

---

In association with the Workers'  
Educational Association North East

---

For Communities  
of Adults with  
Diverse Needs.



# SELF ADVOCACY SOLE TOOLKIT



---

By Anne Preston and  
Diane Holmes

НeиИ

---

This toolkit is developed from the premise that adults with diverse needs shouldn't be excluded from experimenting with and experiencing innovations in teaching and learning approaches with technology and particularly those which involve minimal intervention of teachers through self-organised learning. The toolkit was developed with a particular focus on adult literacy, numeracy and digital skills for students working towards nationally recognised qualifications in reading, writing, speaking and listening.

A SOLE is a space where 'educators encourage students to work as a community to answer their own vibrant questions using The Internet' (Sugatra Mitra), an idea which is now achieving global impact. But how are SOLEs made material in local contexts? Is the idea of using The Internet just an example of a 'charismatic technology', lacking all- important notions of pedagogy and theory which typically surround what is deemed to lead to 'deep learning'?

Supported by an ESRC Impact Acceleration Account Knowledge Exchange award, we have probed the SOLE of adult learning in a collaborative project between SOLE Central and the Workers' Educational Association (WEA) North East. Our work involved using the SOLE approach with a group of adults who have diverse needs. The students were all working towards gaining a UK based qualification in functional skills.



## OUR BACKGROUND

This toolkit was developed as a result of the sharing and exchange of knowledge, practice and experience between Diane Holmes, specialist adult literacy and self-advocacy practitioner within the voluntary community sector at the Workers' Educational Association North East, together with Dr Anne Preston, a researcher in digital learning and education around self-organised learning approaches. Inspired by the original research and practice of Prof Sugata Mitra, Diane and Anne decided to explore the use of SOLE with a group of adults with diverse learning needs in the North East of England

Diane was very keen to use SOLE within her sessions, as she thought this would be an excellent way to inspire 'deeper' learning for the students as they studied for their English test. In addition to this, she felt a sense of self advocacy would develop amongst the group. This concept is important to her students, as this type of learner group often have greater difficulty in getting their views heard (or listened to). The students embraced the concept of SOLE really well. They relished the fact that they could do research in groups on the internet and feed back to the class and tutor about what they had discovered. Working in this way naturally developed their reading, writing, speaking and listening skills too – almost by stealth!



*Anne Preston and Diane Holmes*

The group loved the idea of answering a 'Big Question' and finding out what different information they could share. A crucial part of the success was also the fact that Diane, as the tutor, had to relinquish control. This really encouraged self-efficacy, as the group became the 'experts' and explained to her what they had discovered in their research groups. They became more curious and driven to discover new knowledge, in short the sessions became a more invigorated learning environment. As individuals, the students were keen to have their own views heard and became more able to present their findings to class. Presenting the research formed part of their speaking and Listening discussion test. In all, Diane became more connected to her students and they, in turn, have become more confident and rounded learners.

**Follow us on twitter and join the conversation  
@SOLEadvocate**

---

# TOOLKIT

# CONTENTS

6	What is a SOLE?
8	Designing a SOLE.
10	Planning your SOLE.
11	SOLE skills.
12	Big Questions.
19	Case Studies.



# What is a SOLE?

**noun [SOHL] SELF ORGANISED LEARNING ENVIRONMENTS**

A SOLE can be described as an environment which sparks curiosity to learn through the exploration of Big Questions using the Internet and people's organic drive to work together. In this environment, the teacher is a facilitator rather than transmitter of knowledge and therefore SOLE can also be described as a minimal intervention teaching approach. Sugata Mitra and his colleagues have carried out research for over 15 years on the nature of self-

organised learning: how it works, to what extent, and the role of adults in encouraging it. His innovative and bold efforts towards advancing learning for students all over the world earned him the first-ever \$1 million dollar TED Prize. At the 2013 TED conference, Mitra invited thinkers and doers worldwide to create their own SOLEs and share their discoveries via a School in the Cloud.

[www.theschoolinthecloud.org](http://www.theschoolinthecloud.org)

## So Why SOLE?

In our research we explored ways in which adults with diverse needs can benefit from the original SOLE principles as a form of self-advocacy.

