Catalogue of digital curriculum resources
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- Big People, Small People, 1991: 'Wealthy on the inside'
Introduction
This catalogue contains details about the Finance, business and enterprise digital curriculum resources available from The Learning Federation (TLF) to all schools in Australia and New Zealand. The content supports and enhances students’ knowledge, understanding, skills and values in Financial, business and enterprise contexts in the P–12 years.

Some content focuses on financial calculations as skills practice, other content on application of mathematical skills in authentic financial contexts. Some content requires students to be innovative, creative and entrepreneurial and to make decisions weighing up the effect they might have on self, others, the community and the environment.

The digital resources include:
- interactive learning and assessment objects
- images and film clips.

Learning and assessment objects
Learning objects are generally published in series and some are also aggregated into single, larger learning objects. Aggregated learning objects are identified with the ☛ symbol.

An asterisk (*) on the series title indicates that not all the learning objects in that series have been released. The remaining learning objects will be released progressively.

Some learning objects contain non-TLF content. See the acknowledgements and conditions of use in the learning objects for details.

Digital resources
A range of digitised items licensed from leading Australian and New Zealand cultural and scientific institutions is also available. The items are identified by the following symbols:

- clips from documentaries, newsreels, television programs and feature films
- photographs, line drawings and documents.

With each item, TLF supplies an educational value statement comprising a description and contextual information that enriches the value of the asset for the teacher.

Accessing and viewing the content
Government and non-government education authorities in each Australian state and territory and in New Zealand have responsibility for facilitating access to the pool of digital content. Full details about how to access the content, including the necessary technical and software requirements for viewing it, can be found at:

www.ndlrn.edu.au
Learning objects

Financial calculations

These interactive learning objects involve students in a range of numerical and algebraic calculations involving money.

Diffy (Years 3–9)

Students practise subtraction to find the differences between a series of numbers.

Features include:

- dynamic generation of starting numbers which supports repeated use
- an option for students to specify starting numbers
- a range of number types for students to practice finding differences.

Students:

- calculate the difference between numbers.

Party time: assessment (Years 5–8)

Students are assessed on their ability to shop for a class party within a set budget.

Features include:

- a practical situation to assess students’ calculation skills
- a mechanism for the student and teacher to comment on each student’s learning progress
- a printable report showing the student's selection of party goods, the correct selection of party goods for the cheapest total cost, as well as the student's reflection on future improvement areas.

Students:

- are given a shopping list of three items (lemonade, cupcakes and party hats) to purchase for their class party
- calculate the cheapest unit price for the three items and the quantity of each item required, taking into account the special discounts available as well as the total cost of the party goods.
School canteen series (Years 5–9)

Students are responsible for purchasing stock online for the school canteen. The focus is on the mathematical skills and calculations associated with shopping, including purchasing goods in multiples of fixed units and determining best buys to minimise total costs.

Features include:
- calculations that require recognition and use of ratio, factors and multiples of whole numbers and measures, and recall of multiplication and division facts
- encouragement to use efficient multiplicative strategies to solve arithmetic problems
- two levels of objects that reflect two different levels of difficulty in the calculations
- randomised quantities and costs that support repeated use.

Students:
- use halving and doubling, thirding and trebling strategies in multiplicative situations
- solve problems by selecting and applying efficient multiplicative strategies
- solve problems using or involving ratios and rates
- solve problems in a shopping context.

School canteen: restock: level 1
L1927 – Years 5–9

Students choose how to order school canteen items available in a range of packaging sizes. In these examples, the unit price of the item remains the same regardless of the quantity purchased. Strategies are displayed at the end of each order.

School canteen: restock : level 2
L1931 – Years 7–9

The range of numbers is greater and the packaging size varies from level 1 but the unit price remains the same. Strategies are displayed at the end of each order.

School canteen: best buy: level 1
L1928 – Years 5–9

Students need to calculate the unit prices for each different pack size to find the lowest price. There are up to four pack sizes for each item. Strategies are displayed at the end of each order.

School canteen: best buy: level 2
L1932 – Years 7–9

The calculations for level 2 are more difficult than those required for level 1. Strategies are displayed at the end of each order.

School canteen: two traders: level 1
L1929 – Years 5–9
For each item, students must calculate the total price from two traders. The package sizes and package sizes vary.

School canteen: two traders: level 2  
L1933 – Years 7–9  
The calculations for level 2 are more difficult than those required for level 1.

School canteen: estimate and check: level 1  
L1930 – Years 5–9  
Students check the prices and package sizes from the price catalogues of two traders. They identify the lowest price per item then estimate which trader will supply all the goods for the lowest total cost. Students then test their estimates by calculating the total cost of the items from each trader.

School canteen: estimate and check: level 2  
L1934 – Years 7–9  
The calculations for level 2 are more difficult than those required for level 1.
Exploring linear equations (Years 6–9)

Students watch a video showing animals feeding at a zoo and see how linear equations are used to calculate daily feeding costs.

Features include:
• a video illustrating how linear equations can be used to calculate costs of feeding zoo animals.

Students:
• understand linear equations through a real context
• see how linear equations are used in calculations involving fixed and variable costs.

Exploring linear equations
L6553 – Years 6–9

Students see how linear equations are used to calculate daily feeding costs. For example, daily costs of meat for tigers is ($9.90 per kg x 36kg) + $10 delivery = $366.40.

Exploring Algebra series (Years 6–9)

Students explore and practise a range of concepts and operations relating to algebra to calculate the profit/loss for a small business.

Features include:
• structured equations to help students find relationships between variables
• a sequential approach to solving algebraic problems
• randomly generated variables for use in calculations of profit and loss to encourage repeated use.

Students:
• use variables and equations to express, summarise and apply numerical relationships
• evaluate expressions arising from concrete financial models.

Exploring algebra
L6552 – Years 6–9

Calculate a disc jockey’s profit or loss when he sells records. Use algebraic notation to represent variables. For example, T = 56 + 3n (where T is total expenses and n is the number of records produced). Calculate revenue and expenses then work out the profit or loss.
Mobile phone plans series (Years 8–9)
Students explore the mathematical concepts of cost estimates, data analysis, cost time graphs, line graphs and tables.

