**Introduction**

Students debate issues of democracy and the Eureka rebellion in the Hall of Debate at the Eureka Stockade centre, Ballarat, Victoria.

**Why research?**

*Discovering Democracy through Research* is designed to present teachers with opportunities to extend civics education and encourage the exploration of democratic processes in more detail through a set of Research Investigations. Each Research Investigation is intended to engage students in active and rigorous exploration of both historical topics and topics that are close to their own local experiences. In the process, they will apply and enhance their understanding of the civics and citizenship concepts introduced through the Discovering Democracy Units and associated materials. The Research Investigations complement State and Territory syllabuses and frameworks in Studies of Society and Environment.

Research matters not only because it is a way by which we generate knowledge for ourselves and for society but also because of the valuable range of skills that participants develop in the investigation process. Research offers significant learning opportunities, for example in: creative problem solving; data collection methods; analysis and synthesis; forms of critical thinking, reasoning and argument;
decision making; and a variety of communication and language skills. The skills acquired are valuable for citizens in a participatory democracy. They are also important life skills in the workplace, the marketplace and the home. And they are essential intellectual assets for success in formal education and lifelong learning.

These Research Investigations are designed as non-prescriptive frameworks to facilitate the guided development and practice of such research skills. Students will learn to plan, to design and use different data collection methods, to test the validity of data, to negotiate, to apply ethical principles, to interpret information and to report conclusions. The Investigations offer wide scope for disciplined inquiry through issues and topics that engage student interest with a wide variety of activities.

A feature of the Research Investigations’ design is the emphasis on involving students in using many types of primary source material. Working with primary source data – locating it, recording it, sorting it, analysing it and making sense of it – offers a challenging learning activity, a rewarding intellectual discipline and a stimulating journey of discovery and surprise.

Origins of the Investigations

The Civics Education Group, which chose the broad topics for the research, ensured that they were complementary to the Discovering Democracy Units. Initial drafts were trialed in 80 primary and secondary schools in various locations across Australia. As a result of this process the materials have been revised and excerpts from teachers’ accounts of their experiences have been included in Case in Point samples in each Research Investigation.

One of the strongest findings from the trialing process was the very wide variety of applications that teachers found for the materials. They should be seen in this light. Discovering Democracy through Research is offered not as a prescriptive teaching program but as a guide for the evolution of interesting learning experiences that build civic knowledge, skills and dispositions and meet the needs of local school communities.

The Research Investigations

There are ten Discovering Democracy Research Investigations. The following three are theme-related and general in nature.

- **Taking Issue** is designed to examine various viewpoints associated with an issue chosen by the class. The Investigation engages students in the development and evaluation of an action plan.

- **Good Citizens** engages the students in an investigation into the idea of ‘good citizenship’ and the lives of ‘good citizens’.

- **Our Town** uses historical research methods to investigate a significant historical period in the life of a local community and its effects on the civic structure and identity of that community.
The following seven Investigations have closer, direct relationships to material in particular units of Discovering Democracy.

- **Becoming a Citizen** has students explore the meaning of citizenship by investigating and outlining the process of becoming an Australian citizen and by looking at personal meanings of citizenship.

- **Who Represents Us?** involves students in identifying their political representatives at Commonwealth, State or Territory and local government levels, investigating the responsibilities and working lives of these representatives and examining the issues with which the representatives are concerned.

- **Images of Australia** investigates the idea of ‘national civic identity’, how this is expressed through a variety of media representations and how these representations compare with other points of view about who we are.

- **Citizens Have a Say** explores the nature of direct democracy by looking at referendums and plebiscites, and by examining the experience of referendums in Australia and elsewhere, at present and in the past.

- **Police at Work** provides a framework for investigating the range of jobs undertaken by police, issues related to policing and a case study of the Melbourne police strike of 1923, leading to a consideration of what might happen today in the absence of a police service.

- **Struggles about Democracy** invites students to investigate instances of the emergence or re-emergence of democracy in other countries with a focus on the contexts of the struggles, the leaders involved and Australia’s response to those struggles.

- **Who Rules Here?** invites students to investigate questions about governance by exploring how various organisations in the community govern themselves, by examining school governance as a case study and by looking at how people go about setting up effective organisations.

# Assessment and indicators of student achievement

The Research Investigations complement State and Territory syllabuses and frameworks in the Studies of Society and Environment learning area. Teachers can use assessments in these Investigations, together with those of other student work in the learning area, to make judgements about students’ achievement of State and Territory outcomes.

