# Becoming Agents of Change

## Action Projects for Sustainability Learning

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*Toolkit 13 in the Images and Objects – Active Methodology Toolkit series*

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**Authors:**
Robert J. Didham, Sacha I. de Raaf Kalseth

**Contributers:**
Bente Knippa Vestad

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## Structure of this toolkit

This toolkit is structured into seven main sections.

| | | |
|---|---|---|
| 1. | **INTRODUCTION** | The first part presents an introduction to the toolkit, and it explains the structure, target audience and learning objectives of this material. |
| 2. | **BACKGROUND** | The second part provides a background on the key concepts that frame the issues covered in this toolkit and how these may be addressed through action projects with a special focus on finding sustainable solutions. |
| 3. | **USING THE TOOLKIT** | The third part provides a brief explanation on how to use this toolkit and the activities contained within. It also explains the learning methodology. |
| 4. | **LEARNING STAGES** | The fourth part presents the main action project framework employed in this toolkit and provides specific activities that can be used to support each stage of the action framework. |
| 5. | **SUM-UP AND REFLECTION** | The fifth part presents a simple sum-up and reflection process that can be used with learners at the end of each stage during the action project. |
| 6. | **REFERENCES** | The sixth part provides a list of references used within this toolkit. |
| 7. | **ANNEX** | The seventh part provides additional materials to support the activities presented. |

## Age and Grade relevance

This toolkit has been designed with the aim to be used by teachers in primary and secondary schools. The action project framework presented in this toolkit is a flexible model that can be adapted to a wide age range based on both the complexity of the topics addressed and the depth of active engagement expected at each stage. The examples of activities provided in this toolkit can be readily applied with learners from the age of 8 and up. Facilitators working in both formal education (at different levels, such as higher education) and in non-formal education will be able to adapt these activities and content for use with their learners.

The methodology used in this toolkit will challenge learners to become active investigators and agents of change in their own local communities and to take action to achieve steps towards a more sustainable future. Through the action project framework, learners will identify and research issues that they find interesting and important to their own lives, they will apply their own knowledge and skills to identify practical solutions, and they will work together to implement this solution. This process can produce transformative and expansive learning experiences that allow learners to draw strong connections between the personal, local and global dimensions of sustainable development.

## Learning Objectives

This toolkit elaborates a multi-staged learning cycle for implementing action projects with learners which incorporates an inquiry-based learning model with a cooperative-learning approach and targets real-world application of learning to achieve critical praxis. The activities in this toolkit develop sustainability competences in critical reflection, communication, systems thinking, collaboration, integrated problem solving, and futures thinking. The action project framework provides a structured approach to a learning process which is expansive and facilitates in-depth and applied learning. The following learning objectives are specifically targeted:

- ✔ ***Making personal connections with themes of sustainable development:*** Learning is more effectively embedded when learners make personal connections with the topics being studied. While sustainability is a complex topic that many learners only have an abstract understanding of, the initial steps in this framework aim to strengthen learners' personal connections with the themes of sustainable development and identify their relevance within the context of their local communities and daily lives.

- ✔ ***Investigate the complex nature of sustainability issues:*** Through the investigation of local sustainability challenges, learners gain a deeper understanding of multi-modal explanations and understand sustainability challenges from a holistic perspective. This phase also strengthens learners' competences for systems thinking, collaborative knowledge generation and personal involvement and participation.

- ✔ ***Taking action and empowerment:*** This phase encourages transformative learning through student-led initiatives to address local sustainability challenges. This phase strengthens learners' strategic thinking skills, systems thinking and normative competence, while also empowering them and building confidence as change makers in their own communities.

- ✔ ***Shared reflection:*** The activities that support the final phase of this toolkit are designed to encourage reflection. Learners will reflect on their own learning, and how this has changed their understandings. This phase strengthens learners' ability to self-reflect and adaptively apply learning to new contexts and situations.

# What does Education for Sustainable Development aim to achieve?

The Sustainable Development Goals (SDGs) are global goals that were agreed to by the 193 countries of the United Nations General Assembly in September 2015. The SDGs were outlined in the *2030 Agenda for Sustainable Development* with 17 interconnected goals that build on the achievements of the Millennium Development Goals, but also give more attention to climate change, peace and justice, innovation, sustainable consumption, and economic inequality.

The SDGs are international, to respect different national contexts and conditions to reach the goals. This means that in some countries democracy and equality need to be developed first, while in other countries countering environmental degradation is more prominent. Both issues can be addressed through Education for Sustainable Development (ESD), however it is important that teachers understand why we are teaching ESD.

The inclusion of Target 4.7 as part of SDG 4 (Quality Education) has shown that there is a global consensus that quality education must be holistic – preparing students for life and society as well as work. However, findings of the Global Survey on the readiness of teachers to teach ESD and Global Citizenship Education (GCED) (UNESCO & Education International, 2021) show that about 25% of teachers in primary and secondary schools worldwide do not feel prepared to teach about sustainable consumption and production and climate change. Findings also showed that teachers understand the importance of the cognitive, behavioral and socio-emotional learning dimensions within the four themes of ESD they were asked about (i.e., climate change, sustainable consumption and production, human rights including gender equality, and cultural diversity and tolerance). However, due to a lack of familiarity with *real-world pedagogies*, teachers feel more confident teaching cognitive skills, and less confident and knowledgeable about the benefits of pedagogies that enhance sustainability competences and foster behavioral learning and socio-emotional perspectives.

The fact that teachers feel more confident teaching cognitive skills is closely related to how they themselves were trained as teachers, as well as the value society has placed on content that can be measured through tests, such as the Programme for International Student Assessment (PISA). Little or no attention has been given on how well education prepares learners to apply that knowledge to daily living. Relating education to the context and challenges of everyday living, rather than merely relying on content can help young people understand on a deeper level what they are learning and why (Hofman, 2015).

Education therefore needs to be reformed if it is to counter the effects of a knowledge- and information-centric society towards an education that empowers human and moral responsibility and addresses issues of inequality and well-being. ESD is considered a key mechanism for the achievement of the SDGs due to its potential to build capacities, increase knowledge, and provide new perspectives of understanding about the world around us. ESD supports the transition from transmissive forms of learning to transformative learning by employing different pedagogies that encourage emotional involvement, critical reflection, and the ability to take actions, individually and collectively. Researchers have reported the importance of employing *real-world pedagogies*, such as transdisciplinary learning, project-based learning, collaborative learning, and inquiry-based learning, as these pedagogies improve depth learning, competence development and the potential to transform attitudes and behaviours towards a more sustainable future.

# Taking Action that builds Sustainability Competences

There have been several valuable studies conducted towards identifying and understanding the types of competences education for sustainable development is working with and promoting. These competences provide a foundation for life-long learning. They also target key capacities in a transformative learning perspective and enable learners with skills for active, experiential learning. This is achieved by strengthening a focus on the processes that take place during learning, and complimenting this with the more common focus on knowledge-based learning. When learners are a part of this process as early as possible, they gain a deeper understanding of what they are learning and how to apply this knowledge in their everyday lives (Olsson, Gericke and Boeve-de Pauw, 2022).

