The gift of life

This learning sequence introduces students to a range of issues relating to organ and tissue donation for transplantation. The learning activities are aligned to the Australian Curriculum in the areas of English and Science; they are also relevant to the learning areas of Civics and citizenship and Health and physical education. Students explore sensitive issues through short films and personal stories; engaging and challenging texts for the English classroom. A personal story also serves as the catalyst for the Science activity where students investigate organs of the body through an online interactive and personal research. The materials used to support the learning activities are mainly developed by the Organ and Tissue Authority (DonateLife).

In this resource, hyperlinks are indicated in three ways:
- **text structure** links to the Glossary section of ACARA’s Australian Curriculum website.
- `[ACELY1736]` links to the Content Description section of ACARA’s Australian Curriculum website.
Background for teachers

The activities in this education resource have been designed to support teachers as they develop students’ awareness of organ and tissue donation for transplantation. Students’ learning will be most effective if English and Science teachers coordinate their teaching programs to allow students to complete the activities from this learning sequence during the same term. By using the resource teachers will be helping to facilitate the national reform agenda announced by the Australian Government in 2008. This agenda, *World’s Best Practice Approach to Organ and Tissue Donation for Transplantation*, aims to:

- increase the capability and capacity within the health system to maximise donation rates; and
- raise community awareness and stakeholder engagement across Australia to promote organ and tissue donation.

Teachers need to be sensitive to the fact that the activities in this resource raise the issue of death and dying. In particular, the emotions and needs of students in your class who have personal or family experience with organ and tissue donation and/or transplantation need to be considered (and students who may require an organ transplant in the future due to an existing illness). Other students in the class may also feel some caution about discussing issues relating to organ and tissue donation. Before asking your students to engage in these class activities teachers need to establish a ‘safe’ environment by developing students’ ability to listen to a range of ideas and respect ideas that are different to their own.

Organ and tissue donation is a life-saving and life-transforming process. Organs are removed from a donor and transplanted into someone who is very ill or dying from organ failure. Eye and tissue donation can save or improve the quality of life for others, such as restoring the gift of sight.

While Australia is a world leader for successful transplant outcomes, around 1600 people are on Australian organ transplant waiting lists at any one time. In 2012, there were 354 organ donors who gave 1052 Australians a new chance at life which is the highest donation and transplantation outcome since national records began. However, many Australians are unaware of the rarity of organ donation; less than 1% of people die in hospital in the specific circumstances where organ donation is possible e.g. on a ventilator in an Intensive Care Unit (ICU) or Emergency Department. Whereas organ donation can only occur under very specific circumstances, these circumstances don’t apply to tissue donation. Many more people can become eye and tissue donors as tissues can be donated up to 24 hours after death regardless of where death occurred.
Learning descriptions

ENGLISH

Analyse how the **text structures** and **language features** of persuasive **texts**, including **media texts**, vary according to the **medium** and **mode** of communication [ACELA1543]

Understand and explain how combinations of words and images in **texts** are used to represent particular groups in society, and how **texts** position readers in relation to those groups [ACELT1628]

Interpret the stated and implied meanings in spoken **texts**, and use evidence to support or challenge different perspectives [ACELY1730]

Recognise and explain differing viewpoints about the world, cultures, individual people and concerns represented in **texts** [ACELT1807]

Create imaginative, informative and persuasive **texts** that raise issues, report events and advance opinions, using deliberate language and textual choices, and including digital elements as appropriate [ACELY1736]

Use a range of software, including word processing programs, to **create**, edit and publish **texts** imaginatively [ACELY1738]

SCIENCE

Multi-cellular organisms contain **systems** of organs that carry out specialised functions that enable them to survive and reproduce [ACSSU150]

Solutions to contemporary issues that are found using science and **technology**, may impact on other areas of society and may involve ethical considerations [ACSHE135]

References


DonateLife Book of Life, Volumes 3, 8 and 9 (2011/12)