Teachers will need to determine the precise curriculum alignment for their own context before commencing teaching. To assist teachers, each Research Investigation offers some examples of skill and knowledge indicators of student achievement that might be used with the Investigation. These are intended only as a guide and support for the teacher’s own planning. Knowledge-based indicators, in particular, will need to be developed in accordance with the specific context, objectives and nature of the chosen Investigation. Teachers may find the sample indicators of student skill achievements listed in the table on the next page useful.
Sample indicators of student achievement

<table>
<thead>
<tr>
<th>Level</th>
<th>At this level students can:</th>
</tr>
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<tbody>
<tr>
<td>Middle primary</td>
<td>- draw from their own experiences and other sources to gather and record information</td>
</tr>
<tr>
<td></td>
<td>- begin to distinguish relevant from irrelevant information</td>
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<tr>
<td></td>
<td>- categorise information and sequence events</td>
</tr>
<tr>
<td></td>
<td>- provide simple representations of information gathered, eg pictures or diagrams, simple</td>
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<tr>
<td></td>
<td>reports, brief talks</td>
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<tr>
<td></td>
<td>- provide their own interpretation of the information gathered</td>
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<tr>
<td></td>
<td>- contribute their information and interpretations to group and/or class discussions</td>
</tr>
<tr>
<td></td>
<td>- work effectively with others and in groups on set tasks</td>
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<tr>
<td></td>
<td>- contribute to class discussions</td>
</tr>
<tr>
<td>Upper primary</td>
<td>- use different kinds of data and sources to obtain information</td>
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<tr>
<td></td>
<td>- identify evidence to support a particular idea</td>
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<tr>
<td></td>
<td>- identify additional information and/or interpretations that may need to be gathered</td>
</tr>
<tr>
<td></td>
<td>- identify different viewpoints on issues under consideration</td>
</tr>
<tr>
<td></td>
<td>- represent data in a variety of ways, eg written report, timeline, poster, graphs</td>
</tr>
<tr>
<td></td>
<td>- work with others and in groups and determine how to report on group investigations</td>
</tr>
<tr>
<td></td>
<td>- contribute to decision making at appropriate levels, such as the work group or the class</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>- identify potential sources of information related to an issue</td>
</tr>
<tr>
<td></td>
<td>- use appropriate information-gathering techniques</td>
</tr>
<tr>
<td></td>
<td>- provide evidence to support views</td>
</tr>
<tr>
<td></td>
<td>- distinguish between evidence-based and unsubstantiated opinion</td>
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<tr>
<td></td>
<td>- present a range of viewpoints on issues, along with supporting arguments</td>
</tr>
<tr>
<td></td>
<td>- present data and information in multiple forms (eg text accompanied by diagrams and photos)</td>
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<tr>
<td></td>
<td>- begin to convert information into different forms (eg explain a graph or table in words)</td>
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<tr>
<td></td>
<td>- work with others and in groups to report on the outcomes, using evidence and case studies</td>
</tr>
<tr>
<td></td>
<td>- participate in group and class decision making</td>
</tr>
<tr>
<td>Middle secondary</td>
<td>- identify key research questions arising from a topic or issue and determine the best ways</td>
</tr>
<tr>
<td></td>
<td>to investigate these</td>
</tr>
<tr>
<td></td>
<td>- analyse the evidence used to support different propositions and determine their own position</td>
</tr>
<tr>
<td></td>
<td>- engage in discussion about different viewpoints on the issues under consideration to gain deeper understanding</td>
</tr>
<tr>
<td></td>
<td>- present data and information in multiple forms designed to convey the message to the best effect</td>
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<tr>
<td></td>
<td>- work with others and in groups on research tasks and evaluate the effectiveness of the group itself</td>
</tr>
<tr>
<td></td>
<td>- participate in decision making at a group, class and school level</td>
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</tbody>
</table>
Research Investigations and Discovering Democracy Units

All the Research Investigations are adaptable and designed to be modified to meet local purposes at different levels of schooling. Many of the teachers engaged in the trialing process found that it was useful to embed the research work in the teaching of a relevant Discovering Democracy Unit. Specific detail about relationships with units can be found in the descriptions of the individual Investigations.