### Facilitators will:

#### Feel connected to students on a more equal level

By reversal of roles – tutor learns from students

#### Become more in tune with the interests of students

By being more open to discover student driven knowledge

#### Expand their understanding of how students can learn on their own

By collaboration and exploration of knowledge as an equal

#### Cultivate a learner drive culture of curiosity

By providing opportunities for independent research

#### Expand their understanding of how much students can learn on their own

By relinquishing control and observing self-organised learning



### Students will:

#### Enhance computer literacy

By using newly developed literacy skills of skimming and scanning documents to locate information from internet files

#### Develop the habits of a lifelong learner

By taking their learning outside of the classroom and into everyday life

#### Strengthen interpersonal and presentation skills

By developing new communication and negotiation skills as they present their views to an audience

#### Get better at integrating what they already know into discussions both inside and outside and out of the classroom

By developing literacy skills which will enhance their ability to identify, write and talk about own views, and express them to relevant people

#### Develop a more trusting relationship with educators and peers generally

By working with negotiated groups of peers and developing self – advocacy skills, supported by their teacher

#### Be empowered to take ownership of their learning experience

By working independently of their teacher

#### Develop the habits of a lifelong learner

By taking their learning outside of the classroom and into everyday life

#### Develop stronger memory recall

By reinforcing new literacy learning, by writing about and presenting information to their peers or community

#### Improve reading comprehension, behaviour, language, creativity and problem solving abilities

By developing, reading writing and speaking and listening skills as they undertake independent research to answer a 'Big' question

#### Become more motivated to learn about different subjects and ideas

By realising through own experience that, development of literacy skills provides wider opportunities to discover, enlighten and empower

“

**Self-advocacy is the ability to articulate one's needs and make informed decisions about the supports necessary to meet those needs**

- (Test et al, 2005).

”

## DESIGNING A SOLE

So could a computer replace a teacher? We don't think so. SOLE is not unique in its focus on developing the physical and conceptual space for learning with the inclusion of technology but as our work has shown us, such environments can lead to a change in thinking about the organization of learning by teachers and students. The facilitation of SOLE involves a change in the role of teacher from transmitter to facilitator of knowledge. SOLE can empower students with the skills to self-advocate: to realise that they can have views, they have the right to be heard, and can identify ways to get their voice heard.



Students are given a big question or are challenged to think of their own.



Students choose their own groups and change groups at any time.



Students can move freely, speak to each other and share ideas.





4



Students can explore in any direction that they choose: there may be no single right answer.

5



Groups are expected to present what they have learnt at the end of the session.





# Planning your SOLE.

2 hour session

**If, one pre-selected Big Question:** Frame the Big Question as a genuine process of discovery (relate to previous topics covered in class, a topic in the news or something else you think is relevant)

**If, a selection of Big Questions, either from the School in the Cloud pack of cards, other sources or ones you have authored yourself:** Again, frame the Big Question as a genuine process of discovery but ask the students to pick one which they would like explore.



Intro / Recap

15  
mins

Introduce the organisation of a SOLE or recap on the organisation of a SOLE if already used one, introduce the Big Question/Big Questions:

- This could involve a class vote or the class nomination of one person to choose it.
- Use questions and exposition as much as possible
- Use visual aids, display or type the Big Question/s on large flashcards with an associated picture.
- Keep the Big Question on display at all times in full view of the class.



Big Questions

15  
mins

Ask the students to decide which groups they would like to work in to start the SOLE:

- Remind them that they can change groups at any time.



Self Organised Groups

40  
mins

Students work in self-organised groups to find answers to the Big Question using the Internet.

- Students can record their findings using the PC or with pen and paper (A4 and A3 sheets).
- Facilitate the activity by providing encouragement and admiration but don't try to provide answers even if probed for them. Ask questions along the way where necessary.
- Encourage students to resolve issues themselves
- Observe and document the activity.



Break

20  
mins

This will also allow the students the time to think over their answers to the Big Questions.



Review

30  
mins

Ask the students to report their findings concerning the Big Question:

- Facilitate the discussion around the breadth of answers found (you should have idea of this from your observations in the previous stage) and the similarities and differences between findings.
- If relevant and appropriate, encourage the students through your questioning to make links to topics outside their main findings to the question. This could include links to their own personal experiences with the topic or to topics such as social purpose and citizenship.