FilmLife Film Project 2012 —

GiveandLetLive website (NHS Blood and Transplant) —
Introductory activity

LEARNING DESCRIPTION
Interpret the stated and implied meanings in spoken texts, and use evidence to support or challenge different perspectives [ACELY1730]

The issues raised in this learning sequence are deeply personal and it is important to establish a ‘safe’ classroom environment where students feel free to contribute their ideas. Discuss with your students the need to respect the range of different ideas that class members have; everyone should feel safe to share their ideas during class discussions without fear. Also, encourage your students to focus on issues rather than personalities during class discussions. Emphasise that the decisions individuals make about organ and tissue donation are not ‘right’ and ‘wrong’, and it is valid for people to change their minds about these issues over time.

Before introducing any texts relating to organ and tissue donation, ask students to reflect on the following:

“*What appears right for one person may appear wrong to another.*” Can you think of a situation where this may be the case?

Allow time for students to prepare a brief written response to this question; then invite them to share their ideas with a partner before joining a class discussion. Take time to establish that there are no right answers and that it is important to respect the different views members of the class may hold.

Your feedback to the students during this discussion should focus on their openness to the ideas of others and the way that they seek to clarify their own ideas and the ideas of others.
Devising a message

LEARNING DESCRIPTIONS

Analyse how the text structures and language features of persuasive texts, including media texts, vary according to the medium and mode of communication [ACELA1543]

Understand and explain how combinations of words and images in texts are used to represent particular groups in society, and how texts position readers in relation to those groups [ACELT1628]

Interpret the stated and implied meanings in spoken texts, and use evidence to support or challenge different perspectives [ACELY1730]

In this activity, students will explore the devices used by two young film makers to convey a message about organ donation. The 2–5 minute films, Ask the hard questions by Josephine Lie and One life, one decision by Jessica Sparks, can be accessed on the DonateLife website at FilmLife Film Project. They were created for the FilmLife film festival in 2012, where young and emerging film makers were challenged to respond to the topic of organ and tissue donation.

After your students have viewed the films, invite them to discuss the impact and effectiveness of each film. Ensure students understand that tone (e.g. serious, bitter, sincere, amused) indicates the film makers’ attitude to the subject and to viewers; and that viewers in turn identify or judge tone through past experience and language clues in the text. In a class discussion, ask questions such as:

- What tone did each film maker adopt? How important do you think the tone of a message is to the way we interpret it?
- Do you think the use of sounds or images is more important in conveying the message in each of these short films?
- What elements of persuasive language does each film maker use to convey their message?
- Is it appropriate to use humour to convey a message about a topic as serious as organ donation?
- Ask the hard questions does not introduce the subject of organ donation until the end of the film. Why do you think that this decision was made and how does it affect the impact of the message?

Then, ask your students to provide written responses to the questions on Student activity sheet 1: Devising a message.
Life-sustaining organs and tissues

**LEARNING DESCRIPTIONS**

Multi-cellular organisms contain systems of organs that carry out specialised functions that enable them to survive and reproduce [ACSSU150].

Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations [ACSHE135].

In this activity students will explore the location and functions of the major organs of the human body. They will also consider the organs and tissues that can be donated for transplantation.

**Part A**

Share with students the following story about Daniel from the DonateLife Book of Life, Volume 9 (2011).

Daniel was born in Mildura. He raced through childhood with the usual broken bones and stitches. He played guitar from a young age and went on to share his love of music, laughter and stories while sharing a Bundy or a beer around a barbie with mates and family.

At about 20 he moved to South Australia, and worked as a sign writer and labourer. He had three beautiful daughters. At 33, Daniel collapsed with a brain aneurysm. He was admitted to ICU where the amazing surgeons pulled him through with a repair operation. He seemed to be recovering and even surprised doctors by playing music with a food grater and whisk accompanied by his brother on a ukulele.

About a week later he suffered a massive stroke and was placed on life support for the second time. His condition deteriorated and after a 12 day struggle he passed from this life surrounded by loving family, friends and music.

We received a call from the Eye Bank asking if we would consider donation of Daniel’s eyes as he had registered as an organ donor. As the family had previously discussed organ donation there was no hesitation.