Features include:
- a progressive increase in the number of options and alternatives available in each learning object.

Students:
- use line graphs to analyse the costs associated with some different mobile phone plans
- interpret patterns to make predictions and comparisons between different plans using graphs to analyse and compare the costs
- recommend the cheapest plan for each user profiled.

Mobile phone plans: find the best deal 1
L762 – Years 8–9
Students compare monthly costs of a current prepaid plan (covering calls and texts) for three different users with costs from a new phone company.

Mobile phone plans: find the best deal 2
L763 – Years 8–9
Students compare monthly prepaid plans (covering calls, photos and texts) offered by three companies for a range of users with different calling patterns.

Mobile phone plans: find the best deal 3
L1107 – Years 8–9
Students compare monthly prepaid plans (covering six options) offered by three companies for a range of users with different calling patterns. The plans include discounted rates for calls to subscribers of the same company.

Mobile phone plans: peak and off-peak
L1108 – Years 8–9
Students compare monthly costs on two different calling plans (peak and off-peak) for a range of users with different calling patterns.

Mobile phone plans: one company
L1109 – Years 8–9
Students compare monthly costs on three different calling plans for a range of users with different calling
patterns offered by a company.

Mobile phone plans: several companies
L1110 – Years 8–9

Students compare monthly costs for a range of users using three similar plans offered by three different companies.

Maths and the car: loan calculator (Years 9–12)

This is a short activity in which students use a calculator to estimate the loan repayments needed to buy a car.

Features include:
- an online loan calculator, using set compound interest rates (no early repayments).

Students:
- calculate loan payment schedules
- use a calculator to work out loan repayments and total interest.
Business, consumer awareness and enterprise

These interactive learning objects enable students to be immersed in a range of business situations both as an entrepreneur and as a consumer.

Island life series (Years P–6)

Students distinguish between needs and wants when selecting six items that will ensure their survival on a tropical island.

Features include:
- challenges for students to choose items needed for survival on a tropical island
- careful distinctions between needs and wants
- animated feedback to demonstrate the consequences of decisions made
- a colourful setting and bright calypso music.

Students:
- distinguish between needs and wants when planning to live on a tropical island
- observe the social, environmental and personal consequences of selecting needs or wants.

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Island life: needs and wants
L1008 – Years P–2

Island life prompts students to distinguish between needs and wants in an engaging, fun manner. To survive on a tropical island, students choose six items to take with them. When they arrive on the island, the consequences of their choices become apparent. If they have chosen unwisely, people get sick, the water becomes polluted, rubbish accumulates, trees disappear and buildings fall into disrepair. Students are prompted to revise their selections on subsequent visits to the mainland.

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Island life: smart choices
L1034 – Years 3–4

Students continue to distinguish between needs and wants, but at more sophisticated levels. Choices are less black and white and require greater consideration. For example, students must decide whether a fishing rod is more important than a surfboard, or a packet of seeds is of greater worth than a packet of lollies.

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Island life: life choices
L1035 – Years 5–6

Students continue to distinguish between needs and wants, but at more sophisticated levels. Choices are less black and white and require greater consideration. For example, students must decide whether a fishing rod is more important than a surfboard, or a packet of seeds is of greater worth than a packet of lollies.

This series contains non-TLF content. See Acknowledgements in the learning objects.
**Buds (Years P–8)**

Students are encouraged to discover opportunities to sell and innovate on their product to win an award for finding business opportunities.

**Features include:**
- an introduction to concepts such as the global marketplace, sustainable business practice and triple bottom line business practices.

**Students:**
- take risks, explore opportunities and, in an immersive multimedia experience, engage in entrepreneurial pursuits
- identify, respond to and create opportunities within a goods and services industry
- implement business ideas by interacting with retail and business customers
- invest in equipment to take advantage of new business opportunities.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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</table>
| **Buds: level 1** | L902 – Years P–2<br>
*Level 1 introduces the concept of market opportunities and demand.* |
| **Buds: level 1 [includes audio prompts]** | L905 – Years P–2<br>
*This version includes audio prompts to provide hints and strategies to assist students in the discovery of various opportunities.* |
| **Buds: level 2** | L903 – Years 3–4<br>
*Level 2 is a development on the complexity and number of opportunities students need to discover to win the award.* |
| **Buds: level 3** | L904 – Years 5–8<br>
*Level 3 further develops the type of opportunities, including charity, reputation, stock and resource management, and sustainability.* |
Community enterprise series (Years 3–8)

Trying to make decisions that benefit the economy, society and the environment can be a challenge. Students research, present and justify a recommendation that meets the requirements of the 'triple bottom line'.

Features include:
- opportunities to investigate the social, economic and environmental consequences of proposed land uses
- tools to help compare, sort and analyse a range of opinions on the development of an unused site in a local community
- an interactive notebook for recording and analysing information
- a series pitched at three different levels, with increasing language and complexity
- a printable report in the form of a letter recommending action and summarising reasons.

Students:
- investigate the environmental, social and economic consequences of redeveloping an unused factory site
- recommend a course of action that will maximise the environmental, social and economic benefits of redevelopment to a local community.

Community enterprise: pools, parks and toys
L1026 – Years 3–4

Students enter their findings in a notebook, then conduct an analysis to determine which option will provide the best outcomes for the environment and the community, while remaining economically viable. The students then forward their recommendation to the mayor.

Community enterprise: pools, parks and toys [ESL]
L10436 – Years 3–4

Students help a local council investigate proposals for redeveloping an old factory site. They compare the benefits of building a swimming pool, toy factory or park. Students rate the economic, social and environmental effects of each proposal and write a letter to the mayor recommending a course of action.

Community enterprise: making a choice
L1025 – Years 5–6

Students enter their findings in a notebook, then conduct an analysis to determine which option will provide the best outcomes for the environment and the community, while remaining economically viable. The students then forward their recommendation to the mayor.