<table>
<thead>
<tr>
<th>Research Investigation</th>
<th>Unit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking Issue</td>
<td>Most units</td>
<td>General</td>
</tr>
<tr>
<td>Good Citizens</td>
<td>Stories of the People and Rulers We Remember Joining In Men and Women in Political Life</td>
<td>Middle primary, Lower secondary</td>
</tr>
<tr>
<td>Becoming a Citizen</td>
<td>Stories of the People and Rulers Joining In The People Make a Nation</td>
<td>Middle and upper primary</td>
</tr>
<tr>
<td>Our Town</td>
<td>We Remember The People Make a Nation What Sort of Nation?</td>
<td>General</td>
</tr>
<tr>
<td>Who Represents Us?</td>
<td>Joining In Parliament versus Monarch The People Make a Nation Should the People Rule? Men and Women in Political Life</td>
<td>Middle and upper primary, Lower secondary</td>
</tr>
<tr>
<td>Images of Australia</td>
<td>What Sort of Nation?</td>
<td>Middle secondary</td>
</tr>
<tr>
<td>Citizens Have a Say</td>
<td>Should the People Rule? Parties Control Parliament Getting Things Done Making a Nation</td>
<td>Lower and middle secondary</td>
</tr>
<tr>
<td>Police at Work</td>
<td>The Law Rules Law</td>
<td>Upper primary and lower secondary</td>
</tr>
<tr>
<td>Struggles about Democracy</td>
<td>Democratic Struggles Human Rights A Democracy Destroyed</td>
<td>Middle secondary</td>
</tr>
</tbody>
</table>

The research process

The research process can be described as a series of steps. The steps outlined here are intended only as a flexible guide for developing the Research Investigations. For example, some steps can occur concurrently. Each Investigation provides more detailed advice relating to each of these steps in the context of that particular research topic.
**STEP 1 Choose the research topic**
- Select one of the ten Research Investigations. The relationship of a particular Investigation to specific units is spelt out in that Investigation's guidelines.
- Decide how a subject within this topic will be identified. In some guidelines the subject areas are defined; in others more choice is offered.
- Develop a list of things that the class group might want to know about the topic. It is critical that students are interested in the subject.
- All the Research Investigations present a set of key questions to guide the work. These questions establish what the research is about. Specific projects may require amended or additional key questions. Clarify these and ensure that the research is feasible.
- The two sections Create a Context and Establish the Nature of the Task in each Investigation provide more advice on this crucial first step.

**STEP 2 Review existing information**
- Review the available current knowledge about the issue and topic of research. This review provides a framework and context for the research to come and identifies areas in which further information is required.
- Ensure that students develop background knowledge and understanding of key terms, issues, arguments and current developments relating to their topic.

**STEP 3 Decide on research methods**
- Once key questions, background knowledge and information needs are established, students need to find out which methods of research will give them this information.
- Research methods used will be determined by a range of factors, including the purpose of the research, the key questions, the knowledge gaps, the learning objectives, the resources and time available, and the level of teacher and student skills. A mix of various research methods may be required.

**STEP 4 Identify information sources**
- Sources will arise from the defined research methods and key questions, and often evolve as a product of the search itself. Identifying, locating and discovering new sources from the search are exciting elements of the research journey.
- The Research Investigations provide details of likely sources and Internet addresses to some key general websites.

**STEP 5 Collect data**
- The data collection must be a managed activity. As research is an active process, it usually cannot occur simply within the confines of the classroom.
- Decisions need to be made about the commitment of time, the organisation of the students, the physical resources needed and the limits to impose to keep the activity manageable. Other data collection management tasks include: library and Internet searches; making arrangements for interviews and surveys; accessing equipment; securing permissions and clearances; accessing public figures; and setting up systems for recording and storing data.
A pro-forma Task Planner for students and additional advice are provided in each Research Investigation.

**STEP 6 Analyse data**
- Students try to make sense of the data, construct an understanding, look for patterns and trends, and generally interpret how the data answers the key questions. The level of sophistication of this process will, of course, depend on the age, maturity and skill levels of the students.
- The use of questions and themes is helpful for organising the unstructured data into categories. Graphic displays (such as timelines, pie charts, bar graphs and so on) as well as tables and spreadsheets will make information readily accessible.
- The student researchers should critically evaluate the quality of the data.

**Evaluation could include:**

<table>
<thead>
<tr>
<th>judging relevance</th>
<th>distinguishing fact from opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>checking authenticity</td>
<td>testing validity of opinions</td>
</tr>
<tr>
<td>testing factual accuracy</td>
<td>resolving contradictions</td>
</tr>
<tr>
<td>judging sufficiency of information</td>
<td>identifying subjective points of view</td>
</tr>
</tbody>
</table>

**STEP 7 Report the findings**
- An important feature of *Discovering Democracy through Research* is that researchers have an opportunity to present and disseminate their research findings.
- All Research Investigations provide advice on the types of reporting that might be used. In most cases a range of presentation options is suggested. These choices are limited only by the levels of energy, imagination and resources available.
- All reporting will require a clear understanding of who the intended audience is and what medium or means of reporting is to be used.
- Reporting will require the researchers to express their major findings, viewpoints and conclusions in response to the research questions. A live presentation will require additional designing and planning, the development of media, and rehearsals and actual production time.