Our son was always giving a helping hand to others in life. Doing odd jobs or painting and for a number of years helping cook the BBQ breakfast after the Anzac Day service in a small country town.

It just seemed right that he continue to help others in death, by giving sight to two others. We received a beautiful letter of thanks from one recipient and wish the recipients well.

The support from the Eye Bank of South Australia has been very comforting. They hold a Thanksgiving Service for families of donors and we received a voucher for a Memorial Rose and have just delighted in watching the first year of bloom. We miss this special guy so very much and are so proud and comforted knowing he was still able to help others. Daniel, you are forever in the hearts of your loving family.

Julie
In a class discussion, establish what your students know about organ and tissue donation.
Ask your students questions such as:

- What does it mean to donate organs and/or tissues?
- Why is transplantation sometimes necessary?
- What parts (organs and tissues) of the body can be donated?
- Have doctors been transplanting organs and tissues for many years?
- What technological developments may have been necessary to make organ and tissue donation possible?
- What are some of the ethical issues that need to be considered in relation to organ and tissue donation and transplantation?*

* The Organ and Tissue Authority provides many resources on its DonateLife website—http://www.donatelife.gov.au/ that will assist in answering these questions. The following extract is a suggested starting point:

**What is organ and tissue donation?**

- Organ and tissue donation involves removing organs and tissue from someone who has died (a donor) and transplanting them into someone who, in many cases, is very ill or dying (a recipient). The donation can save the life of or significantly improve quality of life for recipients.
- In Australia, most donations occur when a person is declared ‘brain dead’. Brain death occurs when the brain is so badly damaged that it permanently stops functioning, usually because of bleeding in the brain, a stroke, an infection or a severe head injury.
- A series of tests carried out by two independent and appropriately qualified senior doctors establishes that brain death has occurred. These doctors are different from those who would conduct transplantation, should it occur.
- Brain death is completely different from coma. A patient in a coma is unconscious because their brain is injured in some way, but their brain can continue to function and may heal. Medical tests can clearly distinguish between brain death and coma.
Part B

Use an interactive whiteboard or computer to introduce your students to the interactive donor body from the GiveandLetLive website (NHS Blood and Transplant). (This interactive may take some time to download.) It can be accessed at [http://www.giveandletlive.co.uk/en/donation/donor_body/donor_body.html](http://www.giveandletlive.co.uk/en/donation/donor_body/donor_body.html)

Use the interactive to view different organs and tissues by dragging the ‘x-ray’ to different parts of the body. Once you select the organs or tissues you want to find out about, click on it to reveal several panels of information. Some of the information relates to organ donation in the United Kingdom but the information about the function of the organs and tissues is valid for Australian students.

- When students have had time to explore the interactive, ask them to complete the first page of [Student activity sheet 2: Systems in the human body](#), where they locate six organs on a diagram. (See Appendix 1 for a diagram that has been completed.) The diagram on the second page of the activity sheet identifies tissues of the human body that can be transplanted. Invite your students to explore the diagram and ask them questions such as: which of these tissues were you aware could be transplanted?
- Technological advances mean that ‘artificial’ skin, valves or bone are used in some surgical procedures; why are human organs and tissues still used for transplantation?
- Do you think that more people may agree to tissue donation than organ donation?

Then divide the class into eight groups and allocate one of the following to each group:

- Bone
- Kidneys
- Cornea
- Liver
- Heart
- Lungs
- Heart valve
- Skin

The students in each group need to research the organ or tissue they have been allocated and complete the questions on [Student activity sheet 3: Group research](#). Once they have completed this research they should share their findings with the rest of the class through an oral presentation. Encourage students to include diagrams and images in their oral presentations.
In this activity students will explore short stories from the DonateLife Book of Life and consider some of the issues involved in organ and tissue donation and transplantation. Introduce the stories to your students by explaining that these personal stories were published by the Organ and Tissue Authority to encourage Australians to find out the facts about organ and tissue donation, to make well informed decisions, and to discuss those decisions with their families.

