

# DEEPENING LESSON DESIGN FOR TRANSFORMATIVE LEARNING

### *How do we design lessons for inclusive learning-led ESD in subject teaching?*

Diverse perspectives on education and learning have emerged in recent decades. These pedagogical perspectives have endured in educational debate and in practice. Amongst the current diversity are, for example, constructivist, experiential, competency-based and capacity-building approaches to the planning of learning. These approaches have been developed and re-contextualised to guide lesson planning for both individual and group learning. ESD has developed as an inclusive and participatory process centred on learning actions and learner agency in education as a transformative process of learning-led change.

In planning ESD lessons, it is important to keep in mind that meeting the needs of all learners (including gender related aspects) is a form of social equity, which is also the crux of sustainability. This includes:

- seeking out and tuning in with the learner,
- acknowledging the learner's knowledge and experience,
- making content relevant,
- using multiple teaching and learning processes, and
- enhancing the learning environment (UNESCO, 2012, chapter 'Teaching Techniques for ESD').

With a special focus on primary education, this chapter shares some lesson planning tools for teachers wishing to expand and strengthen their lesson design practices. In principle, the organisation of primary schools offers many opportunities for ESD, as teaching and learning processes take place in a number of different subjects, so these can be addressed in a holistic way. It is worth noting that the natural sciences and the social sciences are generally taught in an integrated manner in primary schools.

A Handprint CARE approach calls for a pedagogy based on cooperation and

#### 4 Action Learning Steps to Sustainability

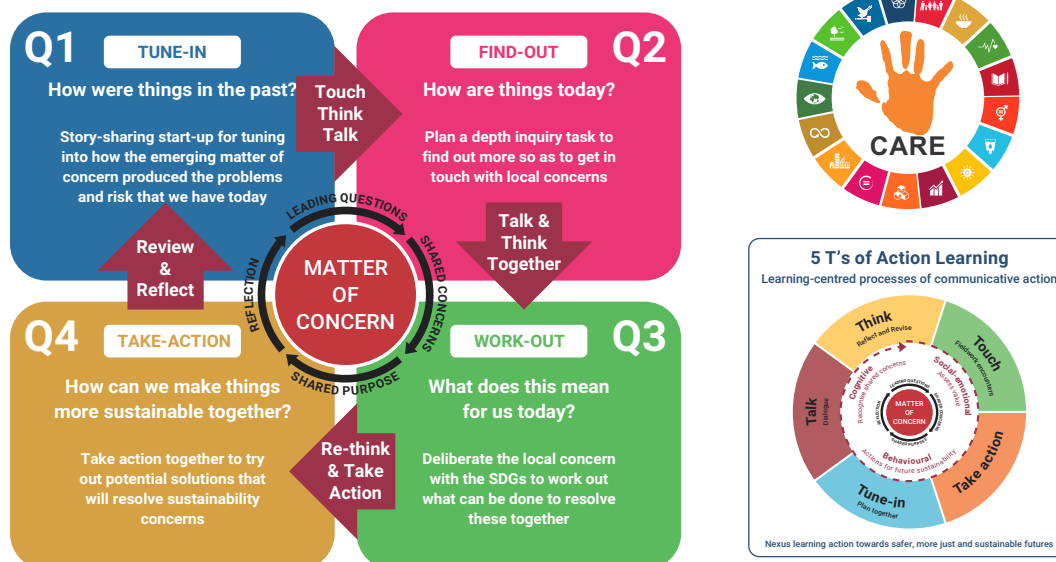


Figure 13: Some tools for planning action learning progressions

solidarity framed by an ethic of care (see Chapter 3). In addition, Handprint CARE illustrates that “pedagogy is relational. Both teachers and students are transformed through the pedagogical encounter as they learn from each other” (UNESCO, 2021, p. 51).

This chapter shares lesson planning tools for teachers wishing to expand and strengthen their lesson design practices. It offers lesson planning tools for a Handprint CARE approach focusing on deliberative **learning** actions (see Chapter 5) and the use of the SDGs (see Chapter 6) for the development of **competences** (see Chapter 7). At the same time the Handbook works with the cultural-historical (Vygotskian) perspective reflected in Edwards' four-quadrant model (see Chapter 4). Figure 13 reflects the combined use of the SDG Wheel and the 5Ts of action learning as tools for informing lesson planning with our students.

A lesson planning process can be informed by leading questions for guiding an open-ended, four-step process of ESD, that can be undertaken with students (see Figure 13). The questions provide useful starting points for mapping the heritage and subject knowledge and they invite students to join an ESD conversation that develops into deliberative learning through question-led, iterative processes that cover:

How were things in the past?

How are things today?

What does that mean for us today?

How can we make things more sustainable together?