By gaining a deeper understanding on the benefits of real-world pedagogies, teachers are better able to engage learners' hearts, heads and hands through a diversity of learning activities. For young people, it is important to be able to reflect in a critical manner and understand that they have several choices, with each choice having a different outcome. This provides an invaluable competency to be able to act in more sustainable ways and make choices that take care of the needs of future generations.

**"Our experience is that engagement and commitment are created when the experience of individual powerlessness is replaced by empowerment and achievement."**

Framtiden i våre hender og Folkehøgskolene, 2015

In this toolkit, we take a closer look at the learning theories that promote *real-world pedagogies* and foster *action competences* for collaborative and individual action. To foster action competences in learners, the pedagogies need to take a holistic approach, meaning interdisciplinary and/or transdisciplinary (Sinakou, et. al. 2019). Others have also indicated that action training is critical when building action competence (Jensen 2002; Kollmuss and Agyeman 2002; Short 2009 in Olsson, Gericke & Boeve-de Pauw, 2022). Since sustainability issues are considered "wicked" problems which cannot be solved from one perspective or with one solution, it is vital that learners are both taught in an interdisciplinary way and gain practical experiences in developing the competences that are needed to solve the "wicked" problems of the world, today and in the future. These practical experiences should be both sensitive to the culture learners are a part of and be relevant to their daily lives.

## Learning Theories that promote Action Competence

The transformative power of ESD is unlocked through the use of pedagogies that aim to actively engage learners in their learning processes behaviors and provide opportunities for learners to reflect on and change their attitudes, dispositions and behaviours towards a sustainable society. The following section introduces three learning theories and approaches that encourage learners to actively investigate real-world problems and promote the use of action competence, as an important basis for young learners to gain if they are to create transformative change in society. UNESCO (2017) found that for young people to develop action competence, it is important to integrate cognitive, socio-emotional and affective (i.e., behavioral) domains into ESD teaching. By relating these learning domains to all three dimensions of sustainable development (i.e., young learners will be able to identify and understand the complex relationships between humans and the surrounding world).

The concept of *sustainability consciousness* has been used to measure ESD effectiveness in Swedish schools (Berglund, Gericke & Chang Rundgren, 2014). *Sustainability consciousness* is described as an integration of

cognitive and affective components that take a holistic approach to the three dimensions of Sustainable Development (SD), i.e., economic, environmental, and social. The cognitive component refers to knowledge or information about the social, economic, and environmental dimensions of SD and their interrelationships. The affective component refers to the emotional aspects of SD, meaning deeper levels of awareness and concern for sustainability issues which is seen through proactive sustainable behaviour and attitudes. For young learners to develop a transdisciplinary world view, they need to have a broad understanding of sustainable development and the interrelationship between the socio-cultural, environmental and economic perspectives.

The learning theories and approaches described in this section of the toolkit foster *sustainability consciousness* and promote action competence, thus creating a foundation for transformative learning.

## Expansive Learning and Activity Theory

In the 1920s, Lev Vygotsky initiated the development of cultural-historical activity theory by introducing the idea of the cultural mediation of actions. This theoretical framework uniquely added society and culture as an additional unit of analysis in considering the relationship between human activity and an individual's thinking and feelings. Vygotsky believed that learning happens when existing complex cognitive structures are internalized by a child through activities shared with adults and which are situated in the cultural context of the child. Aleksei Leont'ev expanded on this by adding the concept of a collective activity system, which moved this theory beyond a focus on the individual as sole unit of analysis and helped to explain how social groups through collective actions have a mediating role on activities.

Yrjö Engeström, since 1978, has built on cultural-historical activity theory by introducing *Expansive Learning and Activity Theory*. This work proposes that learning new forms of activity is a process in constant creation, not based on fixed, existing knowledge and skill. Expansive learning is focused on collective transformation in the collective system, recognising that this is initiated by individuals. Engeström explained that this can happen when individuals start to question the established norms in an activity system, and this can escalate into collaborative and deliberate collective change (see an example of this in box 1). Expansive learning also focuses on horizontal development as complementary to vertical development. Vertical development explains that human learning is aimed at developing higher levels of competence. Horizontal development comes about when knowledge concepts are challenged by the lived experience of these concepts, thus bringing about a change in the individual.

**Box 1 - Example from Norway in collective transformation in the use of palm oil**

In 2012, the Consumer Inspectors (a national television show) from the national consumer organisation of Norway brought to the attention a campaign initiated by the Rainforest Foundation and Green Everyday on the use of palm oil in food products. At the time, palm oil was found in 62% of all food products in Norway. Once consumers learned that rainforests were being slashed and burned to make space for palm oil plantations, with all its rainforest inhabitants threatened (native people, animals, insects, and plants), they created a movement.

Norwegian consumers boycotted all products that contained palm oil. This movement led to grocery chains following the consumers demands and policies changing.
(from: www.regnskogfondet.no)

In this toolkit, we aim to connect our general focus on active learning to the application of expansive learning theory. This is in effort towards actively engaging students as influencers and change agents within the context of collective activity systems and where the target is on addressing sustainable lifestyles practices within the context of social norms and patterns rather than solely concentrating on individual behaviour. "In expansive learning, learners learn something that is not yet there. In other words, the learners construct a new object and concept for their collective activity, and implement this new object and concept in practice" (Engeström, 2014).

Engeström (1999) detailed an expansive learning cycle that has been reflected in the action project framework. The first action in the cycle is questioning or challenging aspects of existing knowledge, understanding or practice. This is followed by the second action of analyzing these aspects to find out how and why they apply in practice and what is the systemic explanation of the situation. This action involves a transformative step in collective understanding, discourse or practice in relation to the situation. The third action involves the modelling of the new explanatory relationship that was identified in a way that can be publicly transmitted. "This means constructing an explicit, simplified model of the new idea that explains and offers a solution to the problematic situation" (Engeström, 1999). In the fourth action, the model is tested, examined and experimented with, to understand its dynamics, capabilities and limitations. This is followed by the fifth action which is the actual implementation, application or extension of this new model. The sixth action involves reflection on and evaluation of the process, and the seventh action involves consolidating the outcomes of this process and integrating into a stable form of practice.

Utilising the action project framework as a facilitated approach to achieve an expansive learning process helps to initiate learners' *zone of proximal development*, as defined by Vgotsky, and is often stimulated by the need to address contradictions that arise during interaction with the collective activity system. In addition, Engeström and Sannino (2017) also explain the importance of expansive learning as a boundary crossing process in which collective concept formation takes place due to engaging with unfamiliar situations or domains that require new conceptual resources to adequately address or encounter them. This process in turn strengthens network building and the potential for further engagement and collaboration among the group to address further development and undergo subsequent expansive learning cycles.