Ask your students to work in five groups, and provide each group with one of the following stories:

- ‘Tinni’s story’, DonateLife Book of Life, Volume 7
- ‘Neville would have given his last cent—instead he gave life to five Australians’, DonateLife Book of Life, Volume 8
- ‘From death’s door to the Wiggles and John Lennon’, DonateLife Book of Life, Volume 9
- ‘Shaun’s story’, DonateLife Book of Life, Volume 9
- ‘Pete’s legacy’, DonateLife Book of Life, Volume 9

Share the information about the purpose of the collection of stories with your students. Allow them time to read their story and discuss it as a group. Then, in a class discussion, ask them to:

- analyse the tone of their selected story and explain how this influences their response to the story (they may like to anticipate how a different tone would have changed their response)
- investigate how language has been used to represent the person in the story and reflect on how this language positions the reader in relation to the issue of organ and tissue donation
- consider the effectiveness of personal stories, as compared to facts and statistics (see http://www.donatelife.gov.au/discover/facts-a-statistics) as a way of educating people about the issue of organ and tissue donation
- recognise and explain different perspectives about donation represented in the stories
- list any questions about organ and tissue donation that have not been answered by the stories and information you have read.

Where possible, arrange for a person whose life has been directly affected by organ and/or tissue donation or transplantation to visit the class and discuss their experience with your students. After they have shared their own story ask if they could answer the questions developed by your students, basing their answers on their personal experience. The DonateLife agencies in each state or territory maintain lists of DonateLife staff, donor families or transplant recipients who are available to visit classrooms. Use this link to locate the DonateLife agency in your state or territory http://www.donatelife.gov.au/about-us/donatelife-network.
**Powerful words**

Analyse how the **text structures** and **language features** of persuasive **texts**, including **media texts**, vary according to the **medium** and **mode** of communication [ACELA1543]

Understand and explain how combinations of words and images in **texts** are used to represent particular groups in society, and how **texts** position readers in relation to those groups [ACELT1628]

Create imaginative, informative and persuasive **texts** that raise issues, report events and advance opinions, using deliberate language and textual choices, and including digital elements as appropriate [ACELY1736]

Use a range of software, including word processing programs, to create, edit and publish **texts** imaginatively [ACELY1738]

In this activity students select any issue that is part of current community debate and create a message that promotes an argument (for or against) relating to that issue e.g. legalising gay marriage, banning plastic bags, genetically modified food. Students have already analysed texts relating to organ and tissue donation; encourage them to reflect on which features of these texts they found most effective and to use similar features when they develop their own message.

Encourage your students to define an audience and to consider their own strengths and interests when they choose a medium for their message. They could, for example, create a web page, a poster, a television advertisement, a skit, a short story or a poem.
Student activity sheet 1: Devising a message

How did you respond to the films *Ask the hard questions* and *One life, one decision*?

1. What are the main messages (stated and implied) of each of the two films?

2. What audience do you think each of the films aims to appeal to? Refer to specific examples from the films in your answer.

3. Identify how each film maker has created the tone of their film (for example, humour, empathy, sound). How effective do you think these devices are?

4. In *One life, one decision* the story is narrated using first person point of view. How does this autobiographical approach affect the power of the message?

5. Which of the films did you find most engaging? Explain with reference to each of the films.
Student activity sheet 2: Systems in the human body

Identify and label each of the highlighted organs on the diagram:

- Heart
- Liver
- Lungs
- Kidneys
- Pancreas
- Small bowel
Student activity sheet 2 (continued)

Tissues that can be transplanted

Adapted from the United States Department of Health Decision Donation Resource
Student activity sheet 3: Group research

1. Which organ or tissue are you investigating?

2. What is the main function of this organ or tissue?

3. Describe the structure of the organ or tissue. Include a diagram.

4. What types of disease, infection or damage can make it necessary to replace this organ or tissue?
Appendix 1 (for teachers)

Body organs: completed diagram

- Lungs
- Liver
- Kidneys
- Heart
- Pancreas
- Small bowel
Daniel was born in Mildura. He raced through childhood with the usual broken bones and stitches. He played guitar from a young age and went on to share his love of music, laughter and stories while sharing a Bundy or a beer around a barbie with mates and family.