**STEP 8 Evaluation and assessment**
- Evaluation is an important part of developing effective research skills. The process should include teacher, student and audience feedback.
- Students can identify their own learning outcomes and evaluate the complete project. The whole group can assess the strengths and weaknesses of the processes and the outcomes of their work in small groups and as a class.
- Audience feedback on presentations or reports can ‘inform’ the evaluation.
- For assessment advice refer to pages 3-4.
Preparation and planning

Conducting any research requires careful preparation and planning. The *Discovering Democracy through Research* Investigations do entail some additional teacher preparation. The following may be a useful guide to effective planning.

1. Choose a topic of interest to you and of relevance to your students.
2. Predetermine some limits to the research.
3. Prepare some questions to be investigated.
4. Identify and locate information sources that are relevant and accessible.
5. Determine the means by which data will be collected.
6. Start to think about ways in which the findings are to be reported.
7. Decide how the students will be organised to undertake the project.
8. Investigate what approvals and permissions the research may require.
9. Check availability and access to materials and equipment (eg computers, Internet access, audio recorders, printing, telephones).
10. Plan the tasks and timetable well in advance.

A Task Planner has been provided for each Research Investigation. These planners can be adapted to meet the particular needs of your project or can be copied, as provided, for student use. The Task Planner is useful in providing each student and the teacher with:

1. a record of key decisions taken by the group or teacher in designing the research
2. a schedule of tasks to be done, by whom and by when
3. a reference document for managing the Investigation
4. a way of maintaining a focus on the project's key questions, purpose and outcomes.

### An approach to planning

... the project took off so quickly that the planning was done one stage at a time. Once one step was achieved then the students (with guidance) planned their next move. For example, after they had concluded their survey the students then decided which visual format to use to present their survey results. After that they then discussed the best choice of site to show their findings. An interesting exercise would be to have the students design a model Task Planner at the end, using the knowledge gained from this project.

*Teacher, years 5–6, Tasmania*

### CASE IN POINT

A Task Planner is offered in every Research Investigation. It is to be used or adapted as a planning instrument for students.

### The ethics of research

Primary research involves a number of core ethical principles and standards of behaviour. Teachers are advised to introduce students to these principles at the outset of the Investigation. They link strongly with many of the values and attitudes inherent in civics and citizenship education.
**Ethical principles for researchers**

<table>
<thead>
<tr>
<th>Researchers should:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. undertake background preparation so they know what they are seeking and do not waste the time of people participating in their work</td>
<td>necessary information about the research</td>
</tr>
<tr>
<td>2. obtain clearances and permissions before interviewing, surveying or visiting sites</td>
<td>check that participants agree to being named and respect people’s right to privacy and confidentiality</td>
</tr>
<tr>
<td>3. show consideration and respect for other people’s cultures, beliefs, feelings and sensitivities</td>
<td>acknowledge the support and contributions of participants in the final report and in letters of thanks</td>
</tr>
<tr>
<td>4. always obtain informed consent from participants before an interview</td>
<td>acknowledge all major sources of information, ideas and opinions which have been used in the project (plagiarism - using other people’s work as if it is one’s own and failing to acknowledge them - is unethical and a serious offence in research)</td>
</tr>
<tr>
<td>5. respect the wishes of those who do not want to be participants in the research</td>
<td>10. seek to make a positive contribution to the community, to benefit others and to do no harm by their work.</td>
</tr>
<tr>
<td>6. always be truthful and open about the purpose and intent of their work, providing participants with</td>
<td></td>
</tr>
</tbody>
</table>

**Information sources**

Information sources are like the supply stations for the research journey: ultimate success depends on locating good sources that provide rich, relevant, accurate and reliable information. This is one of the most demanding and rewarding tasks of any research. For these Research Investigations teachers need to ensure that the sources are readily accessible, available and appropriate for their students. More often than not, the challenge will be to select and contain a manageable choice from the vast range of data sources available.

Like all research, each of the Research Investigations will demand the use of both general and specific reference sources.

**General reference material** includes encyclopaedias, general historical and other reference texts, collections of source documents, atlases and timelines. These may be useful as part of background reading to develop a general picture and context for the research.

**Specific reference material** includes the following items.

- Newspaper or journal articles (historical and contemporary). Newspaper offices keep records of past publications. Wider collections, often on microfiche or maintained electronically, can be found in major libraries in capital cities.
- Cartoons, advertisements, photographs, graphics – all forms of visual text.
- Published results of surveys. Newspapers frequently contain accounts of surveys (their own or those of other groups which are seen to be newsworthy) which may be of relevance.
- Published results of previous research. Various organisations, including local, State, Territory and Commonwealth governments and agencies, conduct and publish relevant research and publish reports. Extracts or succinct summaries are often available on websites.
- Statements of policy or guidelines. Most organisations have such documents, which would be useful and relevant to many Investigations, for example Who Rules Here?
- Records of parliamentary debates. Hansard is available on government websites and is often found in municipal libraries. It provides a complete account of what was said in Commonwealth and State or Territory parliaments.

