

ASSESSING LEARNING

How do we deepen and extend assessment for ESD?

Assessment is an integral part of teaching and learning. When participants are involved in assessment it can enable them to identify key concerns as a process of tuning in to learning. A learning progression can also be expanded to develop and track evidence of developing competence. These assessments can include what is being done together, as a process of assessment for connecting with, and then for reviewing what is being achieved. They can also be developed as a process of summative assessment that expands assessment practices beyond conventional attainment tests.

Different assessment strategies are used in different countries and many apply national level tests. For example, India conducts a National Assessment Survey, regularly, for different grades. The new set of learning outcomes laid out subsequently for each grade in each subject discipline is an attempt to standardise the assessment parameters so as to acquire more evidence on the learning levels of students. This data can provide teachers with useful reference points for improving their subject teaching and for relating this to the desired measures of success.

In most national education systems subject assessment of learning is centred on the knowledge and competences acquired but this can also include the dispositions or outlooks being developed and acted upon by students. A Handprint CARE approach to subject teaching works with the concept of 'change projects'.³ Change projects can be assessed for their effectiveness in reducing or resolving matters of concern. As Handprint CARE actions have become more integral to subject teaching, evaluative learning actions are expanding the scope

³ A Change Project is simply a story of a change that someone has made, whether at home, at school, at work, or as part of recreation, to resolve an environmental issue or risk. The goal is to make a change in perspective and take action towards more sustainable practices.

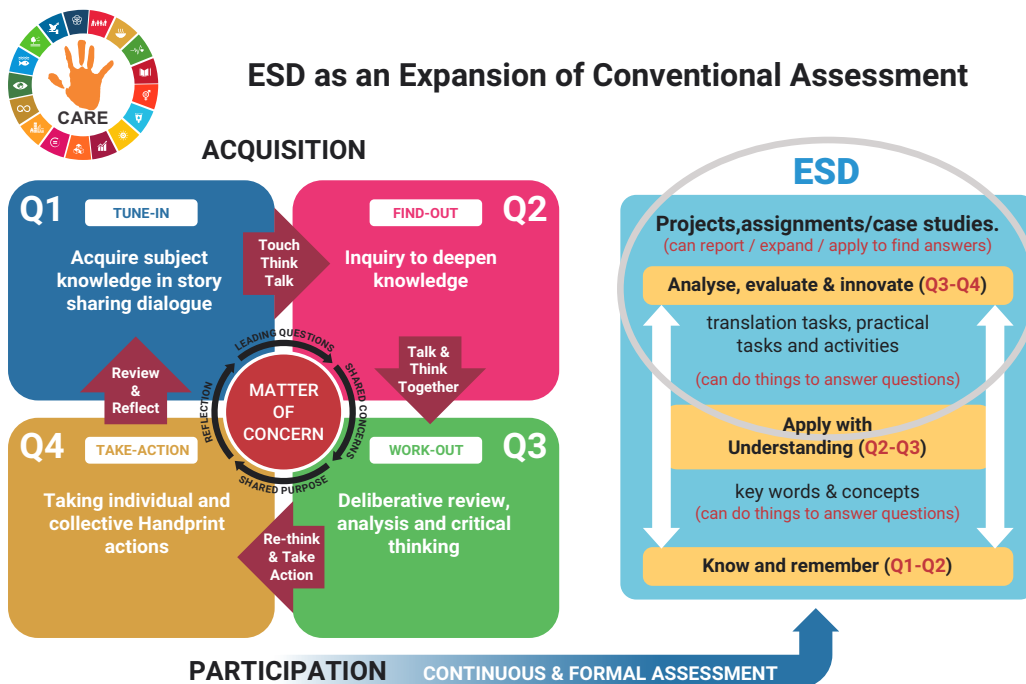


Figure 16: Conventional assessment of application and higher-order thinking skills for ESD

of a subject and activating higher-order thinking skills and action competencies of young students (see Figure 16). Here continuous assessment activities can allow teachers and students to pace learning in a way that can allow participants to engage with subject concepts in practice and to deepen their understanding, rather than simply learning to memorise concepts and facts so as to answer exam questions.