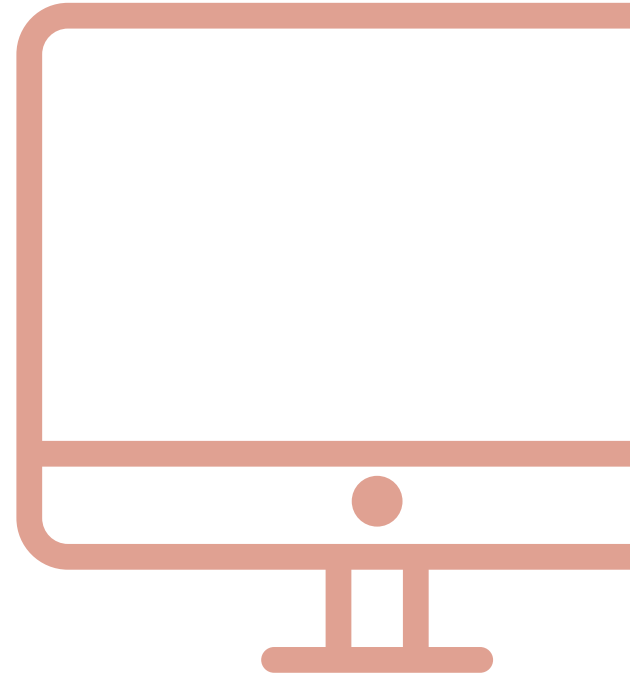
## SOLE Skills

Working across a number of teaching sessions, we adapted SOLE for adults with diverse needs. Our approach integrates teaching methods and the application of functional skills and self-advocacy skills. Timing are indicative but facilitators should amend according to the needs of their students. The diagram to the left is based on a 2 hour session.

When students participate in a SOLE, they will use a number of interrelated digital skills such as using different Information and Communications Technologies (ICTs), find, select, develop, present and communicate information. We found that the following specific skills were demonstrated as part of the SOLE process:

- Interact with ICT for given purpose
- Use search techniques to locate and select relevant information
- Follow recommended safe practices
- Enter and edit items of information
- Enter and develop different types of information to meet given needs
- Bring together different types of information
- Manage information storage
- Combine and present information in ways that are fit for purpose and audience
- Evaluate the selection, use and effectiveness of ICT tools used to present information

You and your students can explore more of these skills using the following link: <http://bit.ly/1SNPMec>



When students participate in a SOLE, they will use a number of interrelated speaking, listening and communication skills. We found that the following skills were demonstrated as part of the SOLE process:

- Participate in and understand the main points of discussions/exchanges about familiar topics with another person in a familiar situation
- Take part in discussions and exchanges that include unfamiliar subjects
- Make a range of contributions to discussions and make effective presentations
- Respond appropriately to others and make some extended contributions in familiar formal and information discussions and exchanges

You and your students can explore more of these skills using the following link: <http://bit.ly/1LaBcLB>

**“Self-Advocacy skills are key to students’ college and life success. Through self-advocacy skill development, students learn life-long strategies to help them take charge of their lives and maximize their strengths**

”

Learners participate in their own representation through expressing views and choices by:

- Giving views about their own lives
- Making Choices
- Developing a way to make a personal choice heard
- Identify a view they would like to have heard
- Speaking up for others
- Asking for support when and if they need it
- Asking questions



## BIG QUESTIONS

Big questions are a crucial part of SOLE sessions. Asking an interesting and relevant question is the thing that fires students' imaginations and curiosity. Selecting and developing a big question can also be the hardest part of running a SOLE session.

### Hint:

You're not the only one that can create and suggest big questions - they can also be developed by the students themselves depending on what they're interested in!



### What makes a good Big Question?

Big questions are the ones that don't have an easy answer. They are often open and difficult; they may even be unanswerable. The aim of them is to encourage deep and long conversations, rather than finding easy answers. These questions encourage students to offer theories, work collaboratively, use reason and think critically. A good big question will connect more than one subject area: "What is an insect?" for instance, does not touch as many different subjects as "What would happen to the Earth if all insects disappeared?" Some questions are ambiguous, some precise, some light-hearted, and some poignant. They can tie in with students' everyday experiences, or be something completely new.

### Types of Question

Big questions can start as something that seem quite simple. To start off, it can make sense to start with narrow, focused questions. These will help introduce search skills and introduce a new way of working, getting the students ready for more open questions. As students get more comfortable answering simple questions, you can start asking some tougher questions that don't have such a direct answer.

These should encourage students to explore a wider topic, connect a number of topics, and develop a deeper understanding of their answer. You can also ask more philosophical questions, or ones that are more specific to a country or region. There are really no limits to what a big question can be, as long as it is thought-provoking and captures students' attention.