## Developing a deeper understanding of transformative learning for lesson planning

The four-quadrant lesson planning template for expanding conventional subject teaching using an Action Learning approach is based on the open-ended Vygotskian task sequencing progression after Anne Edwards (2014). This foregrounds the Vygotskian notion of situated learning as a cultural historical developmental process. It is important to challenge the exclusion of intergenerational heritage in modernity. This can be achieved by foregrounding the situated interplay of plural knowledge resources as deliberative action learning for social justice and future sustainability.

The deepening of understanding in the Handprint CARE approach to ESD was informed by two Critical Realist studies (Chikamori et al., 2019 and Schudel, 2016, see Figure 14). These studies strengthened our understanding of how important it is to give attention to cultural historical evidence of 'how the past has produced the risks we experience in the present'. This starting point can activate learning insights and develop student agency for ESD as ethics-led action learning (see Chapter 3 on Ethics).

Both studies draw on Critical Realism, after Bhaskar, to clarify how ESD needs to include the interplay of PAST (History/culture) and PRESENT (Life experience and concerns) for transitioning to FUTURE sustainability. Figure 14 develops a cultural historical perspective in a schematic framework for planning ESD with the inclusion of history and heritage 'knowing the past' for assessing 'what-is and what-is-not' in relation to the present day.

A dynamic process of 'learning through looking back' provides insights for assessing how the conditions of concern in the present have developed. Cultural / historical insights can inform positive learning actions that enable students to re-imagine 'what could be and what should be'. Here participants can challenge

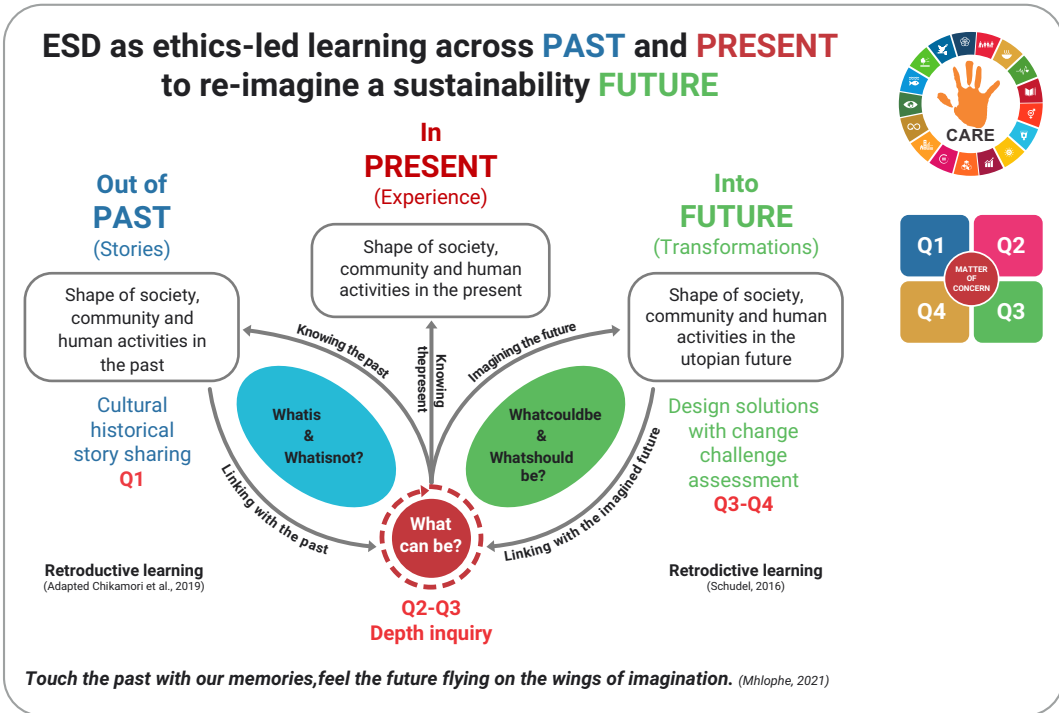


Figure 14: A Critical Realist schema for learning as an open-ended process of transformative meaning-making (Chikamori et al., 2021)

themselves and each other to enact 'what can be' achieved through small-scale, change challenges or Handprint actions for sustainability. Active learning serves to engage young students cognitively and emotionally in order to cultivate knowledge, the ability to 'translate' knowledge into action, and helps develop the disposition to act.

Lesson planning with students using the four-quadrant cultural historical approach offers a structure to organise learning. The open-ended, four-step process (see Chapter 5) of action learning, further enables participatory learning. Also helpful are the 5 Ts – Tune-in, Talk, Touch, Think, Take action (UNESCO, 2018) (see Figure 10). All this leads towards making things more just and sustainable so that everyone and everything can thrive in a more sustainable world.

