

<p style="text-align: center;">The sustainability literacy approach</p> <p style="text-align: center;">The percentage of learners who attain the required level of sustainability literacy</p> <p>Written tests at the end of primary, secondary and further/higher education draw on the Forum for the Future's concept of sustainability literacy and the objectives (knowledge, skills and values) suggested for each stage of education by the Panel for ESD.</p>	<p>Advantages The approach draws on an established concept that has some currency in higher education. It relates to other familiar concepts in ESD such as political literacy, social literacy, environmental literacy, action competence. The approach draws on established guidance provided by the Panel for ESD and developed on the QCA ESD website. The approach reflects NC assessment with attainment targets and key stage tests that are familiar to teachers.</p> <p>Disadvantages Marking schemes for the KS tests have not yet been developed and may prove problematic (SD a discursive concept). Tests will require (paid?) marking by individuals with ESD expertise. Some will regard the tests as too prescriptive (see action research approach).</p>
<p style="text-align: center;">The sustainable schools approach</p> <p style="text-align: center;">Percentage of pupils that are able to relate activities carried out in school to key themes of sustainable development and can recognise the values, skills and knowledge that are relevant to taking considered action on issues relating to such development.</p> <p>An objective test for Yr9 pupils based on the DfES framework and self-assessment tool for sustainable schools</p>	<p>Advantages The test is based on the DfES framework and encourages good practice in schools. The test can be objectively marked (but some themes and routes overlap). There is much scope to change the 8 examples on page 1 and the four examples on page 3 (Appendix 2).</p> <p>Disadvantages: It tests pupils' ability to recognise values, skills and knowledge relevant to becoming active citizens for SD rather than their acquisition of values, skills and knowledge.</p>
<p style="text-align: center;">The citizenship survey approach</p> <p style="text-align: center;">The percentage of pupils who report knowledge, attitudes and activities relevant to active citizenship for a sustainable society in a questionnaire used by the NFER study into citizenship education</p> <p>Makes use of existing and possible additional items in questionnaires that form part of an ongoing NFER study. This focuses on the impact of the introduction of citizenship education into schools.</p>	<p>Advantages: The approach draws on an established study with a ready-made route to relevant data. Provides a model of how ESD might link with citizenship education.</p> <p>Disadvantages: The ten year study runs only until 2009. Extension is uncertain so this approach might yield two years data at best. Not possible to add significant new content as this would unbalance questionnaire and require more than 45 minutes of classroom time. The cautious response to this approach from the ESD community when raised by Jake Reynolds's in 2005 (page 6).</p>

<p style="text-align: center;">The frame of mind approach</p> <p>The percentage of learners who have development sustainability as a frame of mind.</p> <p>The writing of Michael Bonnett and others suggests ESD should focus on eight objectives. These have been used to design a test to measure whether Yr11 pupils have developed sustainability as a frame of mind. Test for other ages / stages could be developed.</p>	<p>Advantages: The approach has a firm philosophical foundation and focuses on a frame of mind or orientation towards nature rather than outcomes determined by policy makers. It encourages teachers to address the psycho-emotional dimensions of learning. It can accommodate the emerging DfES approach to sustainable (caring) schools.</p> <p>Disadvantages: It will be difficult to agree on a marking scheme and find knowledgeable markers sympathetic to the approach. Somewhat distant from existing practice. Some will see the approach as ESD adopting ‘new age’ philosophy or romanticism.</p>
<p style="text-align: center;">The dilemma approach</p> <p>The percentage of learners having the skill to match imaginary characters’ decisions to the knowledge and values that is likely to have prompted such decisions.</p> <p>Dilemmas might focus on decisions taken by young people as consumers, citizens / voters, or workers. A dilemma for Yr11 pupils based on a consumer decision has been developed.</p>	<p>Advantages: Pupils are likely to find the dilemmas interesting and relevant to their own lives. May be possible to integrate the dilemma with classroom teaching and mark it objectively (a software or web based resource may be appropriate).</p> <p>Disadvantages: Selection of relevant knowledge and values is somewhat arbitrary. Answers are not really objective and exercise could be seen to lead pupils to ‘right’ answers</p>
<p style="text-align: center;">The action research approach (or sustainable schools approach 2)</p> <p>The percentage of learners who have successfully taken part in action learning designed to explore ways of creating a more sustainable society.</p> <p>An action research project focussing on an issue in the school (college/university) and/or community (near and/or far) allows learners to develop and refine their own definitions and indicators of sustainable development and determine what knowledge, skills and values are appropriate to realising such development.</p>	<p>Advantages: Builds on established theory and practice and allows for open-ended learning. The approach contributes to community participation and civic renewal. The approach may encourage links with distant communities (global dimension).</p> <p>Disadvantages: The lack of a standard framework and forms of accreditation for such projects. No established monitoring of the extent of such learning within educational institutions</p>

Criteria V	Approach >	Sustainability literacy	Sustainable schools	Citizenship survey	Action Research	Frame of Mind	Dilemma
Validity – the approach measures the extent to which learners have acquired the skills, knowledge and value base to be active citizens in creating a more sustainable society							
Reliability – if repeated at intervals the approach yields measures that can reliably be compared and will show trends over time.							
Simplicity – the approach is understandable and meaningful to learners and the wider community. It encourages their engagement with issues of SD.							
Objectivity – the approach is free of bias. The tests that yield the indicator can be set and marked objectively in ways that eliminate the subjectivity of the writer and marker.							
Cost – the approach can yield an indicator at reasonable cost. The costs of administering and marking the test that yields the indicator are not excessive.							
Equal opportunities – the approach allows all learners to show evidence of relevant skills, knowledge and values, irrespective of race, class, gender or disability.							
Good practice – the approach reflects and encourages good practice as regards sustainable schools and learning and teaching in ESD.							
Government policy – the approach reflects Government policies on education and sustainable development.							
Total score							

First indicate your personal first and second choice approaches by writing 1 and 2 next to them on the top row.

Then use the table to score each of the six approaches. In each box write a number from 0 to 3 according to whether, in your opinion, the approach meets the criteria not at all (0); a little (1); reasonably well (2); very well (3). Then total each row.

Is there a further criterion that you consider an ESD indicator should meet? If so please describe it here:

Name