- How do bees make honey?
- Can insects see in colour?
- Where does water come from?
- How far can we see?
- What is a brain?
- What inventions have had the biggest impact on how we live?
- Who made the alphabet?
- Why do we forget?
- Why haven't we seen evidence of intelligent alien life?
- How was music created?
- Why are teardrops shaped the way they are?
- How do we remember?
- Is there sound on the moon?
- Can we live on a different planet?
- What causes waves in the ocean?
- Why do we get goose bumps?
- Why do humans talk on two legs and dogs on four?
- How does the body know when to make new blood?
- Can anything be less than zero?
- What would happen if all the insects died?
- Why don't we all speak the same language around the world?
- What would happen if Earth was a different shape?
- How does a person learn?
- How big is space?
- Could robots ever replace humans?
- Can you kill a goat by staring at it?
- Is time travel possible?
- Do fish feel pain?
- Does a frog know it's frog?
- Can we function without muscles?
- Why do people dance?

More focussed Big Questions

Broad / Deeper Big Questions



Can insects see in color?



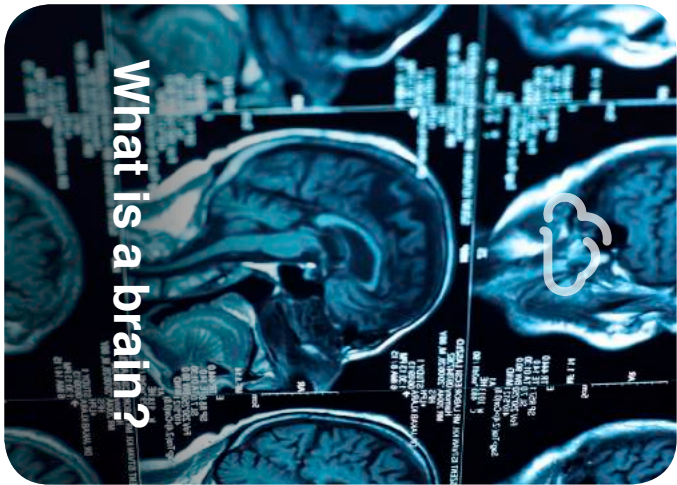
How do bees make honey?



How far can we see?



Where does water come from?



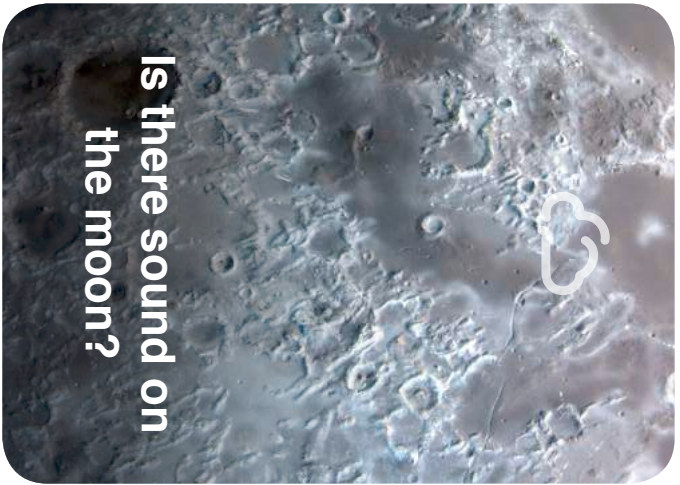
What is a brain?



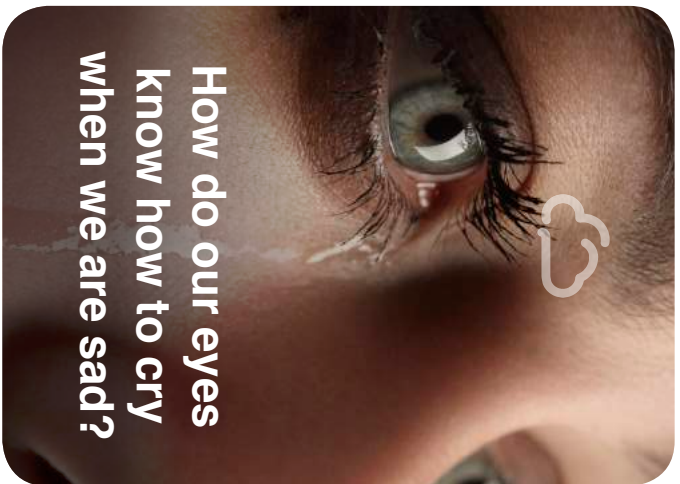
How did Benjamin Franklin's kite experiment change our lives?







**Is there sound on the moon?**



**How do our eyes know how to cry when we are sad?**



**Why do we get goose bumps?**



**How do we remember?**



**Can we live on a different planet?**



**What causes waves in the ocean?**



How does the  
body know when  
to make new  
blood?