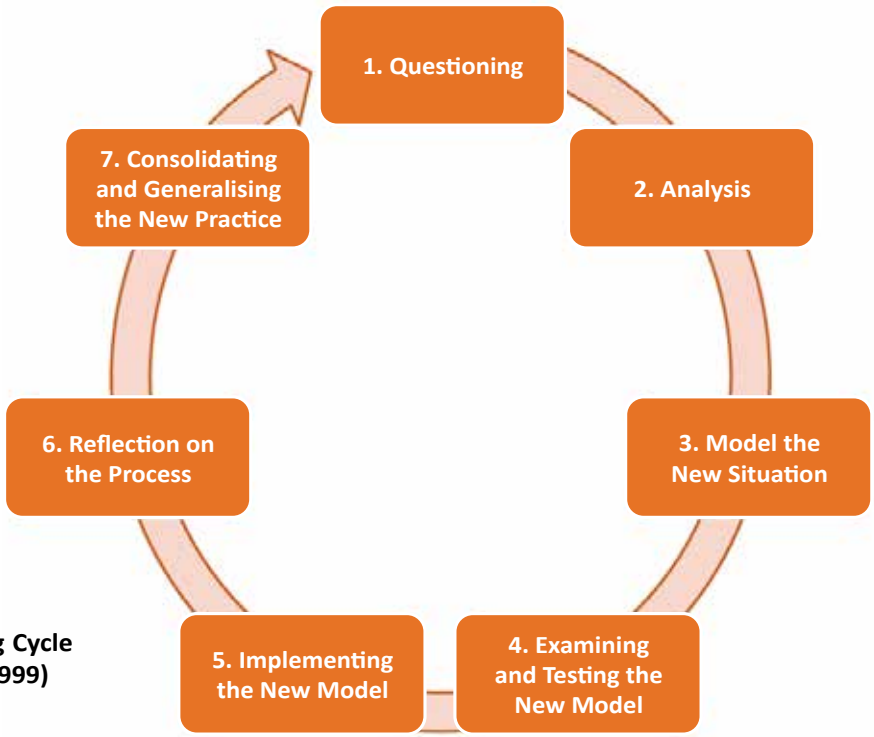



**Figure 1. Expansive Learning Cycle (adapted from Engeström, 1999)**

# Inquiry-based Learning and Action Research Projects

Inquiry-based learning (IBL) is an interdisciplinary method frequently used in ESD. It brings real-life experiences to learners through active participation from the learners in forming and posing questions to investigate the concept or topic in more depth or find a solution. By engaging students in making real-world connections through exploration and high-level questioning, learners develop their problem-solving skills, critical thinking skills and communication skills (Kalsoom and Khanam, 2017).

As a teacher, your role in IBL shifts away from knowledge transmission and towards facilitation of student-led investigations, helping learners define questions for investigations, identify methods for data collection, and analyse and synthesise their findings. Inquiry-based learning in schools is often used in small-scale investigations and projects but can also be used as a springboard to a more scientific action research project. IBL is considered a student-active and transformative pedagogy which can support the development of action competence through action research. Thus, action research is a way of inquiry-based learning as it satisfies scientific requirements and promotes democratic social change (Greenwood and Levin, 2007 in Kalsoom and Khanam, 2017).

Participatory action research is defined by the wish to change something by improving or further developing it, with the help of research, based on one's own experiences. It is a *strategy for change* where the researcher collaborates with the research subjects as co-researchers, and where the researcher takes an active role in creating a change. In this way, participatory action research is different from other research methodology in that the researcher aims to have a direct and immediate effect on the objects or subjects of the research. This contrasts other forms of research where the researcher is positioned as an outside observer that does not actively interact with or influence the research subjects. Similar to other research is that action research requires systematic and valid documenting in order for results to become available for critical reflection and general discussions (Steen-Olsen and Postholm, 2009). The goal with action research is to generate new knowledge and find solutions on practical problems in real-world situations.

Action research projects are a holistic learning approach that aims to engage learners in an experiential learning cycle (Kolb, 1984) and orients them towards becoming change agents in their local communities. The action research approach incorporates many aspects similar to inquiry-based learning and participatory action research; learners usually work through research cycles, i.e., investigate – ask questions – collect information – draw conclusions – present findings. In an action research project, learners select an issue, problem or challenge in their local community that they find particularly important. They conduct investigation to better understand the issue, and they then formulate, plan and implement a change action that can help tackle it. Action research projects have been carried out from kindergarten to higher education and has therefore proven the ability to contribute to transformation by providing knowledge that leads to proactive sustainable behaviours by enabling learners to draw strong connections between the personal, local and global dimensions of sustainable development (Tiller, 1999; 2004).

# Learning for Action and coping with unprecedented change

We are living in an age of unprecedented change. Humanity has achieved many great advances in recent history, but it also faces "grand challenges" of a scale and complexity never experienced before. These grand challenges are described as complex and interlinked socio-scientific issues (SSIs) that present urgent global problems which relate directly to the pursuit of sustainable development (Fensham, 2012). Two major international scientific reviews and their corresponding summaries for policymakers, the Intergovernmental Panel on Climate Change (IPCC) *Special Report on Global Warming of 1.5 °C* (SR15) (2018) and the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES) *Global Assessment Report on Biodiversity and Ecosystem Services* (2019a), draw critical attention to the urgency of these socio-ecological crises. Both reports note that there is still opportunity to halt the most severe impacts of these crises, but to do so will require dramatic and rapid transformations to human society – with both reports indicating the need for these fundamental changes to be fully achieved by the year 2050 at the latest (IPCC, 2018; IPBES, 2019a).

IPBES Chair, Sir Robert Watson explains the scale of change required, "Through 'transformative change', nature can still be conserved, restored and used sustainably – this is also key to meeting most other global goals. By transformative change, we mean a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values" (IPBES, 2019b). While the magnitude of crises faced in relation to climate change, biodiversity loss and ecosystem degradation can easily place these grand challenges at the centre of attention, these socio-ecological crises may be better viewed as the symptoms of a deeper, more underlying and far-reaching illness of humanity, i.e. the continued acceleration of unsustainable patterns of development across all facets of society.

The next decades will be marked by change – fundamental and irreversible change – that will be driven both by external and internal forces. Human society will work to find a path towards sustainable development, while at the same time responding to a changing climate, extreme weather events, and increasing pressure on natural resources and ecosystems. How can we best prepare for change, and what role will education play in this?

In order to reach the ambition of the sustainable development agenda, we need to develop new perspectives and search for solutions that balance social, economic and environmental dimensions and strengthen system interlinkages. This, in part, relies on the importance of education for sustainable development (ESD) and its ability to link learning to the contexts and challenges of everyday living. With education for sustainable development, we can empower people with knowledge and competences which will help them become active agents of change in their own lives and in their wider society. "ESD pedagogies do more than facilitate learning of knowledge—they promote learning of skills, perspectives and values that sustainable societies require" (Laurie et al., 2016: 6). However, the pursuit of sustainable development necessitates educational approaches that can inspire and unlock the potential for transformative, social learning as we collectively endeavor to write a new narrative for our development and find ways to embody the principles of sustainable development within our common language.

Young learners are already aware of and experiencing these grand socio-ecological challenges, and many are suffering eco-anxiety over the severity of these challenges, the lack of viable solutions being implemented, and a sense of inability to effect this situation. The tension between those who want to continue "business as usual" (traditionalists) and those who want to find solutions to complex issues related to sustainable development (innovators) seems to be building. And when solutions are offered, they, more often than not, compete with other solutions (Brown & Lambert, 2012; Adefila, et. al., 2021).

