Science 21
Advice for teachers

Extended experimental investigation planner
October 2010
Science 21 (2010)

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Extended experimental investigation planner

Compiled by the Queensland Studies Authority
October 2010

About this advice

This advice is intended to help teachers implement the Science 21 (2010) syllabus in their school setting. It provides information to help teachers plan and design a unit of work that includes assessment in the form of an extended experimental investigation (EEI).

This planner is designed to be used by teachers before starting the unit of work. It is not a requirement that teachers use this planner; rather, it is an optional tool to assist in designing an effective assessment instrument.

For example, it may be used by:

- individual teachers when developing their own units of work
- groups of teachers to collaboratively plan and develop units
- heads of department/coordinators to manage a common approach to developing units of work for this syllabus.

Other support documents that may be of further assistance are available to download from the Science21 page of the QSA website <http://www.qsa.qld.edu.au/11362.html>. They include:

- Tool for schools
- Developing effective assessment instruments
- SW planner
- ERT planner.

For further information about the conditions, requirements and standards to be used when devising an EEI, please refer to the Science 21 syllabus section 5.5.2.
## Planning sheet — Extended experimental investigation

<table>
<thead>
<tr>
<th>Topic:</th>
<th>Semester (stage of course):</th>
</tr>
</thead>
<tbody>
<tr>
<td>General objectives:</td>
<td>Key concepts:</td>
</tr>
</tbody>
</table>

Note: For teacher use only — NOT to be given out to students as part of the task sheet.

<table>
<thead>
<tr>
<th>Possible hypotheses/issue/researchable question</th>
<th>Outline of possible experiments/ practical tasks</th>
<th>Types of data/information to be collected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Opportunities for students to:**

- modify and refine experiments/ practical tasks
- manipulate and display data/ information
- use technology and modify equipment
- generate and/or collect primary (and/or secondary) data/ information
- develop research outcomes with justifications
- examine and evaluate the validity and value of data/ information

**Learning experiences/prior knowledge/ scaffolding**

<table>
<thead>
<tr>
<th>Time/space/equipment requirements, and costs or safety issues</th>
<th>Strategies for authentication</th>
</tr>
</thead>
</table>