



Essential Secondary Science Assessment (ESSA)

ESSA is an assessment program that provides information about the scientific knowledge, skills and attitudes of 14-year-old students. The test became mandatory for Year 8 students in all NSW government schools in 2007.

ESSA's aim is to enhance teaching and learning in science and to support the integration of assessment into the teaching–learning cycle. Assessment through ESSA is guided by a framework that describes achievement in five strands and at six levels. This ESSA framework is available at:

<http://www.schools.nsw.edu.au/learning/7-12assessments/essa/essatests.php>

Test items are presented in a test booklet accompanied by a coloured stimulus magazine. The test consists of: three extended tasks (which provide opportunity to assess higher order thinking and deep understanding) and provide the scope for items of high order of difficulty; and, seventy five short response and multiple choice items. Assessment items are framed in real-life situations related to self, the family and the community. The items give students the opportunity to demonstrate their understandings at both local and global levels.

The focus of the assessment is the mandatory outcomes and their associated essential content as described in the NSW Board of Studies *Science Years 7–10 Syllabus, 2003*. Students will be tested on their:

- knowledge and understanding of science
- understanding and skills in the process of scientific investigation
- ability to evaluate evidence, make judgments and think critically
- ability to access information and communicate scientific ideas using a variety of strategies.

The test also includes a survey of students' attitudes to the test, to science and their learning of science.

The test takes about 80 minutes. Full details regarding the administration of the test are provided in the *School manual of administrative procedures and teacher handbook*, to be distributed to participating schools in Term 3 2009.

The results of the ESSA test are reported to all participating schools through the *School Measurement and Reporting Toolkit* (SMART), which provides teachers with quality feedback on students' knowledge, understandings and skills, and identifies possible areas for future teaching and learning. Survey results reported at school and state levels are also provided through SMART.

Individual information about student performance is provided to students and parents through the *Student report to parents*, which is printed and sent to participating schools for distribution.

Information sheets for parents about the test and the student report are available at:
<http://www.schools.nsw.edu.au/learning/7-12assessments/essa/index.php>

School Measurement and Reporting Toolkit (SMART)

SMART is a software package that both reports data from testing programs and enables schools to undertake sophisticated analysis and manipulation of that data. SMART supports the planning of specific and tailored intervention strategies for improving learning outcomes. Enhancements to the software are planned annually.

All schools that participate in the ESSA test receive their student results through SMART. Schools also receive a hard copy of a *Student report to parents* for each student.

Some features of SMART

SMART is cutting edge technology that provides opportunity to investigate student performance data at many levels. Here is a summary of some features.

- **Analyse student performance across achievement levels**, identifying students in each level and comparing achievement in the school and test populations.
- **Access information on item performance**, showing student responses for individual test items. Identify patterns of student responses and access distracter analysis and teaching/learning support materials (*Curriculum links*).
- **Investigate student responses**, for detailed analyses of strengths and weaknesses of individual students on test items. Again, there are direct links to support materials (*Curriculum links*).
- **Create custom groups**, such as class groups, and analyse school results in a customised way. These custom groups are available across the entire software platform for additional in-depth analyses of data.
- **Sort test item information** by:
 - item number
 - order of difficulty of items
 - item description
 - syllabus area
 - percent correct in state
 - percent correct in school
 - difference in achievement between school and state.
- **Print report tables**, which are printable PDF files that provide:
 - scores and achievement levels of each student tested
 - the number and percent of students who reached each of the six achievement levels
 - a summary of the test items where the percent correct/incorrect for the school was 10 or more higher than the test population
 - mean score and standard deviation values for overall achievement in science and for each reporting strand
 - the percent of students selecting each option
 - students in order of number of correct responses; for each incorrect item, the option selected is identified
 - the percent of students achieving each score from 0 to 6 for the extended tasks
 - individual student items correct/incorrect in order of item difficulty.
- **Generate individual student reports**, which gives a copy of the *Student report to parents* for any student (for example, for parents who have damaged or lost reports).
- **Investigate student attitudes and values**, for analyses of survey data by student groups and achievement levels.