So how can we steer social learning in a direction where traditionalists and innovators are on the same page and are moving towards the same goals? And how can we collectively work together to find solutions that consider the needs of all groups represented in society? If we can collaboratively learn together to work towards the same goals, we might be able to bring about the transformational change we need – from less sustainable practices to practices that support the health of our planet and the well-being of all its citizens globally.

Research is showing that knowledge about the societal challenges we face alone is not enough to mobilize citizens to take action. In fact, too much information about these challenges can actually lead to inaction by making people feel overwhelmed and powerless (Spence & Pidgeon, 2020 in Adefila, et al., 2021). We need to connect the knowledge about the societal challenges we face to our hearts and our hands. We need to take action individually and collectively, in connection to this information, if we want to embody transformative learning in practice (Adefila, et. al. 2021).

**„We want to understand in order to make a change – and make a change in order to understand."**

Fremtiden i våre hender og Folkehøgskolene, 2015

*Source: colourbox.com*

Education for sustainable development can support the transition that societies need to make in multiple ways to foster inclusion, engagement and mobilization. For learners to participate in collective and participatory processes, they need to develop and strengthen their action and collaboration competences. *Learning for action* is a learning process where colleagues in an organisation or a class of learners observe, critically and systematically reflect over their experiences, and test out new measures. Learning for action is therefore a form of continuous self-development, as well as a learning and reflection process that is supported by colleagues or fellow learners, where the goal is to create a change (Fremtiden i våre hender og Folkehøgskolene, 2015; Steen-Olsen & Postholm, 2009).

Learning for action is something everyone can do, from early childhood education to large multinational companies. The starting point is always that you want a change and start a process of wondering and dialogue together with your community (e.g., school community, kindergarten community, etc.), which leads to the testing and trying out of different measures. Once you have tested and tried different measures, one can learn from these experiences, which again leads to new knowledge and new experiences. What do these new experiences do to the established praxis? Will it lead to a real change? These are the questions addressed during an action project.

# How to use this toolkit?

This toolkit presents an action project framework divided into 5 learning stages which aim to engage learners in a multi-dimensional learning process that includes investigation, critical examination and problem-solving, active testing and implementation, and monitoring, evaluation and self-reflection. By placing an emphasis on the learning process and on student-led investigations, learners are encouraged to take greater self-ownership over information gathering, knowledge interpretation, and evidence-based conclusions. Learners are also stimulated to discover how things work, how whole systems function, and how influences and levers can be manipulated in these systems. By working for change, learners must actively apply their knowledge and skills towards addressing complex, real-world challenges. This form of experiential learning compels learners to experiment with and critically reflect on their own learning and knowledge, and it enables learners to draw strong connections between personal, local and global dimensions of sustainable development.

- **Personal:** While teaching on the SDGs often begins from an international perspective, the experience of learners is strongest when issues are linked to their daily lives and personal experiences. The ability to reflect on one's own actions and recognise the impacts that these actions may have on wider society is an important first step in learning for sustainable lifestyles.

- **Local:** Moving beyond the personal level, education for sustainable lifestyles promotes transformative learning to empower individuals to become agents of change. Practical and real-world learning experiences can provide opportunities to address challenges and find solutions for more sustainable living in local contexts where learners have the deepest connections to community and society.

- **Global:** Growing from personal connection and local action, learners may begin to cultivate a global understanding and recognise that the achievement of the SDGs in one locality or one country depends on a multitude of global interconnections. Whole systems perspectives may be cultivated that not only explore the environmental dimensions of the SDGs, but that also identify how the social, political and economic dimensions are linked to the achievement of global sustainability as well as the fulfilment of basic human rights and well-being for all.

The toolkit provides an introduction to the main stages of the action project framework and details specific activities that can be used to facilitate each stage. Each activity is presented with its own set of instructions and required materials. The activities are designed in a flexible manner to provide facilitators the freedom to spend less or more time on individual activities to meet the needs and interests of the learners and the lesson.

Action projects can be elaborate, multi-staged affairs and require significant time spent outside the classroom. Condensed versions of action projects are possible though where most of the investigative process is carried out in-class through desk-based research and analysis over only a few lessons, and the change action is planned and implemented over a one-week period. These condensed action projects can be an effective approach when the class is divided into small groups (i.e., 3-5 learners) with each group identifying their own challenge and planning their own action, and where each group presents their action in class with a short presentation or video. Larger action research projects that include extended periods for each project stage are better conducted with an entire class (or even the whole grade or school) working on the same project.

As a facilitator, you may choose to adapt and use the suggested activities with different themes. Facilitators are encouraged to use this toolkit in most subject areas and relate to local contexts, making the toolkit both interdisciplinary and transdisciplinary. Where possible, teachers and learners may add additional resources, materials, or images that provide greater connection and relevance to local contexts, challenges, and lifestyles.

# Action Project Framework

The action project framework challenges learners to become agents of change in their own communities and to initiate first steps towards the wider social transformation called for in the *2030 Agenda for Sustainable Development*. By identifying actions that they can take to address sustainability issues in their own communities, learners will be able to draw strong connections between the personal, local and global dimensions of sustainable development.

Working collaboratively in groups, learners will identify a challenge (for achieving sustainable development) in their local communities. They will investigate the issue, and then they will plan and implement an action that will help to address or overcome this challenge.

**Time variations:** As it is possible to flexibly adapt the action project framework to various lengths of time, three different examples are provided to highlight these different possibilities. See Annex 1A for an intensive action project model over a 1-2 week period where the focus is on a school-based action. See Annex 1B for a time effective approach for a locally-based action over a 4 week period. See Annex 1C for an extended approach highlighting a semester-long action project model.

**Figure 2. Action Project Framework**

| Learning stages | Goal of the learning stage |
|---|---|
| **1. Engage and Explore** | Introduce and Engage with the topic |
| | Identify, Explore and Prioritise |
| **2. Investigate and Understand *Complexity*** | Investigate |
| **3. Planning for *Change*** | Plan |
| **4. Taking Action *as change agents*** | Implement |
| **5. Reflect and Share** | Reflect and Renew |
| | Communicate and Share |

