

EXPANDING SUBJECT PEDAGOGY FOR ESD

How can ESD be activated in conventional subject teaching?

The Global Education 2030 Agenda emphasises the role of teachers and educators as key actors in promoting change and in facilitating learners' transition to sustainable ways of life. "Building capacities of educators" is one of the five priority action areas. It is clearly stated that educators in all educational settings can employ innovative pedagogies to help learners understand the complex choices that sustainable development requires and to empower them to become change agents." (UNESCO, 2020, p. 30). This positions ESD as a transformative process, on the inside, seeking to enable change. Following this insight, this chapter of the handbook focuses on the micro-level of classroom activities based on participation, empowerment and self-organisation. As stated by Sterling, this work is "agency centred and linked to collective social learning which can transgress the norm" (2016, p. 211).

In our Handprint CARE collaboration, we experienced how teachers can sometimes find themselves trapped between having subject content to teach and wanting to bring in an action learning approach. This is not always possible with the demands of curriculum coverage, conventional subject pedagogy and school assessment strategies. The conflicting concerns present many teachers with methodological dilemmas that are not easily resolved.

Anne Edwards reminded us that "successful teaching can never be a prescriptive and pre-determined delivery of a curriculum" (Edwards, 2014, p. 13). Her work has links to learning as described by Vygotsky: "Pedagogical experience demonstrates that direct instruction in concepts is impossible. It is pedagogically fruitless. The teacher who attempts to use this approach achieves nothing but a mindless learning of words (...), the child learns not the concept but the word, and this word is taken over by the child through memory rather than thought. Such knowledge can turn out to be inadequate in any meaningful application" (Vygotsky, 1978, cited in Daniels, 2002, p. 54). Vygotsky's crucial point is that

“everyday knowledge concepts must be brought into relationship with scientific knowledge concepts in ways in which they both develop” (Lotz-Sisitka, 2013, p. 31). Edwards (2014, p. 20) underlines Vygotsky's view, “that learning involves not simply internalisation, but also externalisation”; it is key to student agency so that students “learn to use powerful concepts and knowledge as they engage with and act on the world” (ibid., p. 16).

A Handprint CARE Approach to Subject Teaching

In our design research with teachers, we worked on how the foundations of quality teaching and assessment could be expanded to include learner-led action learning in conventional subject teaching. Here a school subject would commonly detail the concepts and competences to be taught, acquired or mastered in teaching and learning transactions with their students. These demands informed how conventional teaching practices in modern education commonly develop as 'teach-task-assess' processes for knowledge acquisition and skills development. We also found that many teachers naturally used these narrow instructional conventions to include cultural heritage and life experience for more meaningful learning. These processes develop as a normative foundation for quality teaching and as a starting point for co-engaged learning. When activated by real-world stories, supported by the acquisition of knowledge and skills (competences) for participatory learning, a transformative process of deliberative meaning-making and learner-led re-imagining through change project initiatives, becomes possible.

Keeping these insights in mind, a Handprint CARE approach came to be centred on an action learning expansion of subject teaching (see Figure 9) following Edward's model of task sequencing (2014) according to the need for an inclusive shift to learner-led application of subject concepts. Here agency can be strengthened through deliberative meaning-making. In this context, learning draws on everyday experiences including history and culture. These align with the engagement of learners' learning and develop with the local (or broader) communities. All these outcomes are not only necessary for ESD but are part of a key process where learners transition from memorisation of facts to the conceptual grasp of more complex, and more meaningful ideas. The skills and competences to apply knowledge that is acquired in more participatory and learner-led transactions strengthens a sense of agency towards doing things for the common good in real-world settings.