Community enterprise: people, economy and the environment
L1002 – Years 7–8

Students compare the environmental, social and economic consequences of developing new enterprises in a small community. Students seek the opinions of a range of community members and gather information regarding the costs, environmental impacts and employment benefits of the different enterprises.
Fish market (Years 3–9)

The 'Fish market' series uses game-play format to assist students to explore the complexities of a trading market.

Features include:
- Experiential learning opportunities, independent learning, problem solving and visual learning experiences
- Dynamically changing information about the trading history of each type of fish
- Trader biographies providing information about the motivations and interests of the various traders offer clues to help students reach the goal of finding and purchasing the 'Fizzer fish'
- Introductory information budgeting; commerce; decision-making; enterprises (business); markets; price elasticity of demand; pricing; risk management and supply and demand

Students:
- Make profits and gain status points that give them access to even more markets and thus more opportunities to buy and sell a wider variety of fish at a wider variety of prices
- Use a range of skills in this series, such as analysing and synthesising information, experimenting with various options and decision making.

Fish market: explore trading
L2574 – Years 3–5

Fish market: explore trading introduces the concept of trading to a younger audience in a simplified format. Differences include simplification of language and concepts, larger text, the removal of the trader biographies, and making the Fizzer fish easier to find.

Fish market
L768 – Years 6–9

The students' goal is to find and purchase the highly prized and expensive Fizzer fish. To achieve this, they must explore various markets, buying and selling different types of fish and gaining information on how the market works.
**Biz whiz unleashed** (Years 5–8)

The 'Biz whiz unleashed' series gives students the opportunity to take the role of a young entrepreneur running a dog walking business in their spare time.

**Features include:**
- a 'real life' community and commercial environment
- a simulation format to enable students to operate in a competitive environment to achieve their own business goals
- a range of opportunities and decisions are generated during use to encourage repeated engagement.

**Students:**
- operate their own business and assess opportunities to introduce innovations to promote sustainability and profitability.
- identify innovative opportunities to service potential customer needs
- identify and capitalise on business strengths
- explore a range of approaches for expanding a venture
- recognise and respond to competition.

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### Biz whiz unleashed: compete for customers

L1311 – Years 5–8

Students find opportunities to boost customer numbers for the business and beat other companies. The aim is to attract new customers, build a good reputation and earn more money than their competitors.

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### Biz whiz unleashed: compete for money

L1312 – Years 5–8

The aim is to market the business creatively and introduce new services, using their resources efficiently.

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### Biz whiz unleashed: compete for satisfaction

L2460 – Years 5–8

Students use their resources efficiently to ensure that they have enough time and resources to service customer needs.

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### Biz whiz unleashed: compete

L1310 – Years 5–8 🏆

This is a combination of the three 'Biz whiz' learning objects.
Kangaroo series (Years 5–8)

Students consider the social, economic, environmental and animal welfare consequences of harvesting kangaroos, and manipulate popular media to promote their own viewpoint on whether kangaroos should be killed for human consumption.

Features include:
- a range of media sources for synthesising facts and opinions
- data comparing the social influence of media sources
- tools to enable students to compile an exposition supporting a viewpoint.

Students:
- analyse the effectiveness of different media presentations when attempting to influence the opinions of community members
- decide whether the eating of kangaroos is in the best interests of Australia's society, economy and environment
- prepare a media presentation to convince citizens that eating kangaroos is, or is not, in the best interests of Australia's society, economy and environment.

Kangaroo: communicating a message
L1343 – Years 5–6

In this version of Kangaroo for younger students, only the television format is presented for students to manipulate, and the number of arguments that inform the students' viewpoints is reduced.

Kangaroo: communicating messages
L1344 – Years 7–8

Students are presented with arguments in a selection of media formats regarding the contentious issue of eating kangaroos. Having considered the issue, students complete a survey in which they identify the medium that influenced them most, and state whether they are for or against eating kangaroos. They then analyse data from a fictitious survey of the Australian population and are prompted to prepare a television or newspaper advertisement promoting their viewpoint. Students are prompted to reconsider their selections if their advertisements appear to contradict their stand on the issue.

This series contains non-TLF content. See Acknowledgements in the learning objects.
Cartown series (Years 5–8)

Students consider the social, economic and environmental consequences of a traffic congestion toll, and manipulate popular media to promote their viewpoint regarding the introduction of a toll during peak times in a large Australian city.

Features include:
- data comparing the social influence of media sources
- a range of media sources for students to use for synthesising facts and opinions
- tools to enable students to construct their own media reports.

Students:
- analyse the effectiveness of different media presentations when attempting to influence the opinions of community members
- evaluate whether a traffic congestion toll is a fair and effective way of reducing pollution and traffic congestion in a large city
- prepare a convincing media presentation supporting a viewpoint.

Cartown: communicating a message
L1345 – Years 5–6

In this version of Cartown for younger students, only the television format is presented for students to manipulate, and the number of arguments that inform the students’ viewpoints is reduced.

Cartown: communicating messages
L1346 – Years 7–8

Students are presented with arguments in a selection of media formats regarding the contentious issue of introducing a congestion toll. Having considered the issue, students complete a survey in which they identify the medium that influenced them most, and state whether they are for or against the introduction of a toll. Students analyse data from a fictitious survey of the local population and are prompted to prepare a television or newspaper advertisement promoting their viewpoint.

In the television ‘Media maker’, students combine animation, audio and music to prepare their advertisement, while in the newspaper ‘Media maker’, they combine text and images in a format of their choosing. Students are prompted to reconsider their selections if their advertisements appear to contradict their stand on the issue.
Fashion design series  (Years 5–9)

Students work in a virtual fashion design company called OzKiwi Designs.

Features include:
- multi-choice quizzes to test understanding of key concepts
- a glossary of difficult terms and their pronunciation.