- Published personal accounts (diaries, memoirs, oral histories). These may supplement or provide alternative points of view to the interview material students collect themselves.

- Statistical material. The Australian Bureau of Statistics has a wide range of publications. Some are topic related, some are based on geographic localities. The annual Year Books contain a wealth of interesting data.

- Sound and film archives. ScreenSound Australia has an extensive catalogue of material available and is accessible via the Internet. The Australian Broadcasting Corporation also has some collections of film and sound recordings related to major Australian events.

- Cultural sources. These include visual art works, architecture, fiction, plays and poetry of particular localities, personalities and eras. They may also include period and contemporary music and films which express the values and attitudes of the time.

- Internet sources. Advice on web-based research is provided on pages 16–18.

Types of sources

An important distinction exists between types of information sources: there are secondary sources and primary sources.

Secondary sources

Secondary sources include textbooks, histories, commentaries and other publications in which data has already been interpreted by others. Secondary sources are used in Step 2 (see page 6) of the research process, as they provide a comprehensive account and overview of the issues under discussion. They can paint the background and provide a direction for thinking about the issues.

Primary sources

Primary sources provide first-hand information from the time and place. They usually yield unstructured and unprocessed or raw data from both the past and today. Selected primary source material often can be found in textbooks and edited collections.

Working with primary sources

The main virtue of primary sources is their immediacy - the way in which they can provide a feel for the time, event or experience - and the opportunity they offer for new knowledge and understanding. Because the information is raw and unprocessed it opens the way to new insights, ideas and interpretations.

A feature of the Research Investigations is their emphasis on the use of primary sources. Working with the primary source data - finding it, recording it, analysing it, making sense of it - provides a major learning activity for the students and a key to unlocking exciting, and sometimes unexpected, research outcomes.
One of the crucial roles the teacher can take in facilitating the research is to teach students how to use primary sources systematically and critically. The following questions may be useful for students to apply in their analysis of primary source material.

1. What is the formal name or title of this source?
2. What are its origins? Where is it from? Who authored or created it? When?
3. Who was the original intended audience for this source?
4. What was the original purpose of the source material?
5. What else was happening at the time?
6. What may have influenced the particular point of view or conclusions of this source?
7. What information does this source yield?
8. What additional questions does it raise?
9. How does this information compare with other information on the same issue?
10. Can this source be validated as being reliable and authentic?
11. Does this source display any biases or omissions that undermine the quality of information it supplies?
12. Does the source indicate the need to consult other information or sources?

**Data collection methods**

Different Research Investigations, and the different issues explored by particular school groups, will require different types of information. The types of information required will demand particular collection methods, for example in-depth interviews for a study of the 1956 Olympic Games in Our Town, or a site visit and questionnaires for an urban development issue in Taking Issue. Methods of collection include:

1. collecting statistical data from government departments, reports and sources such as Australian Bureau of Statistics, the Australian Electoral Commission and Centrelink
2. conducting surveys and questionnaires of various participants involved in the issue or topic
3. conducting and recording interviews with individuals and groups
4. studying original documents and records
5. conducting group meetings of people actively involved in the issue
6. making site visits and investigating by direct observation
7. sourcing and making direct contact with participants via the Internet.
Surveys and questionnaires

A survey is a simple instrument for collecting information that can be collated and expressed statistically. It can consist of questions which require a closed response (such as those that ask for facts like 'your age' or 'yes/no' responses) or it can consist of results from observations (such as 'the number of cars that pass the school at lunch time').

A questionnaire consists of a series of formulated questions which yield a variety of information types. Questionnaires are often used as a type of survey activity to produce statistically expressed results but they often also employ 'open questions' to generate more complex information and varieties of responses.

Surveys and questionnaires need to be designed. The type of survey or questionnaire used will be determined by the aim of the research, the types of information sought, limits on resources available (time, distance, materials) and the sample of people (ie type and number) the research is aimed at. Surveys and questionnaires can be conducted:

1. by mail, fax or email
   - Advantages: convenient and good for surveying large numbers and for covering remote areas, high level of anonymity
   - Disadvantages: the time and expense they require, unpredictable response rates

2. face-to-face with individuals or groups
   - Advantages: instant results, best for sensitive or complex issues
   - Disadvantages: lack of anonymity, labour-intensive, impose limits on sample size

3. by telephone
   - Advantages: can achieve instant results, are less labour-intensive, can cover a broader sample, especially over distance
   - Disadvantages: can be expensive and difficult to execute in a school environment

Designing a survey or questionnaire

1. Always draft the questions. As the questions are drafted also think about how the group will record the results and how data will be analysed.