## Learning Outcomes per Stage

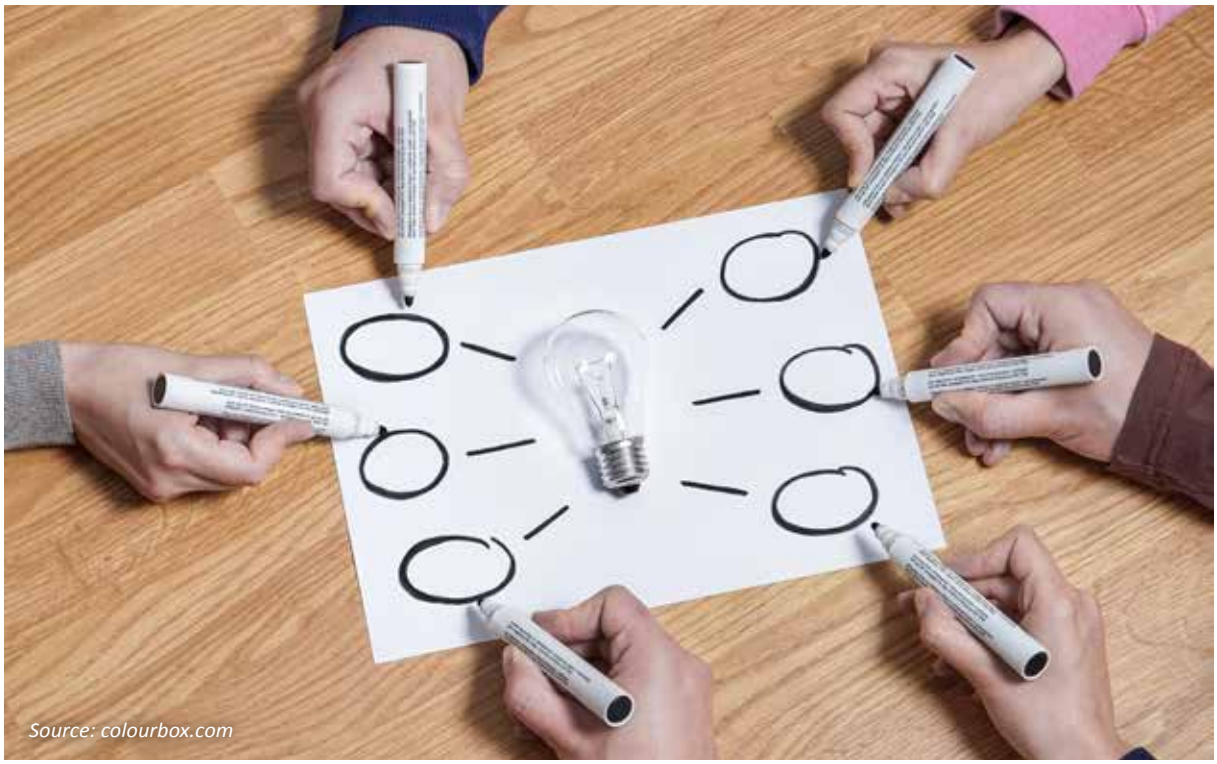
1. **Engage and Explore:** During the initial stage, learners are stimulated to develop an interest and curiosity in the subject of sustainable development. In addition, learners are encouraged to explore the linkages that exist between their own lifestyle choices and sustainable development in order to develop personal connections with the subject. This is strengthened by exploring sustainability-related issues and challenges in their local community and prioritizing one that they would like to work with further.

2. **Investigate and Understand *Complexity*:** The second stage promotes active investigation, critical reflection and collaborative dialogue to construct multi-modal explanations and better understand the complex nature of sustainability issues within their local context. This phase also promotes learners to strengthen competences for systems thinking and collaborative knowledge generation by sharing information about different aspects of the selected issue and from this developing a holistic understanding of the situation.

3. **Planning for *Change*:** The third stage focuses on integrated problem solving and encourages transformative learning by supporting learners' through a process to think strategically and plan a *change action* that will help address a local sustainability challenge. Futures thinking is also developed in this stage through work to envision a more sustainable future and identify the types of changes they would like to achieve.

4. **Taking Action as change agents:** This stage emphasises the objective of empowering learners to actively engage in their local communities and to become agents of change. Learners also develop skills for time management, sharing responsibilities, and project implementation which need to be applied in a flexible and adaptive manner.

5. **Reflect and Share:** During the final stage of the action framework, learners will assess their own learning, identify new knowledge, and reflect on changes in perceptions and understandings. The learners will also prepare materials and information to share their work and findings with others, and to advocate for wider change in society.



*Source: colourbox.com*

# Learning Stage 1 – Engage and Explore

There are two main steps in this first learning stage. The aim of step one – *Introduce and Engage with the topic* – is for learners to become familiar and engaged with the topic of sustainable development by considering their own understanding and relationship with various sustainability themes. The Sustainable Development Goals provide a holistic framework for examining the complex and interconnected nature of these themes, and learners can be encouraged to reflect on their own personal connections with the individual SDGs and the main dimensions of sustainable development.

Information about sustainable development and the SDGs should be made available. This can be provided in various formats: lecture, discussion, self-research, videos, and/or a combination of various formats. The learners use active learning methods to engage more personally with the topic of sustainable development.

In step two – *Identify, Explore and Prioritise* – learners begin to explore the themes of sustainable development in the context of their own local communities. During this step, learners will identify specific local issues or challenges that they believe hinder the achievement of a more sustainable future. These issues can cover a wide range of topics, reflecting the economic, environmental and social dimensions of sustainable development or the 17 different SDGs. As a group, learners will share and discuss the various challenges they have identified. Following this, they will need to prioritise these challenges and select one with which they would like to work further.

As the teacher(s) using the action project framework, it is possible to facilitate the selection of the challenge or topic in a way that connects more directly to curriculum content or learning objectives and to either limit or expand the scope of the action project. If you would like to use this within only one subject or to keep the overall time for the action project shorter, you may instruct the learners to focus on only one SDG or goals only within the environmental dimension for example. This will decrease the complexity within the investigation stage, and it may also limit the scope of the action that is implemented. If you would like to have a wide-reaching and transdisciplinary action project that covers an extended period of time, you may instruct the learners that they have to identify cross-cutting challenges that include economic, environmental and social dimensions or which can be linked to multiple SDGs. Most importantly though, the learners need to be provided clear information at the start of the action project modules on how long they will work with this and how much time is expected to be spent on each stage of the action project framework.

## *Duration*

For each learning stage we will present you with a time-effective approach and an extended approach. This way, you as a teacher can adjust the activities according to your time-schedule and the overall learning goals of your school. Specific activities to support each stage are also provided, but it is possible for teachers to adapt or use other activities that they are familiar with or to incorporate these activities within existing lesson plans.

- ✔ **Time-effective approach:** The two steps in this stage may be condensed to one lesson each, with an option of also including a take-home assignment.

- ✔ **Extended approach:** If a sustainability action project is being used as an interdisciplinary teaching model, then as a team you might plan a full week of lessons to engage learners with the themes of sustainable development and highlight how different subjects contribute different perspectives towards investigating and understanding these issues. The second step remains straight forward, but additional time can be spent on presenting and discussing the different challenges identified by learners and also consider how they may be linked together.

STEP 1: Introduce and Engage with the topic

# Images & Objects (main activity)

## *Suggested activity 1*

For this stage, we suggest the activity "Images & Objects" as a simple introduction activity using images and objects to broaden viewpoints and perspectives through reflection. Images are a way to bring real-world examples into the classroom in an easily accessible manner. The image or object will stimulate thinking about sustainable development and one or more of its social, economic, and environmental dimensions. Through the activity, learners will also practice their skills in democratic processes and decision-making.

## *Materials needed*

A collection of images and objects that represent both positive and negative aspects of Sustainable Development. For relevant materials and further explanation about the activity, see our *Active Methodology Toolkit 1: Images & Object*.

The time necessary for this activity is approximately 30-45 minutes.

## *How the activity works*

1. In order to work effectively, this activity requires eight or more learners. It is particularly effective with larger groups, as it ensures the engagement of all learners in the learning process.

2. A selection of images and objects are spread out in an area of a room where learners have the space to walk around and examine them. An open floor space is ideal if tables are not available.

3. Each learner is invited to select one image or object that has personal resonance and appeals to their understanding of sustainable development. Learners can, if they wish, choose one of the blank cards and write their own words or statements on it.

