks and some worms inside the dog. These bugs can make us sick too! The medicine stays inside the dog for a while to protect them from any other mites, ticks or worms that try to get inside. It makes the dog healthier for a while, and helps them fight off sickness. But it doesn’t do everything, and it doesn’t last forever. Some worms, and fleas, need a different medicine.

We can’t give this medicine to little puppies that are still drinking from their mother. But if we treat the mother, a little bit of medicine will go into the milk and help the pups. Not too much though! It’s really important that each dog gets the right amount of medicine. A little bit of medicine will kill the bugs. A lot might kill the dog! So I’ll need to measure out the right amount for each dog: a little bit for a little dog, and a bit more for a bigger dog.

If we get the medicine on our hands, it will get into us too. A little bit doesn’t matter, but a lot can make us sick. We can wear gloves, or wash our hands after using the medicine to make sure we don’t get too much.

The surgery that we can do is called de-sexing. It stops dogs breeding forever. Some people want this surgery because it stops female dogs having puppies all the time. Too many puppies can be hard to look after, and they get skinny and sick. Dogs can also get diseases, for instance some cancers, when they are not de-sexed. The de-sexing surgery stops male dogs chasing the female dogs. They calm down a bit, stay at home and guard the house. When dogs have the de-sexing surgery, they don’t need as much food, so they often get fatter and shiny.

The de-sexing surgery takes out the uterus (the baby bag) from the female dog, or the testes (the balls) from the male dog. We use anaesthetics (medicines to keep them asleep so they won’t feel anything) while we do this. That way they don’t feel any pain. It’s the same as what happens inside a human hospital.

We have to keep everything very clean so the wound doesn’t get infected with germs. That includes the vets! They wash their hands really well with an antiseptic (especially strong) soap. Sometimes they use gloves too, so they are sterile, or germ-free. Then they can only touch other sterile equipment. No one else is permitted to touch the sterile equipment!

They use sterile instruments to cut through the skin and take out the reproductive organs (breeding bits). Then they sew them back up with sterile thread.

Once they are sewn up, the dogs are allowed to wake up. They will be sleepy for a few hours and maybe a bit sore too, so we need to watch out for them.
**Veterinary services** (continued …)

**Activity:** students list the reasons why people might want their dogs treated. Then discuss what information the owners should know about safety

(Use the following table and the set of questions)

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Surgery</th>
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<tbody>
<tr>
<td>Makes many dogs better</td>
<td>Stops dogs having too many puppies</td>
</tr>
<tr>
<td>Helps wormy dogs to get better (doesn’t kill all worms though)</td>
<td>Stops male dogs chasing the female dogs, making a noise at night and fighting</td>
</tr>
<tr>
<td>Makes the ticks drop off</td>
<td>Calms down cheeky (aggressive) dogs.</td>
</tr>
<tr>
<td>Protects dogs from getting mange</td>
<td>Makes the dogs fatter and healthier</td>
</tr>
<tr>
<td>Protects dogs from getting worms</td>
<td>If done when young, stops female dogs from getting breast cancer</td>
</tr>
<tr>
<td>Protects us from getting sick from our dogs</td>
<td>If done when young, stops all dogs from getting Transmissible Venereal Tumour (sex cancer). TVT is like the Tasmanian Devil facial tumour except it is a canine version and sexually transmitted.</td>
</tr>
</tbody>
</table>

**Medicine - the owners should know:**

a. What the medicine does and does not do
b. That the medicine does not last forever
c. Too much medicine is harmful; not enough won’t work
d. Medicine should not touch our skin
e. Mothers feeding puppies should not get medicine

**Surgery - the owners should know:**

a. Surgery stops dogs breeding forever
b. The surgery area must be kept clean
c. Dogs need extra care when they wake up from surgery

**EXTENSION A: creating resources for community education**

**Activity:** Students research problems associated with, and consequences of, too many dogs (or too much mange or worms)
Create information sheets, posters or pamphlets to share in the community

**Resources:** fact sheets available at [http://www.amrric.org](http://www.amrric.org)
Take photos, draw or make use of the web for photos and information
### TEACHING & LEARNING SEQUENCE