Students:
- analyse the way purpose and audience shape different community texts such as scientific reports, catalogues and magazine advertisements
- recognise that texts (both print and images) use different ways of communicating meaning
- explore how the choice of words and text structures contribute to how a text portrays particular social groups
- select textual elements appropriate to a purpose.

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**Fashion design: market research**
L295 – Years 5–9

Students examine customer profiles: gender, age, workplace, hobbies and major spending habits. They analyse results of a market survey of people’s clothing preferences and review pie charts and customer interviews. They then compare the current survey results with last year’s.

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**Fashion design: quality control**
L296 – Years 5–9

Students test the properties of four fabrics for a fashion design company. They review a lab test summary table and examine the structure of the table and words used. They build a graphic interpretation of the text by adding simple icons. They then identify two fabrics which meet the agency's needs and choose conclusions based on suitable scientific language.

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**Fashion design: advertising**
L297 – Years 5–9

Students help plan an advertising campaign for clothes made by a fashion design company. They review catalogue mock-ups, images and marketing text. They choose the items which best meet the company's needs. They then compare and contrast three magazines and decide which is best suited for their target market.

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**Fashion design: studio**
L298 – Years 5–9

Students explore how a fashion company works to design a range of clothes. They choose words to complete a description about tools of the trade and answer questions about the roles of three departments within the company: market research, advertising and quality control.
Online news series (Years 5–8)

Students explore the ways in which language choices, along with various other multimodal text choices, can construct a particular evaluative stance in an online news page.

Features include:

• modelling of how language and multimodal choices construct an evaluative stance
• explanations of how each element on a web page contributes to the overall evaluative stance
• feedback in the form of text and graphs
• a glossary of difficult terms and their pronunciation
• an increasing complexity in the objects, from a welcome and modelled page, to a scaffolded practice activity, to a final build section where they complete their final page of online news without step-by-step assistance.

Students:

• explore how language choices construct the evaluative stance in a text
• choose titles, sentences and images to create an online news page that supports a negative evaluative stance
• connect multimodal elements of various types of web pages
• identify how multimodal choices contribute to evaluative stance.

Online news: Perfect Pets  
L3456 – Years 5–8

Students create three online pages for a pet shop promoting three types of pets: ferrets, giant Madagascan cockroaches and hermit crabs.

Online news: island holiday  
L3457 – Years 5–8

Students create three online pages for a tour company promoting three different types of holidays: action/adventure, family, romantic get-away.

Online news: Sport Scene  
L3458 – Years 5–8

Students create three online pages for a weekly sports club newsletter promoting a sport and dealing with related issues.

Online news: Green Valley Voice contains non-TLF content. See Acknowledgements in the learning object.
Fish tank: business start-up (Years 6–9)
This learning object is designed to give students the experience of starting a business, managing a set of resources, balancing a budget and seeing opportunities.

Features include:
- an environment in which students can see opportunities, predict outcomes, manage a budget, make choices, revise past actions, respond to events, and assess and deal with consequences
- an option to print a summary of business outcomes.

Students:
- start up and run a business over a two-week trading period
- make decisions about asset purchases and operational purchases
- explore the balance between expenditure and income in operating a business
- observe the business consequences of their decisions
- review the consequences of decisions and actions
- revise decisions and processes in order to improve outcomes
- explore the interplay between various actions and impacts on results
- explore the business imperative of working within a budget
- identify business decisions that affect profitability.

Fish tank: business start-up
L770 – Years 6–9

The aim of this object is for students to breed the maximum number of fish within a given time period to sell at a market. Students are given a tank with two fish in it and a small budget. They have to buy the right kind of equipment, food and plants to ensure that their fish breed and survive to market day.

Fish can only be reproduced if a certain level of fish health and tank cleanliness is maintained. Students must use judgement and trial and error to determine the correct amount of food and cleanser to put into the tank to maintain the appropriate levels. If too little or too much is placed in the tank, the fish and their environment will suffer.
Fish shop (Years 6–9)

Students take a weekend job as assistant at Fish-e mart and must fill orders from customers with different requirements.

Features include:
- an introduction to customer service and profitability in retail business
- unit costs and profit margins for a range of products
- demonstrations of the business consequences of financial decisions
- feedback from the shopkeeper on each of the items selected as well as general feedback about how much of the customer's budget has been used and how much profit the shop will make
- automatic tracking of expenditure, budget remaining and time spent on task.

Students:
- calculates trading profit for a retail order
- identify items that suit customer and business requirements
- recognise and anticipate the consequences of decisions and actions
- reflect on decisions and processes in order to improve business outcomes.

Fish shop: quality or quantity
L769 – Years 6–9

Students explore two different customer requirements. The first customer wants a high-quality aquarium and is prepared to spend a lot of money on a small number of items. The second customer wants to set up a breeding program and wants lots of fish and plants, but isn't interested in the aesthetics.

Fish shop: natural or artificial
L4940 – Years 6–9

Students explore two different customer requirements. One customer wants a very natural aquarium – the student needs to recommend items that are environmentally friendly and self-sustaining. The other wants an aquarium that is very low maintenance and is willing to have artificial items and to use chemicals if it reduces the amount of necessary work.
Eco series (Years 6–10)

Students explore the balance between biodiversity and economic return in primary production. They manage the environment to achieve sustainable production while preserving biodiversity.

Features include:
- ecological details on different areas, animal species and habitats
- yearly statistics on economic return and the effects on biodiversity
- descriptions of different types of logging and the effects of each on biodiversity and economic return
- information on old-growth and regrowth forests and biodiversity within them
- a report showing the outcomes of the student's decisions.

Students:
- distinguish between old-growth and regrowth forests
- connect environmental factors to the survival of animal species
- identify the beneficial roles of natural vegetation and watercourses in maintaining biodiversity.

Eco forest
L10764 – Years 6–10

Students take on the role of forest manager. They learn about the biodiversity of the forest and the animals that live there. They choose the best method of sustainably logging the forest to balance the survival of five particular animal species with the need for jobs in the local community.