Additional information regarding ESSA on SMART is available at <http://www.schools.nsw.edu.au/learning/7-12assessments/essa/essasmart.php>



ESSA Registration information for independent schools

2009 ESSENTIAL SECONDARY SCIENCE ASSESSMENT (ESSA) Assessment date – Tuesday 24 November 2009

Registration:

Please complete a **registration form** and a **confidentiality form** and pay the **registration fee** (or full payment for Home Schools)

ABN: 40 300 173 822

Closing date: for receipt of registrations, **Friday 7 August 2009**

Registration fee: **\$25 (including GST) per school**

Payable by cheque (made payable to the NSW Department of Education and Training) or by electronic funds transfer, using the following details:

BSB: 032-001 (255 Elizabeth St., SYDNEY)
Account number: 20-0000
Account name: DEPARTMENT OF EDUCATION AND TRAINING
DET (A) OPERATING
Reference: ESSA 2009

Please note:

- If payment is made by EFT, a remittance notice with transaction details must be emailed or faxed to Teresa Elliott (contact details on page 2).
- **A late fee of \$100 (including GST) will be incurred for late registrations. No registrations will be accepted after Friday 30 October 2009.**
- The registration fee covers an unlimited number of students.
- The registration fee must be included with registration, and is not refundable. Up-front payment of all charges may be required at the time of registration in the case of late payment of previous invoices.

Cost per student for non-government schools: **\$27.00 (plus \$2.70 GST)**

The cost per student covers the provision of all assessment materials, an individual report and access to the student's data on SMART Data software.

All Year 8 students from the school should be enrolled for the test. An invoice for the total cost for all students will be forwarded after the assessment.

Home Schools registered with the NSW Board of Studies (BOS)

All costs must be paid at the time of registration. This includes **\$25** registration fee **plus \$29.70** (\$27.00 + \$2.70 GST) per student. A copy of Certification or Notification of Recommendation from the BOS must also be provided with the registration form.

Please send completed forms directly to Teresa Elliott (phone 9707 6223) at:

2009 ESSA Registration

Educational Measurement and School Accountability Directorate

NSW Department of Education and Training

Locked Bag 555, Delivery Centre, Milperra, NSW 1891

Please email or fax remittance notices to Teresa Elliott at:

Teresa.Elliott@det.nsw.edu.au or 9707 6289

Invoicing

Schools will be invoiced using the number of students who actually sat for the assessment. Excluding Home Schools, invoices will be issued after the test results are despatched to schools. Where the number of completed test papers returned for marking is less than 90% of the number of students given at the time of registration, the school will be charged \$10 per unused paper.

Payments


All payments must be made to NSW Department of Education and Training within 30 days of the invoice date. Late payment may require up-front payment of all charges at the time of registration in subsequent years.

Conditions of participation

The application form for non-government schools is accompanied by a declaration about the confidentiality of test materials and results, to be signed by the Principal or the appropriate school authority. This is legally binding for all participating schools. The registration fee of \$25 must also be paid to complete registration.

Declaration on behalf of the NSW Department of Education and Training

I declare that the NSW Department of Education and Training and its staff will not divulge the results of any student or school from the Essential Secondary Science Assessment to any organisation or person other than as otherwise advised by the individual School Authority.



David Wasson, **Director, Educational Measurement and School Accountability**

NSW Department of Education and Training

4 February 2009

Regulation for publication of results

EDUCATION REGULATION 2007

Under the Education Act 1990

Her Excellency the Lieutenant-Governor, with the advice of the Executive Council, has made the following Regulation under the Education Act 1990.