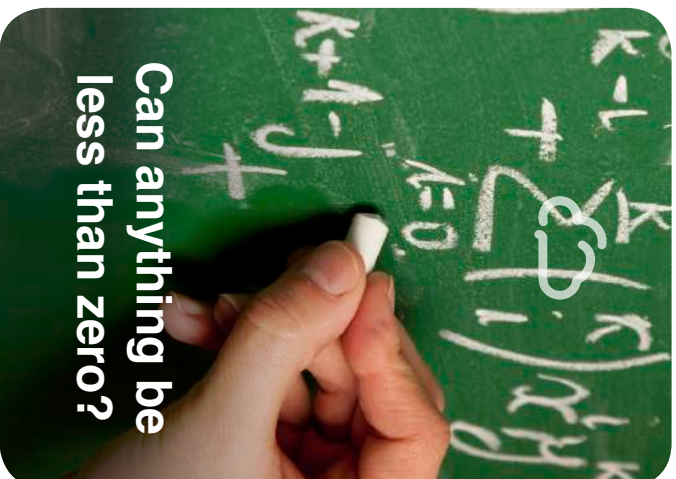
Why do we talk  
instead of sing?



What would  
happen if all  
insects died?



Why do humans  
walk on two legs  
and dogs on four?



Can anything be  
less than zero?



Why are there  
no animals  
bigger than a  
blue whale?

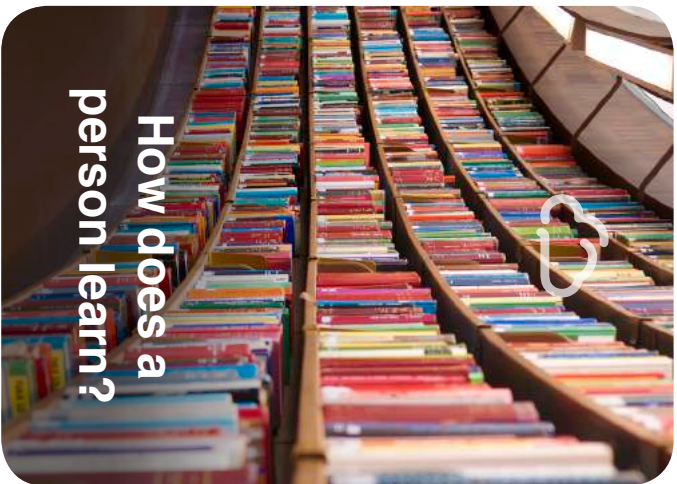




**Why don't we all  
speak the same  
language around  
the world?**



**What would happen  
if Earth was a  
different shape?**



**How does a  
person learn?**



**How big is  
space?**



**Could robots ever  
replace humans?**



**What is the most  
influential design  
movement?**



Is time travel possible?



Does a frog know it's a frog?



Why do people dance?



Can you kill a goat by staring at it?



Do fish feel pain?



Can we function without muscles?



---

## CASE STUDIES

On the following pages, there are examples of the findings of the students' research after carrying out their explorations into some of these Big Questions. We have annotated these to include links to literacy and numeracy skills. The links are not exhaustive and you will have your own ideas about what skills are relevant in your SOLE. In our work, we found that students identified what information they thought was relevant and chose to copy this out. It is also possible that students might rework information they find to develop more original writing. In both cases, students engage with a range of skills.

When working together to annotate these together with Mike Rugg, also at the WEA North East, we also discussed the different kinds of extension and follow-up activities which

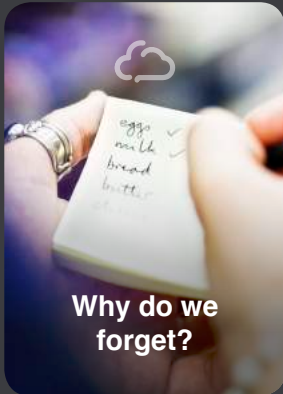
could take place after the SOLE. You and your colleagues may find it helpful to participate in similar 'professional conversations' about how you can draw on SOLE to explore flipped learning and other approaches within your own contexts.

### **Our suggested follow-up Activities**

Use the student generated content as an introduction to the teaching and learning of specific skills such as measurement, shape and space in maths for descriptive writing in English (or another language) for example.

Use the student generated content as a basis for analysing with your students what skills they demonstrated during the SOLE. For example, create cards with key words linked key skills and ask the students to carry out a mapping activity where they evaluate their own work in groups.