4. Learners are invited to form pairs and share the image or object that they have chosen with each other. They should explain to each other their reasons for choosing it.

   **Note:** You may add and additional instruction that learners should actively listen to the other persons presentation, because in the following step they will have to present their partners image and explanation, rather than their own.

5. Two pairs join together to make a group of four. Each image or object is discussed.

6. The group must work together to prioritise just one image or object that will represent the group's understanding of sustainable development and that will be shared with everyone in the room under the following headings:
   - an explanation of why the image or object was selected to represent the group.
   - the process that took place in order to agree on one image or object.
   - the value of the activity in facilitating discussion related to sustainable development.
   - key discussion points or issues that arose in the group relating to sustainable development.

   *During Step 6, the facilitator should circulate amongst the groups, checking that everyone is on task and listening for interesting discussion points that can be highlighted during the general discussion*.

*Source: From top left: Colourbox, Pixabay, Unsplash, Unsplash and Ely Pinto.*

7. General discussion phase:
   - Each group selects a person who will speak on behalf of the four group members.
   - The reporter from each group shares their image or object with the other groups and there is a general discussion led by the facilitator/teacher.

   It can be useful for the facilitator to share any background information about the image or object. This may highlight how images and objects are open to different interpretations and how care must be taken to avoid generalisations, prejudiced or stereotypical comments.

   **Note:** You may also ask groups to reflect on how they came to a decision about the picture they selected (as such collaborative approaches can address aspects of citizenship education). For example, was there equal say and consensus in the group on which picture was selected; was it based on a majority wins approach; or did one person make a suggestion and everyone else followed it?

# Roll the Dice activities

## *Suggested activity 2*

To go further in-depth in the engagement with the topic and to begin to understand the framework of the SDGs, we suggest the Roll the Dice activities. These are a set of three activities that use SDGs cubes for fast-paced learning games that encourage critical reflection about the inter-relationships between the 17 goals and how our lifestyle choices influence these goals. They promote strategic thinking and scenario thinking by investigating solutions and innovations for achieving sustainable development in our daily lives and in the world around us. You can choose to use just one activity or all three activities, and you could use different activities during different lessons.

## *Materials needed*

The three SDGs cubes and the one sustainable lifestyles cube. For relevant materials and further explanation about the activities, see our *Active Methodology Toolkit 11: Playing for the Future* and its corresponding resource bank.

## *How the activity works*

**Exploring interlinkages across the SDGS –** This activity stimulates learners to investigate the details of specific goals and to think systematically to identify the interlinkages and relationships between different goals. By considering forces of influence and using problem-solving skills, learners consider how challenges can be turned into probable solutions. **(Time required is 40-45 minutes)**.

**Creating stories of more sustainable living –** Through this collaborative activity, learners are supported to work together in addressing interconnections between SDGs. They formulate a shared explanation about responsible and sustainable living that is prompted by SDGs. **(Time required is 40-50 minutes)**.

**Linking lifestyles practices with the SDGs –** This activity aims to provide a quick-thinking exploration of the links between lifestyle practices and the SDGs so learners may gain a deeper understanding of what a sustainable lifestyle might constitute. **(Time required is 15-25 minutes)**.

*Source: CCL*

# Newspaper Front Page 2031

## *Suggested activity 3*

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) are based on an agreement by the countries of the world to work together and to fundamentally transform society to achieve a path to sustainable development where all are able to benefit and none are left behind.

This activity provides a simple challenge for learners to consider what this future may hold and the changes that may occur. It also asks them to directly think about the aspects of their lifestyles that have the most significant impacts on sustainability and how these may transform. To achieve this, learners work in small groups to create the front page of a newspaper in 2031, following shortly after the completion of the SDGs' deadline and hopefully their full achievement. By preparing headlines and an advertisement, each group is able to express their vision of the future we are working towards.

## *Materials needed*

Large sheets of paper (A2 or poster size) and pens/markers are needed for this activity. The time necessary for this activity is approximately 45 minutes.

**Note:** If you find the year of the newspaper to soon, you can push it to 2050.

## *How the activity works*

1. Learners are divided into groups of 5 persons each.

2. Consider that the year 2031 has just begun, and with this the 2030 Agenda for Sustainable Development and the SDGs has now reached their deadline. After 15 years of the countries and the people of the world working together to achieve a lasting path for sustainable development, what has changed and what has been achieved?
   Each group is asked to prepare the frontpage of a newspaper that is to be published on the 10th January 2031.

3. Choose the name of your newspaper. Your frontpage should include a minimum of three headlines and one advertisement.

4. Consider the following categories related to sustainable lifestyles and how they may have changed by 2031. Use at least four of the categories below when preparing content for the newspaper front page:
   - What we eat?
   - What we buy and what we use?
   - How we move around?
   - Where and how we live?
   - What we do for fun and entertainment?

5. Use the full sheet of paper. Add pictures, make it colourful. Be creative and have fun!
   Here the ideas and thoughts behind the ideas are the most important thing, not that it should look great. Concentrate on headlines and possibly the first sentence of the articles, but you do not need to write full articles.

6. Once finished, the newspaper frontpages can be hung up and each group should take a turn to present their work.

## *Reflection questions:*

- ✔ What can each of us do to change to a more sustainable lifestyle across the different categories?
- ✔ What can we do together here in the classroom / school / village / city to change to a more sustainable lifestyle across the different categories?

## *Additional Tasks:*

For a richer learning outcome, the newspaper frontpage can be expanded with supplementary activities.

- ✔ Look at the Sustainable Development Goals and explore how the categories in the task are linked to them.
- ✔ Use up-to-date media outlets that link to lifestyles as a starting point for critical reflection and conversation.
- ✔ You may also consult Annex 2. Sustainable Lifestyle domains and influencing factors for more details.