After deliberation on ESD and assessment many of the participating teachers asked:

Is there a place for conventional assessment in ESD?

In a review of a national assessment processes, examiners reported that the patterns of attainment in school subjects reflected how students were finding it difficult to use subject knowledge in real-world situations. Students also struggled to give answers to examination questions that require higher-order thinking skills. In their assessment of their joint lesson-study work on a Fundisa for Change (Learning for Change) programme, teachers noted a big improvement

in students being able to relate subject content to the world around them as well as lesson deliberations that reflected higher-order thinking skills. This improvement was evident when students were engaging in local, small-scale change projects. From this it can be deduced that conventional assessment, using Blooms Taxonomy, had a place in ESD (see Figure 20) and could be expanded into more in-depth assessment of significant learning and applied competence (see Figure 21). This illustrates how an assessment strategy can be based in conventional educational assessment of attainment, as well as being applied for higher-order processes of application, analysis, synthesis and evaluation.

Many participating teachers asked an additional question, namely:

How can we assess significant learning that is particular to ESD?

Shumba, Mandikonza and Lotz-Sisitka (2021) explored how significant learning is often missed by conventional assessment practices. In work with teachers on the UNESCO Sustainability Starts with Teachers (SST) programme, they drew on the work of Dee Fink (2013) to expand conventional assessment. By expanding

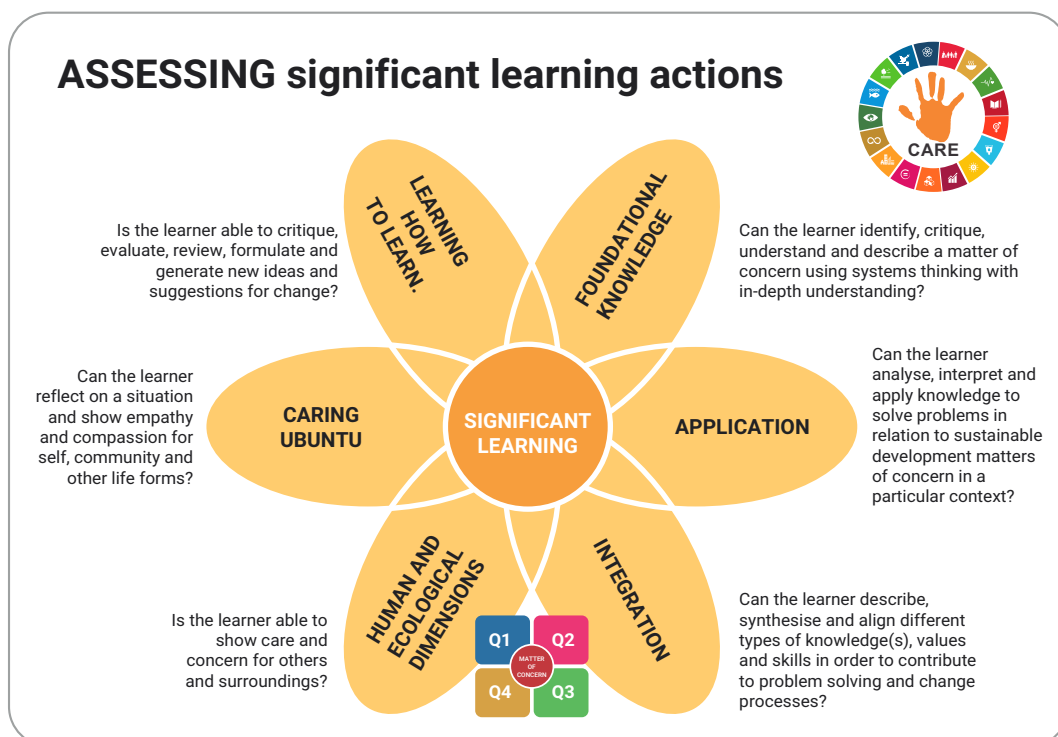


Figure 17: A schema for the assessment of significant learning (Shumba et al. 2020)

conventional assessment they were able to explore and document significant learning on environment and sustainability programmes. This expanded assessment enabled transformative learning to also be included in addition to conventional classroom practice. Figure 17 is a graphic summary of a schema that develops a wider scope for evaluation in ESD. It enabled participants to assess significant learning that was beyond the scope of conventional classroom assessment practices.