At about 20 he moved to South Australia, and worked as a sign writer and labourer. He had three beautiful daughters.

At 33, Daniel collapsed with a brain aneurysm. He was admitted to ICU where the amazing surgeons pulled him through with a repair operation. He seemed to be recovering and even surprised doctors by playing music with a food grater and whisk accompanied by his brother on a ukulele.

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The support from the Eye Bank of South Australia has been very comforting. They hold a Thanksgiving Service for families of donors and we received a voucher for a Memorial Rose and have just delighted in watching the first year of bloom.

We miss this special guy so very much and are so proud and comforted knowing he was still able to help others.

Daniel, you are forever in the hearts of your loving family.

Julie
Tinni’s story

Our beautiful 17 year old daughter Katrina or Tinni as we called her, was taken away from us in the prime of her life.

Tinni was diagnosed with epilepsy at the age of 11 and by the time she was 16 it was getting worse.

Tinni was a typical teenager who loved life, parties and going out with her boyfriend and friends. It was in her last month with us that we had a random conversation. We have no idea how it even came up but it was at this time when we found out her intentions to donate. Her reply was ‘I won’t need them anymore so someone else can use them.’ That was the end of our conversation.

Thinking back now, how would anyone have been able to look into the future?

As a donor family we found so much comfort in receiving letters from the recipients; to know that all is well and that donation has made such a difference in another family’s life. It is like a piece of her still lives on and it is of great comfort that our daughter was able to give the gift of life.

To our family, Tinni is a hero. She donated her kidneys and heart valves. Without this random conversation we wouldn’t have known what to do. We believe that decision would have been too hard to make.

Talk to your friends and family, and spread the word. Everyone needs to know the importance of organ and tissue donation.

To all the recipients we have found such comfort in your letters and cards; it has made a world of difference.

Tinni has left her legacy behind her. She will never, ever be forgotten. We love you Tinni. You will be forever young and free. Love Mum, Dad, Kearin, Kelly and Matthew.
Neville would have given his last cent—instead he gave life to five Australians

At 18 years of age Neville was a promising student in digital media who also enjoyed dancing and drama. That same year he was diagnosed with a brain tumour close to his brain stem.

Neville had a biopsy and recovered well but his prognosis was terminal because the tumour was inoperable as it was quite deep.

He incurred some light swelling to the brain but while in hospital he ‘crashed’ and became unconscious. More surgery followed as his brain continued to swell.

Following waiting, monitoring and tests, I recall my mother saying, ‘What do we need to do about organ donation?’.

I knew he had filled out forms to register as a donor but more than this I knew the way Neville lived his life was that he would give anyone his last cent if it could help them. I knew he would want to help others by donating his organs.

He did help people.

Five other Australian lives were saved through the generosity of Neville’s organ donation—his lungs, kidney and liver. His liver was able to be split so that it saved two lives.

I have had discussions with my family and they all know my wish to donate.

The Theatrix of Performing Arts at Unanderra now has a perpetual trophy to honour Neville but his wonderful giving spirit lives on through organ donation.

Liza

Neville.
As Brent lay in a coma our family travelled from across the country to say their goodbyes, but Brent was to have another chance. The tragic end of one life gave him a new beginning when he received a donor liver—just in time.

Unlike most children who need transplants, Brent developed rare hepatitis very rapidly and without warning, which meant we and the hospital staff had to swing into action quickly. To find a suitable liver within 24–48 hours. This required a miracle and luckily—it happened.

Fast forward 15 years and Brent is now 18, has just finished secondary school and is contemplating his tertiary options. In the years leading up to now he has been predominantly fit and healthy. He has achieved academic success and enjoyed playing football in junior ranks, culminating in captaining under 14’s into the finals. Unfortunately his smaller body and enlarged spleen made it too dangerous to continue against bigger bodies that had not been subjected to years of anti-rejection medication.