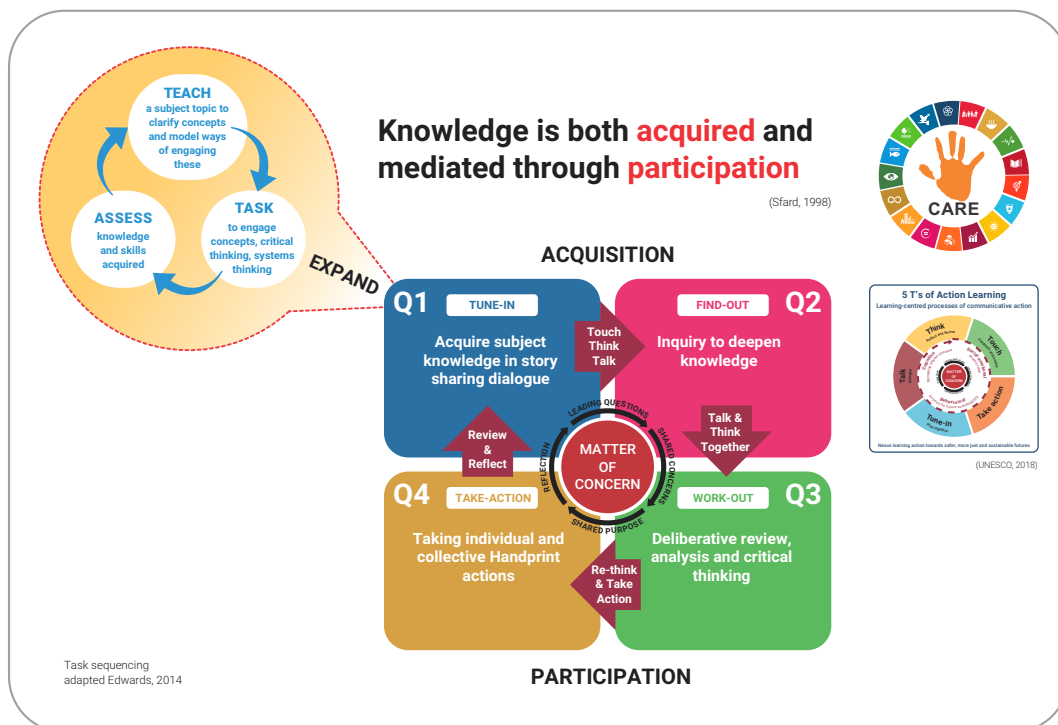


Figure 9: An action learning expansion of conventional task sequencing

The ideas of Edwards are strongly linked to Sfard's (1998) formulation of the central significance of two “metaphors” for the process of learning:

- The Acquisition Metaphor (AM), on the one hand, depicts the process of the “acquisition of knowledge” and the “development of concepts” (p. 6); key terms in the AM are internalisation, appropriation, transmission, grasp.
- The Participation Metaphor (PM), on the other hand, represents learning as an active involvement in an ongoing process of learning with others; key terms in the PM are practice, discourse, community and shared activities. PM “brings the message of togetherness, solidarity, and collaboration” (p. 8) in a reciprocal way in learning transactions where “the whole and the parts affect and inform each other” (p. 6).

The four quadrants model is a way of structuring different elements/phases of the teaching and learning processes, but it is not a blueprint. It is rather a “heuristic that points to the need for us to see learning as the learners' increasing grasp of the subject matter while also developing as learners; and to help teachers identify: the increasing meaning-making and agentic demands in each quadrant, how the roles of teachers change in each quadrant and how formative

assessment can help guide student engagement” (Edwards, 2014, p. 21). There are good reasons to follow the suggested four quadrants schema taking learners from Quadrant 1 to Quadrant 4. However, there are other possibilities teachers might explore such as applying the four quadrants in a different order.