2. Once the questions are drafted, have the students pre-test them with friends, family and other students to see if they yield the clear and relevant information needed. Revise the questionnaire accordingly. Check for clarity. Ensure that the survey is manageable and can be conducted in a reasonable time.

3. If possible, conduct the final version of the survey or questionnaire with a group as if it were the real thing. This is a good way to fine tune the questions, finalise the arrangements and protocols for running the survey and give students some practice in conducting a survey or questionnaire.
Introducne

Survey about a conservation park in Taking Issue

As well as conducting extensive site visits and face-to-face interviews, a year 8 group in South Australia used questionnaires to identify opinions about this issue. They mailed 100 questionnaires to the local community and 48 questionnaires to members of the South Australian parliament. They achieved a response rate of over 70 per cent.

Interviews

Interviews are a more flexible research instrument than questionnaires. They can be used for a variety of situations. Interviews can be very structured (like a spoken questionnaire) or, at the other extreme, more open-ended explorations with an interviewee.

Conducting interviews

1. As with surveys and questionnaires, preparation and good design are crucial for effective interviews.

2. Interviews ought to be practised, and piloted if time permits. Students should be encouraged to practise listening and responding to answers rather than going through their question list regardless of what the interviewee says.

3. To assist in organising interviews a pro-forma Interview Planner has been supplied on page 19. This can be used by students as a checklist for the task or can be adapted according to need.

4. There are certain protocols and administration tasks associated with interviews. These include requesting an interview, obtaining permissions or clearances, sending cover letters and advance copies of questions, arranging interview times and places, scheduling if there is a series of interviews, deciding how to record the interview, thankyou letters and other follow-up.

Organising and analysing data

Organising data is the process of assembling the information gathered around the themes and key questions of the research. It ought to take place throughout the research process and not just at the end.

Organising

Students should be encouraged to categorise and label data as it comes to hand and to write down notes or memos on observations and ideas as they occur. Have them use diagrams to explain ideas or explore interrelationships and linkages.

The results of this organising are usually presented as text or, in the case of statistics and survey results, tables and various types of graphs.
Analysing

Analysing the data is the process of interpreting the results. This involves identifying patterns or trends, making generalisations, testing ideas and theories against the data, and generating explanations for situations or events.

Analysing also involves sifting the data and reducing it to the most relevant pieces, identifying where more information is needed (if evidence is inconclusive) and resolving any contradictory or conflicting information.

These processes might have to be taught by making the requirements explicit and providing a framework for it to occur. A framework can be constructed around a series of questions to be applied to the material. To help organise the information students can use the following listing process.

- The key questions being investigated with this source are ...
- In this source, what we found out about the issue was ...
- These sources agreed on these points ...
- These sources disagreed on these points ...
- Our conclusions are ...
- These conclusions are supported by ...

To assess the adequacy of research students can apply a set of questions.

- Have we answered the key questions?
- Do the descriptions or explanations we offer answer these questions satisfactorily?
- Does our research data convincingly support these descriptions or explanations?
- Do our answers require additional supporting information? If so, what?
- Are our results and interpretations true, reliable and complete?
- Which questions about the topic remain unanswered?

Another useful way of compiling results for analysis is to use a Results Grid, so that information about a situation can be systematically compiled for comparison. Some Research Investigations include a sample Results Grid as a student handout.

Reporting the findings

Once interpretations and conclusions have been finalised the students will report their findings to a specific audience. The target audience and method of reporting need to be determined early in the planning process.

*Discovering Democracy through Research* offers students the opportunity to communicate their findings clearly and concisely and disseminate them so other school communities or local communities can share in the understanding, insights and new knowledge that the research has generated.
Written reports

Written reports may take the form of individual or group reports for the teacher or for posting on the school website, articles for the local newspaper, or pamphlets for the local community. A plan for a written report might include:

- an introduction – to outline the purpose for the research and its focus
- an outline of the methods used to gather information
- a review of the major findings from the data
- a discussion which explains and interprets the findings
- a conclusion and any relevant recommendations.

Other forms of presentation

In addition to written reports, class groups ought to consider a wide variety of communication methods for reporting and disseminating their findings. Each Research Investigation will make relevant suggestions for alternative forms of presentation.

It is recommended that teachers address the question of how to present findings in the early stages of the project as the answer to the question could have significant implications for the rest of the project. For example, an audiovisual presentation to a live audience would benefit from video recording in the actual research collection phase.