His childhood fascination with the Wiggles gave way to a love of the Beatles and in particular John Lennon. Brent has now taken up playing piano and wearing round sunglasses!

Brent’s biggest adventure since his liver transplant was a snow skiing trip to Switzerland with other transplant kids from around the world—a trip he made without his mum and dad. His biggest concern about going to a foreign country alone was ‘what do they eat over there?’.

Brent is a passionate member of the Richmond Football Club and attends games whenever possible, travelling to Melbourne on the train with his mates; a far cry from the very sick little boy with little or no chance of survival as I (his father) was told one dark, cold night.

None of this would have been possible without the gift of life given to Brent by a total stranger, someone that we have never known or ever forgotten.

Allan (Brent’s father)
Hi, my name is Shaun and I am 17. I like hanging out with my friends, the Bombers (Essendon Football Club) and girls—all pretty normal teenage stuff really. But my life hasn’t always been that normal.

Here is my story.

I have had two heart transplants. Yes, two. When I was born I had a problem with my heart. By the time I was eight I couldn’t run, I was tired all the time and I wasn’t growing. The doctors said I needed a new heart. I didn’t really understand why, but I cried with happiness when the doctor told me I would be able to play footy like the other kids.

One night about 11pm the hospital rang and said they had a new heart for me. I had an operation that lasted 14 hours and then I was given a new life at eight. I played my first footy game and I went swimming. I loved playing with the other kids and keeping up!

Nearly five years later, when I was 13, the doctors found another problem with my heart. My heart was not working again. But a second miracle occurred and I was lucky enough to have a second heart transplant. How can one person be so lucky?

That was four years ago now, and I am doing really, really well. When I finish school I want to be a nurse so I can help sick kids like I was—because I know what a big difference the nurses make.

I was chosen to be an ambassador for ‘Heart Kids’—a support group specifically for kids with heart problems. As an ambassador I talk about my life and help them to stay positive.

I want the families that helped me to know that I am living life to the fullest for them and for me. My motto is stay positive, and never, never, never give up. You never know what tomorrow will bring.

Shaun

Sadly Shaun passed away in May 2012. Shaun had been battling a chronic heart condition and was told by doctors he would not have long to live after his body began rejecting a second heart transplant.
Pete’s legacy

When a tragic skateboarding accident led to a midnight phone call, a trip to the local hospital, and a high speed ambulance transfer to hospital, we were met with the news that Peter was unlikely to survive his critical head injuries. Peter was placed on a ventilator and, as a CAT scan revealed, he had brain injuries which would probably be irreversible. We maintained a bedside vigil as his sisters flew and as family drove through the night to be by his side.

Peter’s dream was to become a doctor or paramedic. He wanted to make a difference and save lives. He was an advocate for blood donation and as Captain of his High School he had instigated blood donation as the main focus of his year on the Student Representative Council. It was a natural progression when he gained his licence that he tick ‘Yes’ to the organ donation question on his licence. Peter had discussed it with me, his mum, in passing and asked if I was an organ donor and in an offhand manner I replied I was. We never really discussed it as I never really considered it likely to happen.

Peter died in the early morning, around 11 hours after his accident, of a heart attack caused by swelling of his brain and massive blood loss. This type of death in a country hospital prevented organ donation. We were doubly disappointed that his final wish to save lives was not realised.

Today, however, Peter is saving lives through a special ‘Be Positive 4 Peter’ group which anyone can access on Facebook. Over 1500 new donors have signed on to donate on his behalf. The 42% increase in local donations which has in part contributed to the new and expanded service in Coffs Harbour.

The distress of lack of knowledge about organ donation has led to my interest in education about organ donation in schools. As the local teachers, students and Nurse Educators bring this program to the Valley, Peter’s dream of saving lives will be realised.

We hope 2012 will bring the message to schools throughout NSW so that other families are able to fulfil the wishes of their family when they make the ultimate donation.

Kerri and Terry

Peter