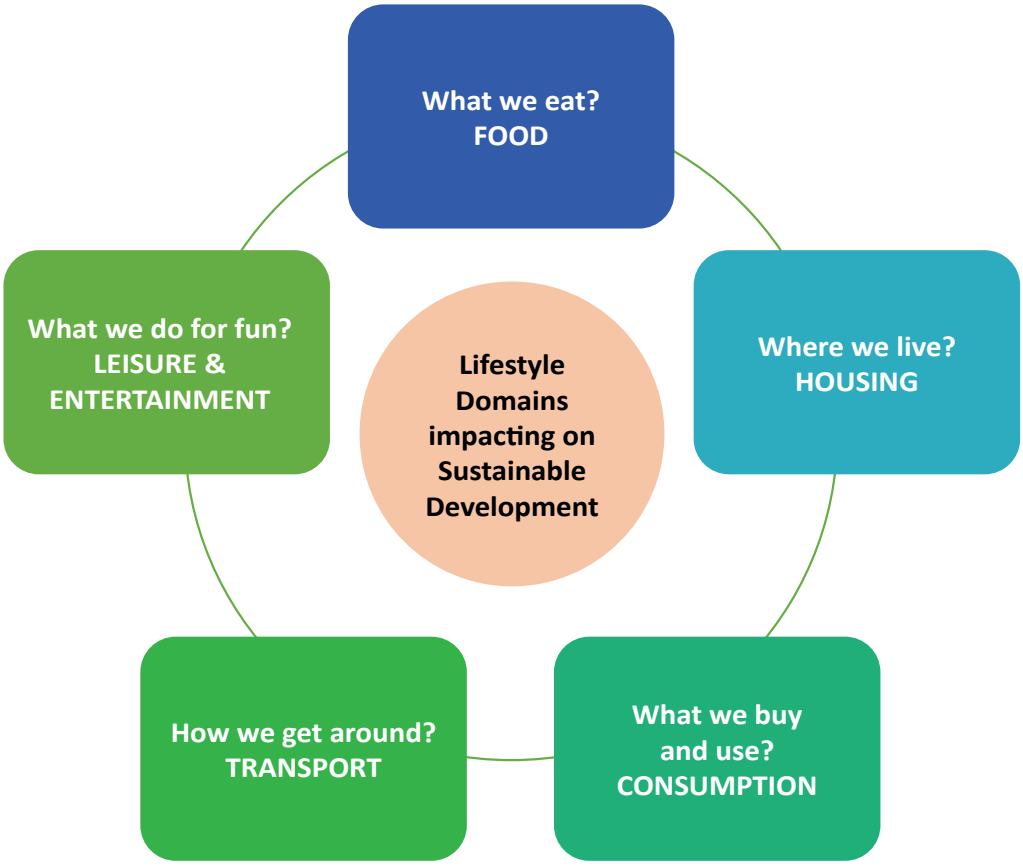



**Figure 3. Sustainable Lifestyle domains**

STEP 2: Identify, Explore and Prioritise

# Identification of Challenges

## *Suggested activity 1*

This activity begins by having learners reflect on and identify some of the sustainability challenges they find in their own communities.
What challenges / problems do you see in your community?
*It should not be a personal problem, but something that a wider number of people experience.*

## *Preparatory work for learners (optional):*

It is possible to start this step with a take home assignment that allows learners to conduct "field observation" in their local communities. For this activity, learners are asked to have a short walk or bike ride through their local environment. On a piece of paper, they should prepare four columns or boxes with the following headings:

- ✔ "What do I like in my local environment/community"
- ✔ "What things make me feel safe/secure"
- ✔ "What do I not like in my local environment/community"
- ✔ "What things make me feel concerned or unsafe"

As the learners observe different aspects of their local area, they should note down relevant features under the appropriate headings. Additionally, learners could also collect pictures, videos, or sounds from their local area that respond to these questions.

## *Classroom Activity in small groups:*

1. Individual reflection on the question: "What challenges / problems do you see in your local community?" Learners write down on a sticky note or index card a challenge / problem.

2. Share the challenge. Learners come together in group(s) to share and discuss their challenges. In small groups (4-5 persons), the learners share and explain the challenge they have written down. They should discuss why they feel that this challenge is important and what impacts they feel this challenge has for the local environment and/or community.
   - Take turns sharing challenges until all learners have had a chance to present theirs.
   - After sharing their challenges, they may be stuck to the wall.

3. Discuss and reflect. Learners discuss the a group and consider what is important with each challenge/ problem. Similar or common challenges may be combined/merged into one larger challenge if the learners feel that is appropriate. Learners may also discuss potential opportunities for changing or addressing this challenge, i.e. can something be done and how big of a difference is it possible to make.

4. Selection. Learners will prioritise the challenge that they want to work on by considering two factors: *how important/significant is this challenge (to achieving sustainable development)? & how likely are they able to improve the situation?*
   - Learners will select the challenge that they see as the first and second priorities. Each learner will give 2 points to the challenge they select as the first priority, and they will give 1 point to the challenge they select as the second priority. Tally marks or small stickers can be used to give points, and these should be placed on the note with the specific challenge.
   - The challenge or problem that gets the most points wins and goes on to the final round.

5. Final round – plenary sharing. All groups join together in plenary and present their prioritised challenge and explain why it is important. If time allows, groups may also explain why this challenge was prioritised over other options. Again, it is possible for similar or common challenges to be combined/merged into one larger challenge.

## *Selection of Challenge for action project:*

**Note:** Depending on the approach for action project(s) that has been selected, i.e., one project which a large group will work with or several projects which small groups will work with, this part will then be conducted in the corresponding group(s).

6. Learners must now discuss which challenge they will select as the focus of their change action. If agreement is difficult to reach, one possibility is for learners to consider if it might be appropriate to link more than one challenge together for their change project. An alternative option is to use the same scoring approach employed in the previous step.

7. Once a challenge is selected, it should be clearly explained:

| **What kind of challenge / problem in the local environment / community do you want to work with?** ***Here it is desirable to have a brief description of one or two sentences.*** |
| --- |
| |

8. Brainstorming on possible actions. Learners may also begin to discuss and brainstorm possible actions that could be taken to address this issue.
*(this step is not essential and could be skipped, but it is beneficial in providing some initial reflection in relation to the next two stages of this methodology).*

| **What action will you take to change this challenge / problem so that it gets better?** ***Write down the ideas you have.*** |
| --- |
| |

*Source: colourbox.com*

# Learning Stage 2 – Investigate and Understand *Complexity*

In this stage learners will undertake real-world investigations of the challenge they selected in Stage 1 and conduct a systems analysis to identify key factors of influence and potential leverage points for intervening within the system. The initial research design activities may occur in class over a few days, and the final compilation and analysis of results can also happen in class over 1-2 days at the end of this stage. The main research activities though will be conducted in the local environment and engaging with the local community over several days, one week or many weeks depending on the scale and scope of the research.

The nature of the selected challenge will shape the types of research that will be necessary, and the complexity of the challenge will also influence both the needed breadth and depth of the research. In larger action projects, teachers or learners may also recruit relevant specialists to support learners with using different research methods (e.g., water or soil sampling, interview and survey techniques, engineering studies, spatial mapping, etc.). Learners may need close facilitation in developing their research plans, but it is desirable to do this through review and feedback rounds after they have already begun to formulate their own questions and have identified their target areas of research. In this way, the learners are able to direct the research and take ownership over it, and the teachers' role is to facilitate their own discovery process and investigation so it considers the full breadth of interconnected issues and their research captures an adequate depth to have a good understanding of the situation.

## *Duration*

✔ **Time-effective approach:** To prepare for a good research process, learners should take some time to plan their research, which can be done in 1 day but may benefit from 2-3 days to plan effectively. It may also be necessary that certain arrangements and appointments will need to be made for conducting the research, and this will mean that there could be a delay between planning and implementing the research. The length of research depends on the complexity of the selected challenge, but if learners are informed ahead of time of the provided duration for this stage, then it is their responsibility to plan effectively. A 1-week research period would provide a good duration while also limiting the research to an easily manageable amount. Following the research, learners need to both compile and analyse results. This can be efficiently done during two separate lessons or over 1-2 days. The proposed version here would require 2 weeks, but this could be streamlined to 1 intensive week if learners were given extended time each day to work with it (note: the only limitation here is having to make appointments for research activities like interviews or site visits which may delay progression).

It is possible to conduct this stage in just a few lessons in a condensed version if the research part is only done as a desk-based or internet-based activity, but this also misses the real-world engagement that is an essential part of the action project.