John Della Bosca, M.L.C., Minister for Education and Training

Clause 4

Publication of results and other matters: section 18A

- 1) This clause applies to the following results:
 - a) results of basic skills testing under section 18 of the Act,
 - b) results of School Certificate and Higher School Certificate examinations and related assessments,
 - c) results of annual assessments of the academic performance of students contained in reports to parents on student achievement.
- 2) The following are included for the purposes of subclause (1) (a):
 - a) English Language and Literacy Assessment (ELLA),
 - b) Primary Writing Assessment,
 - c) Secondary Numeracy Assessment Program (SNAP),
 - d) Essential Secondary Science Assessment,
 - e) OECD Programme for International Student Assessment (PISA),
 - f) Trends in International Mathematics and Science Study (TIMMS),
 - g) Best Start Kindergarten Assessment,
 - h) Year 3 and 5 Basic Skills Test (BST),
 - i) Year 3, 5, 7 and 9 National Test in literacy,
 - j) Year 3, 5, 7 and 9 National Test in numeracy,
 - k) Year 6 National Assessment Program—Science Literacy,
 - l) Year 6 and 10 National Assessment Program—ICT Literacy,
 - m) Year 6 and 10 National Assessment Program—Civics and Citizenship,
 - n) Year 6 and 10 Computing Skills Assessment.
- 3) Results to which this clause applies must not be publicly revealed if the results relating to particular students are revealed.
- 4) Results relating to a particular student may however be revealed as follows:
 - a) to the student, or to anyone with the student's consent,
 - b) to the student's parents (or his or her other caregivers),
 - c) to the principal of a school (including a school in another State or Territory) at which the student is enrolling, enrolled or at which the student was previously enrolled,
 - d) in the case of results of School Certificate or Higher School Certificate examinations and related assessments—by or with the approval of the Board of Studies, by way of the publication of the results of students who the Board considers have achieved outstanding results.
- 5) Results to which this clause applies must not be publicly revealed in a way that ranks or otherwise compares the results of particular schools.
- 6) If a school is required (by the appropriate authority for the school) to publish an annual report of school performance but fails to do so by the due date for publication, this clause does not prevent the public release of any results that were required to be the subject of that report.
- 7) The *appropriate authority* for the purposes of subclause (6) is:
 - a) in the case of a government school—the Department of Education and Training, or
 - b) in the case of a non-government school registered as a member of a system of non-government schools—the approved authority for the system, or
 - c) in the case of a non-government school registered as an individual school—the proprietor of the school.



Registration form for independent schools

2009 ESSENTIAL SECONDARY SCIENCE ASSESSMENT (ESSA)

Assessment date – Tuesday 24 November 2009

Closing date for registration: Friday 7 August 2009

School name used on school/student reports			
Affiliation Independent or system name			
Street address for courier deliveries	Town/suburb	State	Postcode
Mail address if different from above	PO Box	Town/suburb	Postcode
Country if other than Australia			
Telephone			
Fax			
Email			
Years catered for e.g. 3–8 7–12 K–12			
Principal's name	Title	First name	Last name
Contact person			
Enrolment number for current Year 8			
Method of payment	Cheque	EFT	

Also include:

- the signed confidentiality form
- **\$25** registration (including GST), payable to NSW Department of Education and Training (or **\$100** late fee if after 7 August 2009); on payment, page 1 becomes a tax invoice
- copy of NSW BOS certificate (for Home Schools).

Return to:

2009 ESSA Registration
Educational Measurement and
School Accountability Directorate
NSW Department of Education and Training
Locked Bag 555, Delivery Centre
Milperra NSW 1891
Australia



ESSA declaration of confidentiality

I, _____, the principal of
_____ School/College

undertake to observe the conditions of confidentiality of test materials and results, set out below, and ensure that staff members undertake to observe the same conditions:

- I will ensure that whoever receives the test materials signs for them legibly and records his/her name and the date and time that the materials arrive at the school.
- I take responsibility for the overall security and confidentiality of all test and test support materials from the time of receipt of those materials at the school through to and including the safe collection or dispatch of those materials on conclusion of the test.
- I will not divulge the contents of any Essential Secondary Science Assessment (ESSA) test to any teacher or other person until the time set aside for students to take the test is reached.
- I will observe Section 18A of the Education Regulation 2007 under the Education Act 1990 (see attached extract) with respect to the release of results of testing.

Signature _____

Date _____