Eco farm
L10765 – Years 6–10

Students take on the role of farm manager. They learn about the different habitats and communities found on farmland and make decisions about the management of four areas on the farm (cropped and grazed paddocks, woodland remnants and dams and creeks) to increase profits while improving biodiversity.
Points of origin series (Years 7–8)

Students compare the prices and quality of everyday items available on the global market and identify the countries from which the raw materials used in their manufacture are sourced.

Features include:
- information about the quality and price of the items.

Students:
- are challenged to assemble a mountain bike, an outfit of clothing or a food hamper using components sourced from countries around the world
- are provided with a choice of four countries from which they can purchase the components
- assemble the mountain bike, outfit or hamper and complete a product release form on which they summarise the origin and cost of the various elements
- return to the map of the world, where they trace the countries of origin of the raw materials used to make each item.

<table>
<thead>
<tr>
<th>Points of origin: budget mountain bike</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2675 – Years 7–8</td>
</tr>
<tr>
<td>Students are challenged to select the cheapest parts to assemble a mountain bike.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Points of origin: budget outfit</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2676 – Years 7–8</td>
</tr>
<tr>
<td>Students are challenged to select the cheapest parts to assemble an outfit.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Points of origin: budget hamper</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2677 – Years 7–8</td>
</tr>
<tr>
<td>Students are challenged to select the cheapest food items to assemble a hamper.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Points of origin: quality mountain bike</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2678 – Years 7–8</td>
</tr>
<tr>
<td>Students are challenged to select the best quality parts to assemble a mountain bike.</td>
</tr>
<tr>
<td>Points of origin: my mountain bike</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Students assemble a mountain bike and are free to select the components they prefer.</td>
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<thead>
<tr>
<th>Points of origin: my outfit</th>
<th>L2680 – Years 7–8</th>
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<tbody>
<tr>
<td>Students assemble an outfit of clothing and are free to select the components they prefer.</td>
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<thead>
<tr>
<th>Points of origin: my hamper</th>
<th>L2681 – Years 7–8</th>
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<tbody>
<tr>
<td>Students assemble a hamper of food and are free to select the items they prefer.</td>
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</table>
Innovation cycle series (Years 7–9)

Students explore the different stages of the innovation cycle. They identify and apply research methods to advance an innovative design solution that meets pre-determined requirements.

Features include:
- specific case studies from Australia
- an interactive notebook to record and collate outcomes and results
- simulations for interviews, surveys, testing and evaluations
- models for the steps involved in the required evaluations
- an option to print a summary of each student's findings.

Students:
- explore the connections between ideas and development of a product through research, developing ideas and prototypes, and testing and selling
- make analyses and evaluations of methods and products based on what they have learnt of research method.

**Innovation cycle: idea**
L2285 – Years 7–9

Students explore ResMed Breathing Aids to learn how innovators develop ideas. They observe a simulated brainstorming session and complete a decision-making tree exercise to determine the most effective response to a problem. They learn to recognise a need or opportunity and creative thinking for problem-solving.

**Innovation cycle: research and develop**
L2286 – Years 7–9

Students explore Australian tea tree oil to learn how innovators use research and development to test and develop ideas. They observe simulated laboratory tests of different types of materials and are asked to assess the most suitable material based on a given criteria, then evaluate methods of research and development for an innovation against pre-determined criteria.

**Innovation cycle: design**
L2289 – Years 7–9

Students explore the Sydney 2000 Olympic torch to learn the stages and processes involved in designing an innovative product. They observe simulated field research and laboratory testing to assess the most suitable shape of a product based on appearance and functionality then evaluate the best design of a product against pre-determined criteria.
### Innovation cycle: patent
L2288 – Years 7–9

Students explore the company Bishop Technology Group to learn how innovators use patents to protect innovative ideas. They observe simulated interviews to determine the most appropriate type of Intellectual Property (IP) protection that should be taken on a new type of product. Includes issues of intellectual property, copyright, patent and trademark. They then evaluate types of IP to protect the innovation against pre-determined criteria.

### Innovation cycle: resource
L2287 – Years 7–9

Students explore the Clean Up Australia innovation to learn how innovators use resources to develop ideas and promote products. They observe simulated interviews to determine the development stage at which a particular product should be outsourced. They then evaluate opportunities for resourcing against pre-determined criteria.

### Innovation cycle: make
L2290 – Years 7–9

Students explore the Caroma Dual Flush Toilet to learn how innovators manufacture design elements to market innovative ideas. They observe simulated field research and laboratory testing to assess the most suitable manufacturing of a product based on appearance and functionality. They then evaluate production process against pre-determined criteria and choose the preferred one.

### Innovation cycle: sell
L2291 – Years 7–9

Students explore Victa Lawn Mowers to learn how innovators choose distribution strategies to market innovative ideas. Students learn about the four Ps (product, price, place, promotion) of marketing, the use of target marketing, and understanding the buying behaviour of the target market.

### Innovation cycle: service
L2292 – Years 7–9

Students explore Incat Catamarans to learn how innovators use service strategies to market their innovative products. They observe simulated animations to determine different types of sales service such as pre-sales service and after-sales service. They then complete a decision-making tree exercise to determine the most effective type of sales service for a pre-determined problem.

This series contains non-TLF content. See Acknowledgements in the learning objects.
Start a business (Years 7–10)

Student explores factors associated with starting a viable retail business.

Features include:
- a look at the significance of market research when locating retail outlets
- a town map showing key locations of residential and business consumers, existing businesses and potential retail sites
- feedback encouraging students to examine business outcomes and adapt business ideas
- task-design to support repeated testing of ideas and an iterative approach to business modelling.

Students:
- explore how retail profitability is related to customer demand, competition and shopfront location
- analyse market research evidence to identify a profitable type of retail business and shop location.

Start a business: location
L3232 – Years 7–8

In this version of Start a business for younger learners, students follow the same process as in the version for older learners, 'Start a business: location and type', but focus only on the best location for the business.