In a school curriculum context, lesson planning often centres on the cognitive approach to learning. Sustainability education initiatives have placed more emphasis on socio-emotional dimensions and change practices. Such co-engaged approaches are supported by ethical drivers for seeing and doing things differently in a changing world. Learners begin to recognise matters of concern, assess value and begin to take action towards future sustainability practices. Such learning pathways constitute a useful mediating progression for deliberative learning environments in ESD (O'Donoghue, Taylor & Venter, 2018, p. 116). To plan for Action Learning, a 'Tuning-in' approach to ESD is proposed. Here one can find five elements (5Ts) that need to work together in transformative learning (see Figure 10). The elements are **Tune-in, Talk, Think, Touch and Take action** (ibid., p. 117). These elements are all part of learning actions but do not have to operate as a linear process. They can be activated at different stages and one can return to them in iterative progressions.

The 5Ts approach to active learning can start with the deliberative identification of an issue that is of concern to a group. This can be informed by both subject knowledge and the socio-cultural relevance of a local concern. An example of a local concern could be access to water or food. The objective is to establish the topics to be addressed so that action-learning transactions guide the students towards acquiring the necessary knowledge and competences. These enable students to connect with what is understood about future sustainability possibilities and what competences they may need to develop to achieve these. A key aspect here is to deliberate a topic of interest around which the learning can be developed.

The 'Tune-in' approach can be centred on story sharing (see Chapter 4) so as to provide a basis for deliberative learning around shared concerns. Here participants can use what they know to make sense of what they see and experience. The collective commitment of the learners allows them to develop actions to solve things collectively, while they share their concerns and deliberate what strategies are most appropriate.

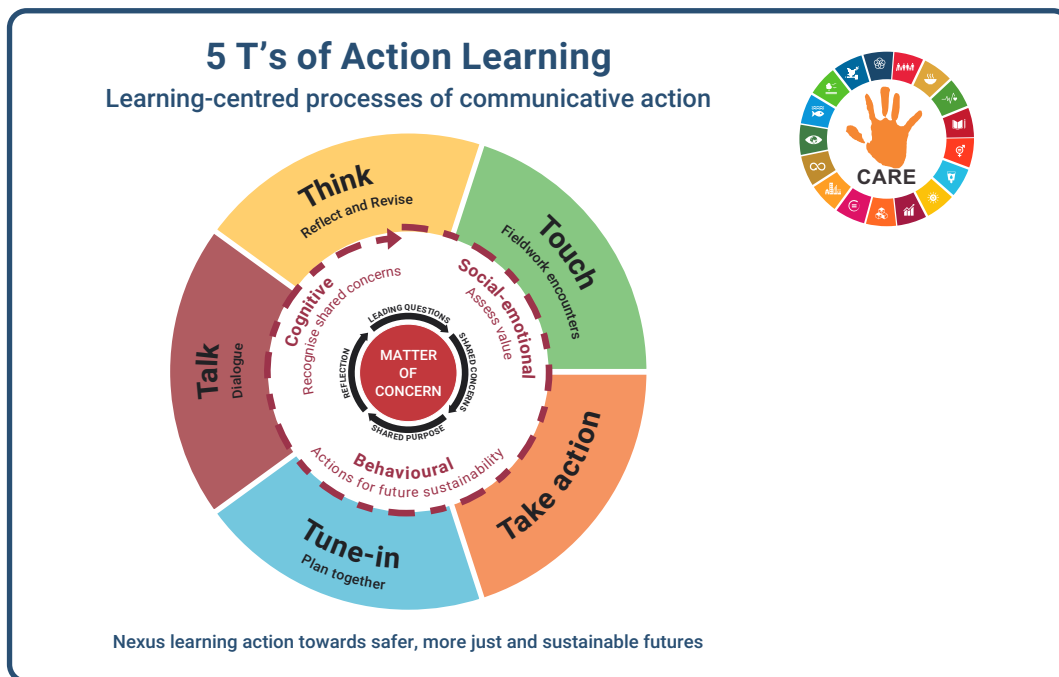


Figure 10: The 5Ts of action learning can be used to support learner-led ESD (O'Donoghue, Taylor & Venter, 2018, p. 116)

Concluding Insights

ESD is not about new and different methods. It is rather about good teaching that can be expanded to include learner-led activities and positive change challenges.

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