Ways of presenting and reporting research projects include:
- information brochures for local distribution
- photographic and/or 3D model displays
- multimedia presentations
- meetings or seminar discussions with audiovisual or video presentations
- visual displays with posters, flow charts, timelines and other graphics
- role-plays, music or other performance pieces
- letters to the editor or articles for newspapers, journals or magazines
- presentations to student forums or school committees
- forums or debates for public presentation to relevant community groups
- posting on school or specially constructed websites.

Citing sources

Sources should be properly cited. The knowledge and skills of accurate citation may have to be taught and practised.

There are several standard forms of citation. If you are unsure about which to use or how to cite sources generally, advice which is both helpful and authoritative can be found in Style Manual for Authors, Editors and Printers 1994, 5th edn, Australian Government Publishing Service, Canberra.
Using the Internet

This brief guide is for teachers who are not familiar with the Internet.

The Internet is a massive worldwide network of computers which can 'talk' to each other. It is used for information storage, display and retrieval, one-way communication and discussion. Information can be in the form of text, graphics or still pictures, moving pictures and sound.

Useful terms

The World Wide Web ('www') is one component of the Internet. It consists of 'sites' (addresses which have texts, graphics, sometimes pictures, moving and still, and sound) which you can 'hit' (or visit and read). No one is certain how many websites exist, but the number is certainly in the millions and growing daily. Most can only be changed by the 'owner' of the site. They all contain instructions about their use. The information they contain is set out on 'pages', which can sometimes be obtained by 'downloading' (see below). Some sites, such as those from libraries or art galleries, are set up for downloading files of the material they contain.

Email is a facility which allows the sending of text and pictures to other email addresses.

Forums (also called Newsgroups, Bulletin Boards or Discussion Groups) are places defined by a topic. Users provide information or conduct discussions which can be read by contributors or other interested parties at any convenient time.

Chat rooms are like Forums except that they operate in real time. That is, participants are online at the same time. As one person types someone else can read and respond - a written 'conversation'.

A search engine is an electronic means of finding sites that are related to topics in which you are interested. More information about their use is provided opposite.

Other useful terms

CD-ROM (Compact Disk Read Only Memory): a high-capacity disk for use with computers. Generally used for interactive activities such as games or for information storage such as databases. Some CD-ROMs will allow you to print out information or save it onto a disk or hard drive.

Page: a single unit of text, graphics, pictures or sound on a website. Most websites consist of a number of pages with a 'menu' or directory to help you find the information you want.

Thread: themes or topics within a forum discussion, such as 'Votes in the 1900 referendum' in a forum devoted to Federation.

Download/upload (post): the processes of moving files of information from one computer to another. You download a file from a website to your computer, where you may read or print its contents and upload or post a file from your computer to another site or address.

Hypertext, or hypertext link: a website address which, if clicked on, allows you to move to that address. Hypertext often appears in a contrasting colour and/or is underlined.
**Bookmark:** a handy way to keep and access addresses of sites you visit frequently or otherwise want to remember. Operates just like a bookmark or an address book.

**Plug-in:** a tool, often provided on a web page, which, once activated, allows the transmission of sound or video images.

**User name:** your own individual name which allows you to log on into a network.

**Log on/log off:** connect/disconnect from a computer, either the one you are using or one which is remote. To log on you may need a password.

**Password:** a ‘secure’ name or short piece of text which identifies you and allows you access to a site.

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## Using a search engine

Search engines allow you to find information related to a specific topic or to browse through material available on the Web. They may be topic- or field-specific.

Two good search engines (of which there are many) are:

- Altavista (http://www.goethek.com.au)

Each responds to a keyword or words and also provides general topics for browsing. Be aware that different search engines will yield different results.

When using search engines, consider the following.

1. **Be as specific as possible.**

   For example, if you use the term ‘animals’ to search, that is what you will get. If you use ‘Rottweilers’, that is what you will get. You can obtain more accurate results by using the logical operators AND and NOT, which include or exclude items. So a search on ‘cows AND sheep’ will result in sites which relate to those two animals; ‘merinos NOT sheep’ may produce results related to merinos and merino products.

2. **Put quote marks or parentheses around names.**

   For example, if you use the term Alfred Deakin, you will be offered everything that might relate to all Alfreds and all Deakins. This may include a tour of Alfred Deakin High School in the ACT, the Deakin Hall home page, a list of the most common boys’ names in SA in 1997 and the program of the Canberra Rose Festival. If you search on ‘Alfred Deakin’ or (Alfred Deakin) you will get a much more restricted and workable result.