The inclusion of ESD as an expansion of conventional assessment commonly starts with an assessment of prior knowledge (formative assessment) to align a learning programme within the capabilities and interests of students. Formative assessment in ESD is usually more collaborative towards an assessment of how things were in the past and how past practices have given rise to matters of concern in the present day (see Chapter 8). This helps participants to give assessments of:

- how things have changed,
- what is going wrong,
- what is not yet known, and
- what we need to find out about and resolve together.

In this way, assessment becomes a key focus area in an ESD approach to the teaching of subject disciplines. ESD requires critical thinking, communication regarding complex real-life situations, participatory learning and action where the traditional forms of assessment (e.g. true/false, multiple choice tests, etc.) might not be adequate or effective in gauging learning related to sustainability.

Assessing both the quality of ESD programmes and the students' attainments (knowledge, competences, attitudes and values) can be challenging. It needs to be undertaken as an inclusive and a continuous process that enables students to interact in a social learning process, and to get and give feedback, as their learning and action competence develops.

Recognise (what is known?)

Identifying how learners recognise issues around them is key to assessing learning. *For example, whether learners are able to recognise the dwindling population of bees in their locality or elsewhere, and reasoning why there has been such a decline.*

Assess value (what is important to us?)

Once learners identify and recognise the issues around them, it is important to understand how they assess values around such issues. *For example, are they able to connect the importance of the dwindling population of bees with that of food production and livelihood of people, or indeed, with their own lives?*

Act (what do we need to do?)

The next step in assessing learning is to see how learners decide to take action regarding the various issues, and what solutions they suggest and get involved in, for those issues. *For example, what ideas do learners come up with to increase the bee population and how seriously do they participate in such activities?*

Assessing learning, as elaborated above, will also cater to core ESD competences such as:

- Anticipatory competence
- Normative competence
- Strategic competence
- Collaboration competence
- Critical thinking competence
- Self-awareness competence
- Integrated problem-solving competence
- Systems thinking competence

(UNESCO SDG Learning Objectives, 2017; see also Chapter 7 on ESD Competences)

Examples of assessing students in the context of ESD competences

1. The puzzle activities suggested in the exemplars on Bees and Pollination, and Migration have been mentioned above. Using the puzzle, the teacher could assess students on aspects such as ability to recognise and understand the interconnectedness among components and to give reasons for such interconnectedness. This will help in assessing systems thinking and collaboration competences.
2. Through start-up story and experience sharing by students, the teacher could assess critical thinking, self-awareness and anticipatory competences. Reflection questions can also be used for assessment, such as: What are the two key questions that come to mind after listening to the story; According to you, in what ways can the problem narrated in the story be solved; What else could have been done by the main character in the story to tackle the situation?

For the Handprint CARE start-up stories and the associated story-sharing provided in this Handbook, it is important to raise questions for the evaluation of the learning in an ESD learning progression, as it leads to the:

- Development of the core of the student-led processes of finding-out,
- Working out of things together, and
- Deciding on what change challenges to take up.

Continuous assessment in this context becomes an inclusive process, while, at the same time, conventional approaches to assess learning in developmental and fair ways, including in test and examination settings, should also be used judiciously. For ethics-led learning, the assessment process could be more reflective and performance-based, and can use feedback from educators and peers, and self-evaluation, to empower students to monitor their own learning processes and identify possible areas for improvement.

Concluding Insights

A Handprint CARE approach can strengthen higher-order skills. Conventional assessment is still relevant and conventional assessment tools can be used to assess the higher-order thinking skills activated through ESD. Assessment can also be expanded, however, to include significant learning that was not included in the conventional assessment. It is important to think of assessment not only as assessment *of* learning, but as assessment *for* learning.

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