Start a business: type
L3233 – Years 7–8

In this version of Start a business for younger learners, students follow the same process as in the version for older learners, 'Start a business: location and type', but focus only on the best type of business.

Start a business: location and type
L3230 – Years 9–10

This is a combination of the two Start a business learning objects.
Café consultant (Years 7–10)

Set in a café business, the student evaluates market demand to determine what time the café should open, what should be on the menu and what sort of décor the café should have.

Features include:
- options to change settings and run the café repeatedly until the optimum result is achieved
- a look at the significance of market research when locating retail outlets
- support for repeated testing of ideas and an iterative approach to business modelling

Students:
- examine business outcomes and adapt business ideas
- interview potential customers, record and evaluate their responses before making choices about the opening time, menu and décor
- can view the trading results in order to determine if their choice of business and location have been profitable.

Café consultant: attract customers
L3234 – Years 7–8

This is the easiest learning object in the series. Students interview four prospective customers to determine what the café should offer.

Café consultant: attract customer groups
L3235 – Years 8–9

This learning object builds upon Café consultant: attract customers. It has the added complication that students interview representatives from five groups of prospective customers and evaluate what the café should offer. The added difficulty is that the groups are different sizes.

Café consultant: spending habits
L3236 – Years 9–10

This is the most difficult learning object in the series. It builds upon Café consultant: attract customer groups. It has the additional factor of the amount of money that each person in the group has to spend.
Wind farm series (Years 7–10)

Students are presented with a range of opinions regarding the installation of a wind farm, and must evaluate their worth using factual information gathered from a range of media resources.

Features include:
- informative pop-up screens
- a notebook for students to record details, opinions and ideas
- an option to print a summary report with key recommendations, the reasoning behind them and supporting data.

Students:
- identify the advantages and disadvantages of establishing a wind farm in a coastal community
- collect, interpret and analyse data
- balance issues of ecological sustainability, economic development, social responsibility, aesthetics and lifestyle implications in determining a preferred course of action.

Wind farm: pros and cons
L898 – Years 7–8

Students investigate the pros and cons of establishing a wind farm in a small coastal community. Issues of ecological sustainability, economic development, social responsibility, lifestyle and aesthetics are considered while students determine whether to proceed with the development of a wind farm.

Wind farm: cool solutions
L1341 – Years 9–10

Students investigate the pros and cons of establishing a wind farm, with a greater emphasis in this learning object on alternative energies to address the issue of climate change. Students consider the causes of climate change and possible effects including health, environment and lifestyles.
The futurist series (Years 7–10)

Students use futures strategies to identify trends and challenges in the online distribution of music.

Features include:
- tools to enable comparison and evaluation of a range of future scenarios
- data about trends in digital music distribution for interpretation and analysis
- evidence with enough scope for a range of alternative opinions and solutions to be justified
- an option to print a student report summarising reasons for recommendations.

Students:
- identify trends and challenges in the online distribution of music
- collect, interpret and analyse data about trends in digital music distribution
- use futures strategies to determine how to achieve a preferred future for an online distribution music company.

The futurist: online music
L1340 – Years 7–8

Students meet representatives of Rebis Records, a music distribution company. The increasing popularity of online music distribution has presented Rebis Records with a dilemma: should the company invest in expensive and unproven online distribution resources, which are vulnerable to music piracy, or should they continue to distribute music on CDs? Students collect and enter notes in their Personal Digital Assistant (PDA), which they can refer to throughout the learning object.

In a Futures Lab, students use two tools to assist them in their research. One is a teleconferencing device in which they consult experts from around the world and consider issues of piracy, encryption and digital rights management. The other is a Futures Scenario Tester, in which they enter data regarding options for music distribution and are provided with likely future outcomes.

Students compile a report for Rebis Records using the notes made in their PDA. They then present their recommendation to the staff and answer questions about their research.

The futurist: music distribution
L897 – Years 9–10

In this version of the futurist for younger learners, students follow the same process as in The futurist: online distribution to determine whether Rebis Records should continue to make and sell CDs, or direct their resources to online distribution. However, the focus is the future of CDs and online distribution. More complex information relating to digital rights management and encryption are not included.
**GM foods series** *(Years 7–10)*

Students compare the economic, social and environmental opportunities and potential dangers of growing genetically modified crops.

**Features include:**
- opportunities to identify the environmental, economic and social pros and cons of introducing genetically modified crops to the Australian environment
- arguments for and against the introduction of genetically modified food crops in Australia
- a quiz about the environmental, social and economic benefits and concerns of GM food crops.

**Students:**
- identify opportunities and threats of growing genetically modified food crops for Australian society, economy and the environment
- summarise arguments for and against the growing of genetically modified crops in Australia.

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**GM foods: pros and cons**  
L1024 – Years 7–8

In this version of *GM foods* for younger learners, students follow the same process as in the version for older learners to determine whether Max and her family should plant a GM crop. The concepts are presented in a simple and concise manner suitable for students in years 7–8.

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**GM foods: future choice**  
L948 – Years 9–10

Students are introduced to Max, a young woman whose family has grown canola for generations. Max instructs students to gather information about the pros and cons of planting a genetically modified crop. Students visit a laboratory, trial site and farm to talk to scientists and farmers about the social, environmental and economic consequences of growing GM foods. They collect notes in which they record the pros and cons of GM foods before considering the relative importance of people's health, the environment and the economy.

Before making a final recommendation, students review some of the key points by completing a quiz. The learning object concludes when students suggest whether to plant a GM crop or not.
Fish stocks series (Years 7–10)

Students compare conflicting points of view when a ban on commercial fishing is proposed for a seaside community.

Features include:
- The means to compare, sort and analyse a variety of values and opinions regarding the regulation of fisheries in a local community
- An interactive tool allowing students to analyse information and view photos after collection
- A printable report in which students recommend an action and summarise reasons.

Students:
- Investigate the environmental, social and economic consequences of regulating commercial fishing
- Compare, sort and analyse a variety of values and opinions regarding the regulation of fisheries in a local community
- Recommend a course of action that will maximise the environmental, social and economic benefits of managing fish populations.