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| 5. | **CONDUCT THE CENSUS** | **Teacher note:** Consider using an adult community member to accompany each group, e.g. Animal Management Worker, Teacher Aid, LGA official, Government Engagement Officer or Elder.  
**Procedure for conducting census:**  
- Mark a route on the map  
- Explain important information  
- Record census data  
- Note which households will require a 2nd visit (owner absent) |
|   | Direct: the students into groups ensuring a good mix of abilities. Allow each group to discuss the roles needed to conduct the survey  
**Class discussion:** share group ideas for roles and agree on the best arrangement. Assign town sections for which each group will be responsible  
**Group activity:** students plan their procedure and materials; and (if needed) role play engaging a household  
**Debrief:** what does success look like – is the data accurate, clear, and comprehensive. If not, what can be done to improve it | |
| 6. | **CREATE THE SPREADSHEET** | **Teacher note:** You may prefer to provide your ‘prepared beforehand’ spreadsheet for all or some of your students. Alternatively, allow less able students to partner with a more computer-literate friend.  
Activity: students use their hard copy design to construct the spreadsheet. Focus on setting up the spreadsheet. Including function cells comes later. | |
| 7. | **ENTER AND DISPLAY THE DATA**  
(Using a spreadsheet) | **Teacher note:** as an aside discussion, pose the question whether it is worth revising the census/spreadsheet. Remind students that a well-designed instrument can be used over and over or can be easily modified  
**Activity:** enter the data into the spreadsheet and construct tables and graphs to organise the data  
**Review & revise:** how well did the census instrument work? Change the design of the spreadsheet if necessary |
| **EXTENSION B:** | **Use the spreadsheet to calculate totals** | **Note:** enter 1 or 0 instead of yes and no so that columns can be totalled  
**Demonstrate:** how function cells can be used to calculate totals, e.g. total number of dogs: per house, in the community, that have mange, are undernourished, require medicine, to be de-sexed  
**Activity:** students add function cells to their spreadsheet |
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| **8. WRITE A REPORT**        | Introduce: the report genre and provide a template | **Teacher note:**
|                               | Activity: students write a report on the current ‘dog situation’ in their community. Attach census data (spreadsheet) and optionally, photos to illustrate facts contained in the report | 1. This can be as big (e.g. an extension lesson on report writing) or as simple (provide a template and/or whole class guided writing) as you like
|                               | **Teacher note:** | 2. The report should include the answers to questions in 1.3 |
|                               | **Extension activities** | 1. If done methodically and accurately, these activities provide invaluable data to AMRRIC and the community. |
|                               | a. Conduct a follow-up survey a month or two after the veterinary program | 2. Consider including other interested people in the community, e.g. AMW, GEC etc. to help students maintain their enthusiasm for the project, e.g. to help lead the monitoring project and/or as a regular guest speaker |
|                               | b. Compare the changes and draw conclusions | |
|                               | c. Report back to the community and to AMRRIC and ask for feedback on how the program could be improved | |
|                               | d. Continue to monitor dog population and wellbeing. Create graphs to illustrate changes over time | |
|                               | e. Refer back to the D2 ‘Healthy Dogs, Healthy Community – Y Diagrams. Discuss the community’s progress toward being a place that is ‘good for dogs’ | |
| **EXTENSION C**               | Monitor the program (making use of the spreadsheet) | |
| **9. EXTENSION OPTION**       | Investigate the impact of unmanaged dog populations | Sample activities:
|                               | **Extended project/s:** explore the extent of change in the local environment in remote ATSI communities over time through unmanaged dog populations | Develop a significant question about how human and environmental processes have shaped the local community and its surrounding environment
|                               | **Teacher note:** | Keep a class journal of each stage in planning the investigation |
### 10. EXTENSION OPTION

**Produce an oral presentation – ‘A Dog Health Issue’**

**Group work:** collaboratively plan, research and deliver a presentation to the community (or community group) on a debatable topic. For example:

- ‘Families should have no more than two dogs’ OR
- ‘All male dogs should be desexed’

Select an appropriate way to deliver the presentation, e.g. PowerPoint

Select and sequence appropriate multi-modal content/elements to support and emphasise your arguments

**Resources:** draw on the data from the dog census/survey, the extended survey and research conducted over the range of the project

Refer also to the ‘Additional Resources’ in *Be a Friend to Your Dog*.