

Achievement Standard

Subject Reference Biology 3.2

Title Research a contemporary biological issue

Level 3 **Credits** 3 **Assessment** Internal

Subfield Science

Domain Biology

Registration date 1 November 2005 **Date version published** 1 November 2005

This achievement standard involves researching a contemporary biological issue.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none">Research information to describe a contemporary biological issue.	<ul style="list-style-type: none">Integrate researched information to explain a contemporary biological issue.	<ul style="list-style-type: none">Integrate and evaluate researched information to discuss a contemporary biological issue.

Explanatory Notes

- 1 This achievement standard is derived from *Biology in the New Zealand Curriculum*, Learning Media, Ministry of Education, 1994, p. 28, achievement objective 8.3 (a).
- 2 In *research*, the student collects and interprets information from mainly secondary sources. Use of primary sources is acceptable. The research will be conducted with teacher guidance. This means the teacher is supporting the student throughout the research but the whole process will be student driven. The student is to select an issue, either from a list provided by the teacher or from the student's own research. The teacher guidance gives general information in the form of broad questions, resource suggestions, or possible new directions.
- 3 An *issue* is one for which people hold different opinions or viewpoints.

- 4 For achievement, students are expected to describe:
 - biological concepts and processes relating to the issue
 - implications of the issue, which can be biological, social, ethical, economic or environmental
 - differing opinions or viewpoints.
- 5 Students are required to support their description, explanation or discussion with referenced information. This means that references to information sources are included within the text of the report, with full details given in a reference list.
- 6 Terms
 - *Describe* requires the student to define, use annotated diagrams, give characteristics of, or an account of.
 - *Integrate* means to bring together and organise relevant information and opinions from a range of sources.
 - *Explain* requires the student to provide a reason as to how or why something occurs.
 - *Evaluate* requires the student to:
 - comment on sources and information, considering ideas such as validity (date, peer reviewed, scientific acceptance), bias (attitudes, values, beliefs), weighing up how science ideas are used by different groups, own opinions, attitudes and beliefs
 - provide a justified position that supports or opposes aspects of the issue or an implication of the issue. *Justified* means to demonstrate, with supporting evidence, why the position has been chosen.
 - *Discuss* requires the student to show understanding by linking biological ideas. It may involve students in justifying, relating, evaluating, comparing and contrasting, and analysing.

Quality Assurance

- 1 Providers and Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against achievement standards.
- 2 Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.