Fish stocks: two points of view
L1806 – Years 7–8

In this version of Fish stocks for younger learners, students follow the same process as in the version for older learners, although they have only two viewpoints to consider.

Fish stocks: three points of view
L1805 – Years 9–10

Students are presented with two conflicting points of view regarding the issue, and after being prompted to consider the issue further, are offered a third, 'middle ground' position. After investigating each viewpoint, students collect images and text to include on a customised web page on which they present their preferred position. When preparing their web page, students are prompted to reconsider their selections if they choose conflicting pieces of information.
Sunday trading series (Years 7–10)

Students investigate the advantages and disadvantages of allowing shops to trade on Sundays in a small coastal town.

Features include:
- opportunities to investigate the economic and social consequences of extending shopping hours in a small coastal town
- an interactive notebook allowing students to analyse information and view photos after collection
- feedback if student's selected point of view and supporting statements do not match
- an option to print student's web page
- a matching game demonstrating how statements are used to support points of view
- an ESL version with a glossary and hyperlinked words within the text defining unfamiliar terms.

Students:
- compare values that come into conflict when Sunday trading is proposed in a regional town
- recommend a course of action that will maximise the personal, social and economic benefits of retail trading hours in a regional town
- compare, sort and analyse a variety of opinions regarding the introduction of Sunday trading
- develop a web page that uses images and text to support their point of view on Sunday trading in a regional town.

Sunday trading: two points of view
L1809 – Years 7–8

Students review two points of view on the issue and the arguments that support them. They gather opinions from a consultant and local residents such as a fisherman and a supermarket owner.

Sunday trading: three points of view
L1810 – Years 9–10

Students review three points of view on the issue and the arguments that support them. They gather opinions and consider issues of personal and social wellbeing, employment and other economic effects.

Sunday trading: three points of view [ESL]
L7628 – Years 9–10

Students review three points of view on the issue and the arguments that support them. They gather opinions from a consultant and local residents such as a fisherman and a supermarket owner.
Fish biz (Years 9–10)

Students experience running a fish supply business. These complex learning objects dynamically simulate key aspects of stock and financial management, allowing students to appreciate the diverse range of factors involved in running a profitable business.

Features include:
- introductory explanations of the range of considerations students should take into account when undertaking the simulation
- a printable summary of business outcomes.

Students:
- manage the stock level of fish by ordering fish in bulk and processing customer orders
- pay bills and manage a bank account (if bills are not paid on time the student's credit rating will drop, and if bills are not paid by the final reminder, they will go out of business)
- manage customer expectations, shown on the customer satisfaction gauge (if orders are delivered early, customer satisfaction goes up, but if orders are not delivered, customer satisfaction drops and orders will no longer arrive).

Fish biz: cash flow
L5203 – Years 9–10

In this version, students must manage their business for three months and attempt to make the most profit by managing their bank balance and also their stock level.

Fish biz: cash flow and credit
L771 – Years 9–10

In this version, students have the option to take out an overdraft, which then allows them to investigate the nature, limitations and cost of credit.
Muffin bakery (Years 9–10)

Students explore various factors affecting business profitability in order to maximise profit. These factors include fixed and variable costs, pricing and volume discounting.

Features include:
- support for repeated testing of ideas and an iterative approach to business modeling
- an option to print students’ five-day trading results.

Students:
- simulate running a muffin bakery business over a five-day period
- analyse sales results data and adjust key factors to maximise profitability.

Muffin bakery: price setting
L3238 – Years 7–8

*Muffin bakery: price setting* demonstrates the relationship between price and demand and highlights the significance of unit costs and price elasticity when determining production volume and retail prices.

Muffin bakery: volume discounting
L3239 – Years 8–9

*Muffin bakery: volume discounting* introduces the concept of bulk buying discounts and examines the effects of unsold stock on profit.

Muffin bakery: price and volume
L3237 – Years 9–10

*Muffin bakery: price and volume* is the most complex in the series. Students investigate fixed and variable costs involved in production and consider how gross profit and net profit are calculated.

Muffin bakery: price setting
L3238 – Years 7–8

*Muffin bakery: price setting* demonstrates the relationship between price and demand and highlights the significance of unit costs and price elasticity when determining production volume and retail prices.
Muffin bakery: volume discounting
L3239 – Years 8–9

*Muffin bakery: volume discounting* introduces the concept of bulk-buying discounts and examines the effects of unsold stock on profit.

Muffin bakery: price and volume
L3237 – Years 9–10

*Muffin bakery: price and volume* is the most complex in the series. Students investigate fixed and variable costs involved in production and consider how gross profit and net profit are calculated.
**Resort rescue series (Years 9–10)**

Students consider the long-term environmental, social and economic effects of development at a beach resort over the past 15 years. They then compare the merits of different environmental management solutions and recommend and evaluate their solutions.

**Features include:**
- illustrations of long-term effects of environmental degradation and remediation in a coastal tourist resort
- tools to analyse the economic, social and ecological consequences of various social, economic and environmental issues
- tools to facilitate comparison of solutions that address various social, economic and environmental issues
- multiple-choice questions to test understanding of key concepts.

**Students:**
- explore social, economic and environmental issues in a coastal management setting
- compare the merits of solutions to problems posed about various social, economic and environmental issues.

<table>
<thead>
<tr>
<th>Resort rescue: coastal protection</th>
<th>L2691 – Years 9–10</th>
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<tbody>
<tr>
<td>Students consider long-term effects of development at a beach resort.</td>
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<tr>
<th>Resort rescue: fresh water use</th>
<th>L2692 – Years 9–10</th>
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<tbody>
<tr>
<td>Students consider long-term effects of unrestricted use of fresh water at a beach resort.</td>
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<tr>
<th>Resort rescue: water sports</th>
<th>L2693 – Years 9–10</th>
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<tbody>
<tr>
<td>Students consider long-term effects of motorised water sports at a beach resort.</td>
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<tr>
<th>Resort rescue: over development</th>
<th>L2694 – Years 9–10</th>
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<tr>
<td>Students consider long-term effects of overdevelopment at a beach resort.</td>
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Resort rescue: off-road vehicles  
L2695 – Years 9–10

Students consider long-term effects of off-road vehicles at a beach resort.