## A summary of the Handprint CARE four-quadrant lesson planning process

In **Quadrant 1**, the topic(s) of the curriculum are addressed in connection with local knowledge. This is expressed in a start-up story previously created by the teacher to invite story-sharing around a matter of concern. Each teacher will have a preferred way of engaging students' curiosity at this stage of a learning progression. The intention here is one of enabling opportunities to value one another and to learn from each other. As students practice exchanging ideas and views, they:

- a) recognise their own knowledge and that of their community, and
- b) identify a gap in their knowledge that can be filled, that is, identify necessary learning which is based on their previous knowledge/experiences.

Story-sharing is central to this part of the process as it triggers a conversation between the teacher and the whole class. This supports an exploration of how the key concepts presented are connected to daily realities and are relevant to matters of concern in the context of the learners and, indeed, that of the teachers.

**Quadrant 2** is the space in which the students, with the teacher's guidance, inquire into the community about concerns, knowledge and practices of daily life that can be related to the topic(s) addressed in Q1. The inquiry in the family and/or community context, which allows them to explore their own context, can be individual, in pairs, in groups, or a combination of these. It is ideally accompanied by the teacher's instructions and orientations to suit the curriculum needs. The learners also determine their inquiry strategy with the teacher's support: the time available, the necessary resources, the actors with whom they will inquire, the places to visit, the strategies for asking questions, the talking and registering, etc. The inquiry activity can be complemented with books, the internet and other sources.

In **Quadrant 3**, the inquiry findings are shared and discussed. With the support of the teacher, the students can find patterns and trends, as well as compare concerns, knowledge and practices by community actors. Based on this, students can be encouraged to review, analyse and critically think about possible solutions which can be developed in the context of the community so as to address concerns. This offers the space where teachers and students deliberate on the possibilities of transforming their environment and begin to understand the potential of school and community knowledge, and their connections and linkages. In this quadrant, the teacher anticipates that the connection between school and community knowledge is desirable and helpful to address specific situations in which it is necessary to solve some problem of relevance to the community. Furthermore, in Q3, students are given an opportunity to look at problems from an ethical point of view by analysing contemporary issues.

In **Quadrant 4**, the Handprint actions for change are carried out (it can be one or more) in which students and teachers plan, develop and evaluate a specific activity that contributes to solving, totally or partially, a problem that is relevant in the school, family or community context. This quadrant is the space for the teacher to reflect on the learning of the contents, their relevance and pertinence, the development of skills related to critical and systemic thinking, as well as other thinking skills such as analysis and comparison. It is the quadrant where the students and the teacher evaluate the learning that the progression through each of the quadrants triggered through various activities, and their results. Evaluation can also be a collaborative activity with the students.

## Systems thinking

The reflection on the development of skills and competences has to be prepared in planning the lesson; careful consideration should be given to how certain learning outcomes can be achieved. With regard to the development of skills and competences (see Chapter 8) it is important to mention that students can only develop them step by step over time; this cannot be achieved within a few weeks or months. Teachers are invited to support such processes in an ongoing way. In primary education settings, for example, the development of “systems thinking” for dealing with complex situations is helpful. (A forthcoming book on Systems Thinking by Thomas Hoffmann, et al. (2022) will be useful here). In this work we learn to examine a topic/system from different, multiple perspectives and consider them in relation with one another. Rather than simply passing on isolated information, the work entails making connections. Such multiple perspectives can focus on “environment – economy – social – culture/heritage”, “past – present day – future” and / or “local – global”. Recognising that two (or more) parts of a system are related and interconnected in some way is a basic systems thinking skill. Furthermore, relationships can form feedback loops – this is another component of systems thinking (Hofmann-Bergholm, 2018).

This Action Learning Planning using the four-quadrant model presents a structure that some teachers may find rigid. However, understanding and adapting the framework through its implementation is the first step in the process. Later, the teacher can design their own learning progressions or implement frameworks designed by others. Here the ability to be flexible and creative is really helpful.

The proposed Action Learning Planning is connected with the changing roles of students and teachers. Students are increasingly encouraged to learn with the teacher and be more active, engaged participants in the learning processes. The role of a teacher changes from being an expert who transfers structured knowledge to being a facilitator of learning processes, partly shifting power, responsibility and decision-making to the students (Henze et al. 2020, pp. 96-97).

Teaching and planning are framed from the perspective of students, their life contexts (socially and culturally) and learning experiences. The role of the teacher is thus to create learning settings that support dialogue and reflection and encourage the sharing of students' experiences and reflexive thought processes. Students are thus encouraged to strengthen their competences and to engage in Handprint actions for change.

### Concluding Insights

A deepening of lesson planning can be achieved with real-world start-up stories that reveal how the past has produced matters of concern in the present day. This can enable learners to identify what has been neglected or could be done differently to make things better. The combined use of Edwards' four-quadrant model, the 5Ts of action learning and the SDG Wheel can be useful tools for informing lesson planning.

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