## CASE STUDIES



Writes short and simple sentences

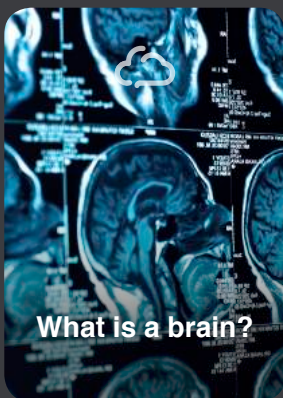
Read and understand the purpose and content of straightforward texts that explain, inform and recount information.

Write texts with some adaptation to the intended audience.

Andrew

I remember my mother vegetable garden when I was a child. Corn plants tall like skyscrapers I remember when I fell out of the tree and everyone from the neighbor's barbecue rushed over to see if I'd broken a bone remember / remember... the web itself is poetic doing the essence of experience the notion of memory is so that we come up with more metaphors for it than

Read and understand short, simple texts that explain or recount information.



Write texts with some adaptation to the intended audience.

Read and understand the purpose and content of straightforward texts that explain, inform and recount information.

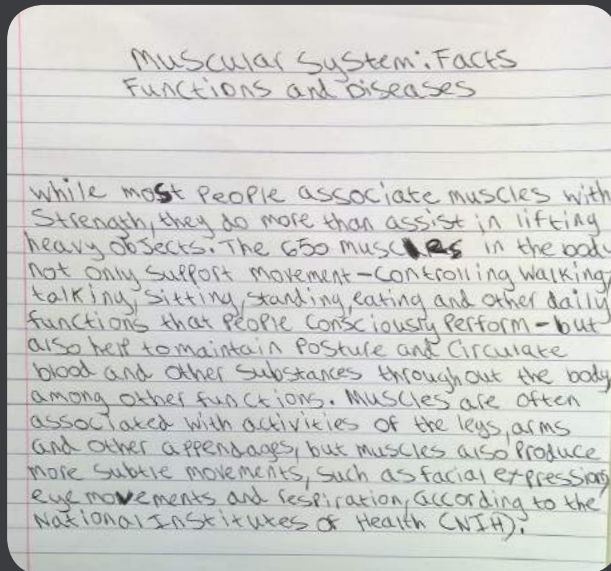
Richard Ayre

Your brain is the center of your nervous system it takes in sensory information about your surrounding in an appropriate way to environment processes this information in an appropriate way to the world

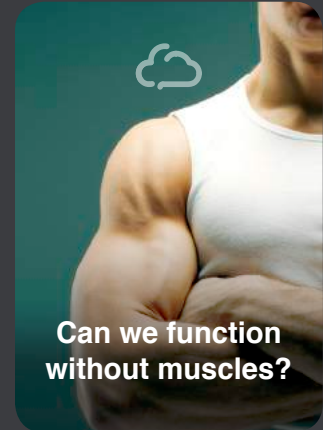
Respond appropriately to others and make some extended contributions in familiar formal and informal discussions and exchanges.

## CASE STUDIES

Write texts with some adaptation to the intended audience.



Recognise that a situation has aspects that can be represented using mathematics.

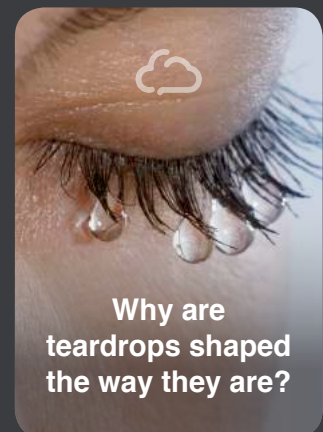


Read and understand the purpose and content of straightforward texts that explain, inform and recount information.

Choose appropriate language and forms of presentation to communicate results and solutions.

RAIN  
SMALL DROPS (RADIUS)  
1 MILLIMETER (MM) ARE SHAPED LIKE  
A HAMBURGER BUN!  
REAL RAINDROPS LOOK SCARY  
RESEMBLE TO THIS POPULAR  
FANTASY-EXCEPT AFTER THEY LAND

Recognise that a situation has aspects that can be represented using mathematics.



Self-Advocacy SOLE Toolkit for Communities of Adults with Diverse Needs by Anne Preston and Diane Holmes is licensed under a Creative Commons Attribution Non Commercial ShareAlike 4.0 International License. Based on a work at the School in the Cloud and the original SOLE Toolkit by Sugata Mitra. Permissions beyond the scope of this license may be available at <https://www.theschoolinthecloud.org>.

All photographs are licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