Green machine series (Years 9–10)

Students investigate the connection between a vehicle's features and its greenhouse gas emissions and assemble a vehicle that meets specific targets for fuel consumption. They consider the responsibilities of Australian drivers within the context of global warming and its possible effects on planet Earth.

Features include:
- links between greenhouse gas emissions, the greenhouse effect and global warming
- automatic graphs to show the fuel consumption and greenhouse gas emissions of vehicle configurations
- comparisons between the fuel consumption and greenhouse gas emissions of vehicle configurations and an environmental target set by the Australian Government
- multiple-choice questions to test understanding of key concepts
- an option for students to print their green tips and reflections.

Students:
- relate a vehicle's features to its impact on the environment
- select product components according to personal preferences
- build a vehicle that minimises fuel consumption and greenhouse emissions.

Green machine: sedan  
L2699 – Years 9–10

Students build a passenger car that causes as little harm as possible to the environment.

Green machine: four-wheel drive  
L2700 – Years 9–10

Students build a four-wheel drive vehicle that causes as little harm as possible to the environment.
Green machine: sports car
L2701 – Years 9–10
Students build a sports car that causes as little harm as possible to the environment.

Green machine: luxury car
L2702 – Years 9–10
Students build a luxury car that causes as little harm as possible to the environment.

Green machine: ute
L2703 – Years 9–10
Students build a ute that causes as little harm as possible to the environment.

Green machine: hatchback
L2704 – Years 9–10
Students build a hatchback vehicle that causes as little harm as possible to the environment.
Plan for the party: superannuation (Years 9–10)

Students investigate various topics associated with superannuation.

Features include:
• an audiovisual presentation about superannuation investment choices and retirement planning
• additional animated explanations about compound returns, employer and personal contributions, investment strategies and how much super is enough
• a printable glossary of superannuation terminology.

Students:
• take part in an interactive quiz show to test their understanding of superannuation.

Plan for the party: superannuation
L9088 – Years 9–10

Students listen to audiovisual segments and animated explanations about specialised superannuation topics.

Safe or sorry: insurance (Years 9–12)

Students consider their options before making decisions about car insurance in a real-life scenario.

Features include:
• information that allows students to consider the effects of their choices
• simulations of one of three typical accident scenarios based on student’s choices and real-life data
• an interactive quiz to test understanding
• a printable glossary of insurance terminology.

Students:
• choose a car, modifications and insurance within the limits of a budget.

Safe or sorry: insurance
L9087 – Years 9–12

Students buy a car and insure it on a budget of $12,000. They gather information before making their final choices about the following: type of car, any modifications, car insurance (including options such as excess) and replacement policies.
Car safety check series (Years 9–12)

Students identify features that should be inspected before buying a regular car, modified car or four-wheel drive vehicle.

Features include:
- standard car, modified car and four wheel drive vehicle scenarios.

Students:
- identify features to check in a pre-purchase inspection of a motor vehicle
- make informed choices when purchasing a vehicle.

Car safety check: before buying
– Years 9–12
Look out for things such as rust, crash damage and proof of ownership before deciding to purchase a car.

Car safety check: before driving
L1367 – Years 9–12
Look out for things such as clean windows, tyre pressure and class of driver's licence before driving a car.

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Digital resources

These images and film clips licensed from some of TLF's partner institutions provide opportunities for students to explore economic knowledge, understandings, values and issues.

**Polymer banknote, 1988**
This shows the design of the world's first polymer banknote – developed by Note Printing Australia and the CSIRO in response to an increase in counterfeiting of the Australian $10 note. It incorporates various security devices and represents the first appearance of an OVD (an image that changes when viewed from different angles) in a clear substrate on a banknote.

**Decimal coinage, 1964 – assets 1–3**
Decimal coinage was introduced to the Australian population in 1966. These clips show the different coins that were introduced and coins being made at the Canberra Mint.

**Colour Bars, 1997: Life’s expectations**
The clip introduces some issues that are important to young people, including finding work, financial independence, self-image and the need for respect. The young man featured shows particular interest in enterprise and his future direction.

**’I Think …’ – Which one?**
This clip features a group of children discussing the concept of choice. They explore the complexity of making decisions and things that make choosing easy or difficult, such as the possibility of missing out. They also use examples to show how choice involves decision making and selecting from alternatives.

The children recognise that making a choice is not an end in itself but may lead to the need for further choices.
'I Think ...' – For sale
This short considers how to determine the value of something you wish to sell. Children discuss the concept of ownership, the right to sell things and whether you can buy or sell natural resources such as water or soil and natural forces such as wind. The discussion raises questions of what can be bought and sold, and how to value the creative content of an item such as a video or book.

Kath and Kim – Money, 2002: 'Look at moy'
This is a clip from the Australian television comedy series Kath and Kim. In this clip from the first series of the comedy show, spousal discount for employees is exploited and Kath has her own preoccupation: selling lingerie as part of a pyramid scheme.

Decimal currency advertisement, 1965
This is an animated black-and-white television advertisement designed to assist Australians with the transition from imperial to decimal currency on 14 February 1966. It was part of a nationwide public education program to inform and prepare Australians for both the introduction of the new currency system on 14 February 1966 and the phasing out of imperial currency over the following two years.

Big People, Small People, 1991: 'Wealthy on the inside'
This clip highlights issues of financial security. Over the decade to 2002, according to the Reserve Bank of Australia, combined household debt in Australia outstripped income and the household debt-to-income ratio rose from 56 per cent to 125 per cent, while personal savings remained at a record low. This meant that many Australians lived from pay cheque to pay cheque and had few resources to cope with a crisis such as unemployment or a financial setback.