3. **There is no such thing as a universal search engine that will provide access to every site on the Web.** Some search engines have broad coverage; others have excellent coverage of a field or topic. If you can’t find what you want from one engine, try another.

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## The Discovering Democracy Website

The Discovering Democracy Website address is:

http://www.curriculum.edu.au/democracy

This website is used to support the Discovering Democracy program. It contains, among other things, general information about the program, a newsletter, advice about teaching civics and a resource centre. It is updated four times a year.
with information and teaching and learning activities provided on a new issue or topic, for example the republic referendum, the Federation centenary. The resource centre contains a list of useful print resources and websites at 'Choice Civics Clicks': http://www.curriculum.edu.au/democracy/resource/clicks/clicks.htm

The Parliament@Work Website, which is referred to in a number of Research Investigations, is available at http://www.curriculum.edu.au/parliament

The Discovering Democracy Website also provides access to One Destiny! materials. The One Destiny! Website at http://www.onedestiny.com is a rich resource about the process and history of federation in Australia.

Copyright and legal issues

Teachers and students ought to be aware of copyright and legal issues.

The issue of plagiarism was mentioned on page 9. Generally students can use quotations from other sources as long as the quotation is properly acknowledged. If material is to be published as an article or a brochure the students and the school will have to obtain written permission from copyright owners for any reproduced visual and text material.

Posting material on a website is classified as publishing on the Internet. Accordingly, any visual image, quotation or reference will need to have the appropriate written clearances from the copyright owners. If individual citizens or public figures are quoted or represented their written permissions will also be required.

All efforts should be taken to monitor student use of websites.

Evaluation

Following completion and presentation of the research, teachers are advised to allow time for an evaluation of the work with students. This evaluation can be seen as separate from assessment but could also be developed as part of the assessment process. Assessment and indicators of student achievement are discussed on pages 3-4. A pro-forma Evaluation Planner is provided on page 20. It can be used as a student handout or adapted to meet specific needs. Evaluation may include:

- assessing the feedback from the research’s various audiences
- describing any observable outcomes and responses from local or school communities
- student reflection on their own individual learning and learning of the group
- identifying the civics and citizenship value of the research work
- assessing the strengths and weaknesses of the research in terms of both its processes and the quality of its outcomes
- developing a list of recommendations for improving research skills and the implementation of other activities in Discovering Democracy through Research.

<table>
<thead>
<tr>
<th>Evaluation Planner</th>
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<tbody>
<tr>
<td>The Evaluation Planner on page 20 may be copied for use by students in every Research Investigation. Teachers may choose to use it as is or to adapt and construct a planner to suit their particular needs.</td>
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Advice about conducting interviews

Be polite, be well prepared, start on time, finish on time. The interviewee is doing you a favour so be careful not to waste their time. Present them with a brief outline of what you are trying to achieve by the interview. They should have received, in advance, copies of the key questions you will put to them.

Listen carefully to what the interviewee says. They might be telling you something interesting or useful which you haven’t considered in your questions. Don’t be afraid to ask new questions or to follow up ideas or information they suggest. Keep in mind the main issues about which you are collecting information.

Feel comfortable about asking the interviewee to repeat or clarify their response if you do not understand their answer. Make the most of this one opportunity.

Make a record of the interview. Write up a summary while it is still fresh in your mind.

Follow up with a thankyou letter to the interviewee and a courtesy copy of any final product arising from the interview.

Research topic

Name of interviewee/s

Name of interviewer

Contact details

Schedule

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Interviewee</th>
<th>Date of interview</th>
<th>Location</th>
<th>Time started</th>
<th>Time finished</th>
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Checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Notes</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consent request letter sent to interviewee</td>
<td></td>
<td></td>
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<tr>
<td>Consent received from interviewee</td>
<td></td>
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<tr>
<td>Interview arrangements confirmed</td>
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<tr>
<td>Questions completed and forwarded</td>
<td></td>
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<tr>
<td>Transport arrangements</td>
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<tr>
<td>Method of recording: scribe/audio/video</td>
<td></td>
<td></td>
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<tr>
<td>Audiovisual equipment booking</td>
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<tr>
<td>Other materials required</td>
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<tr>
<td>Other</td>
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</tbody>
</table>
EVALUATION PLANNER

Research Investigation title

Evaluation by

Our key questions
1
2
3

Date research started

Date completed

Method of presentation

Research team members

Audience responses to the report (based on audience feedback forms)
Positive
Negative

Individual assessment of own learning

In this Research Investigation I:
° learnt most about
° have become better at
° demonstrated I still need to work on
° enjoyed most the

Class evaluation of learning

As a class group:
° our main achievements were
° the strengths of our work were
° the weaknesses in our work were

In future Research Investigations we should