# The Legacy Code: The Altruism Paradox

(Year 9 - Ages 14-15)

# Lesson 1 of 9

#### Lesson Overview

**Lesson Title:** The Legacy Code: The Altruism Paradox

Year 9 (Ages 14-15) Year Level:

60 minutes **Lesson Duration:** 

Game Theory, Neuroscience, Evolutionary Psychology, Ethics. **Key Focus Areas:** 

**Curriculum Links:** Australian Curriculum - Health and Physical Education

(Foundation)

 AC9S9U02: Analyze how body systems coordinate and regulate function... (Focus: The Nervous/Endocrine system's reward pathways for social behaviour)

• AC9HP10P09: Critique behaviours and community actions that impact health and wellbeing. (Focus: The impact of altruism on community health)

AC9HS9K04: The role of political parties and... how citizens participate in Australia's democracy. (Focus: Active citizenship and social responsibility)

# Learning Intentions

- Define Altruism through the lens of Evolutionary Psychology and Game Theory.
- Investigate the "Neuroscience of Giving" (how the brain rewards prosocial behaviour).
- Analyze the difference between Reciprocal Altruism (expecting a return) and Pure Altruism (donation).
- Evaluate why high rates of altruism (like donation) create stronger, safer societies ("The Social Contract").

# Success Criteria

- Explain the "Altruism Paradox" (Why do we help if it doesn't seemingly benefit our survival?).
- Identify the role of Dopamine and Oxytocin in the "Helper's High."
- Apply Game Theory logic to explain why cooperation is a better long-term strategy than selfishness.
- Categorize Organ Donation as a unique form of "Pure Altruism" (helping a stranger without direct reward).





# Teaching Sequence

Work through this lesson in the following sequence:

Duration	Part	Focus
15 minutes	Part A: The Game	Simulation: "Split or Steal" (Prisoner's Dilemma).
15 minutes	Part B: The Paradox	Discussion: Why be nice? (Evolution vs. Ethics).
15 minutes	Part C: The Neuro-Lab	Worksheet: The chemistry of kindness.
15 minutes	Part D: The Social Contract	Reflection: Planting trees we won't sit under.

#### Part A: The Game (15 minutes)

#### Step 1. The Hook

- Play: "Split or Steal" video clip.
- Simulation: Pair up students. Give them "Split" and "Steal" cards. Play 3 rounds for points/chocolate.
- Debrief: "Who stole? Who split? How did you feel when you got betrayed?"

#### Step 2. The Link

• Say: "Life is a game of Split or Steal. If everyone steals, society collapses. If everyone splits (cooperates), everyone wins. Donation is the ultimate 'Split'—giving to the collective pot."

### Part B: The Paradox (15 minutes)

#### Step 1. The Question

- Ask: "Darwin said 'Survival of the Fittest.' So why do humans help strangers? Why don't we just look after ourselves?"
- Concept: Introduce Reciprocal Altruism (Social Credit) vs. Pure Altruism (Donation).

# Part C: The Neuro-Lab (15 minutes)

#### Step 1. The Science

- Worksheet: Students complete Part 2.
- Direct Instruction: Explain that the brain bribes us to be good.
  - "When you register to donate, you get a hit of Dopamine (Pride) and Oxytocin (Belonging)."
  - Link to Science: This is the Nervous System and Endocrine System working together to regulate social behaviour.



#### Part D: The Social Contract (15 minutes)

#### Step 1. The Legacy

- Quote: Read the Greek Proverb from Part 4.
- Discussion: "Organ donation is planting a tree for someone else. It is the 'Code' that keeps humanity going."

#### Step 2. Conclusion

Say: "Next lesson, we look at the people who are waiting for that tree to grow."

# Differentiated Learning

- Extension:
  - Students research "The Tragedy of the Commons" and explain how it relates to the shortage of donor organs (a shared resource).
- Learning Support:
  - Provide Use physical tokens for the game (Red = Steal, Green = Split) to make the simulation concrete.

# Teacher Reflection

- Did the Game Theory simulation engage the "gamers" and logical thinkers?
- Did the neuroscience link validate the feeling of kindness as "real" biology?
- Was the transition from "Game Strategy" to "Real World Ethics" clear?

### Assessment

- Worksheet (Part 1): Assess logical reasoning—can they explain the strategy behind Split/Steal?
- Worksheet (Part 3): Assess understanding of the types of Altruism.

# **Additional Notes:**

This lesson is high-engagement. The "Split or Steal" game usually generates a lot of noise and excitement. Use that energy to drive the discussion about Trust. Without trust, the game fails. Without trust, the donation system fails. This sets up the rest of the unit perfectly.