✔ **Extended approach:** For an action project that is being conducted over a longer period, this stage benefits from being given a more extensive time frame as it provides learners with a deeper understanding of the challenges and thus leads to better contextualisation of their work in all subsequent stages. In this case, 1-2 months could be an appropriate time frame to work with.

- 1st: Learners will plan their research, identify their areas of investigation and key stakeholders to contact, set research questions, and define their research methods.
- 2nd: Learners make practical arrangements for their research, schedule appointments, identify specialists that can support their research, set interview and survey questions, etc.
- 3rd: Learners will conduct the research activities.
- 4th: Learners will compile their data and results.
- 5th: Learners will analyse their data and identify key findings, which in the extended version may be compiled into a research report and presented.

✔ **Note:** If the action project involves separate research teams examining different research topics/dimensions, then they can first compile and analyse individually, before sharing their findings with each other. Otherwise, compiling can start as a collective activity bringing all results and data together before a common analysis.

✔ **In addition:** If you want to ensure good monitoring of the impact of the action project, you may also aim to identify some key baseline indicators at this stage, i.e., what are measurable features of the current situation that the action project will aim to influence or change?

## General outline of investigation stage:

1. Learners are asked to further investigate this local challenge, its reasons and key factors, and its impacts. Learners may also identify "key questions" that they want to know about this challenge and will investigate during their research.

2. Learners should be encouraged to consider this challenge from a holistic (or multi-dimensional) perspective. One option for this is to have learners consider how this challenge relates across the 5Ps of the SDGs (i.e., planet, people, prosperity, peace, and partnerships). The 5Ps model can be used to view the challenge from different perspectives and to reflect on the interlinkages across these different dimensions.

3. Research activities may vary in relation to the specific challenge that was selected, but it should ideally include real-world investigation and social research. Depending on the scale of this research, some support and facilitation may be necessary to identify appropriate and acceptable research methods.

4. Learners may divide into smaller teams to investigate individual dimensions more actively, or they may conduct research activities with different stakeholders or in different geographic areas.

5. After concluding individual research activities, the learners share and compile the results. They then analyse these results, discuss, and identify key findings.

**The following questions are useful guiding questions for this research:**

✔ How is this challenge connected to the following dimensions of the sustainable development goals: planet, people, prosperity, peace, and partnerships?

✔ What are the primary causes of this challenge? What are the secondary consequences of this challenge?

✔ What are the main impacts and problems caused by this challenge? How do they relate to planet, people, prosperity, peace, and partnerships?

✔ Who are the main actors involved with this challenge? Who and what are most impacted by this challenge?

✔ Have there been previous efforts to address this challenge?

✔ What are the key reasons/factors that this challenge continues to exist?

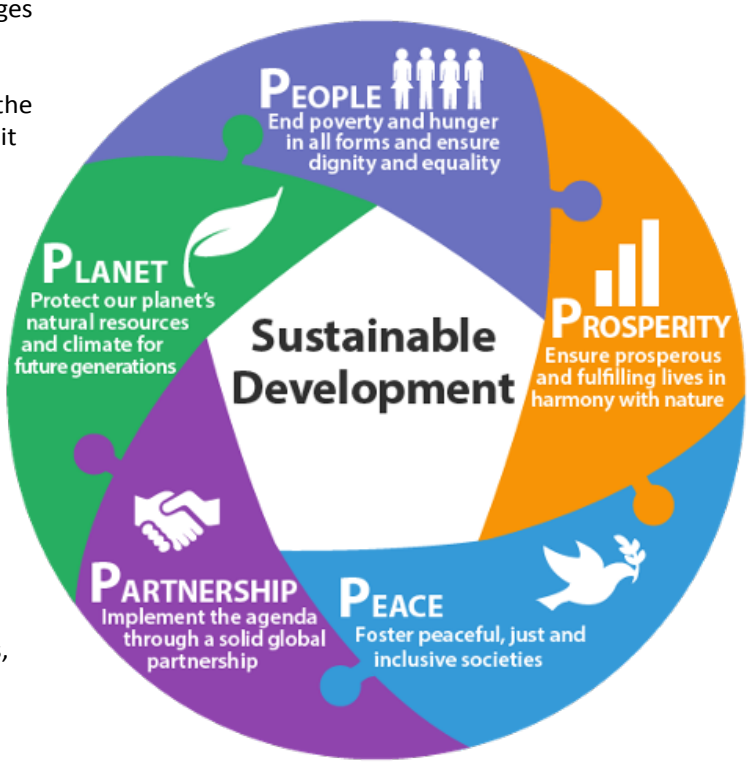



**Figure 4. 5P's of the SDG's**

## Activities to support analysis of data and results:

*Force-field Analysis*

One method to support a deeper analysis of research results is using a force-field analysis to map and reflect on the positive and negative dimensions of different driving and restraining forces (or factors). The force-field analysis provides a tool to conduct a participatory and visual mapping of an analysis similar to a SWOT (strengths, weaknesses, opportunities, threats) analysis.

*Role Play and Stakeholder Analysis*

A second method that will support learners to explore their research results and analyse how this issue impacts on different individuals is to conduct a stakeholder role play where different learners represent the interests of key stakeholder groups, consider the concerns of these individuals, and the roles they may play in addressing this challenge more deeply. The students can role play a debate or a "public forum" where the selected challenge is discussed, and possible solutions are deliberated upon from the perspective of the represented stakeholders. You can also choose to give voice to non-human stakeholders, e.g. animals or nature.

**Note:** Details of these two activities are explained below.

*It would also be possible to conduct the two suggested activities in a combined format where learners engage in the role play activity during which the force-field analysis is used to facilitate the public discussion. In this case, learners would continue to represent the interests of their specific stakeholders while participating in the force-field analysis*.

## How the Force-field Analysis activity works

Force-field Analysis provides a framework for looking at the factors (forces) that influence a situation, originally social situations (developed by Kurt Lewin). It looks at forces that are either driving movement towards a goal (helping forces) or blocking movement towards a goal (hindering forces). It provides a process to support decision-making and planning in complex situations by creating a visual map and understanding of what may promote and what may hinder progress to a given goal. It also supports identification of actions to overcome barriers, strengthen the positive forces, integrate and synergise across activities, and build in greater system durability and resilience.

*It is important to note that in all communities and in all systems, there exist both positive (driving) and negative (restraining) forces. While it may be necessary to address the most negative factors directly, it is also often the case that more can be achieved by working from and building on the existing strengths rather than focussing on the inherent weaknesses. This technique tries to provide a balanced analysis of both positive and negative forces, and to recognise that an individual factor can have both driving features which can be strengthened and restraining features which can be mitigated*.

*Force-field Analysis activity*

This activity is best conducted with the full group of learners in order to share their findings and reach a common understanding of the issues they will be working with during the course of their project.

1. Learners individually think about the results of the research. They should reflect on what are the main positive/driving forces and negative/restraining forces that need to be considered in order to over come their local sustainability challenge.
   On individual sticky-notes, each learner should write down the positive and negative forces they identify. Two different colours of notes may be used to distinguish between positive and negative forces, or it is possible to simply put a + or – symbol on the corresponding notes.

**+ Positive**

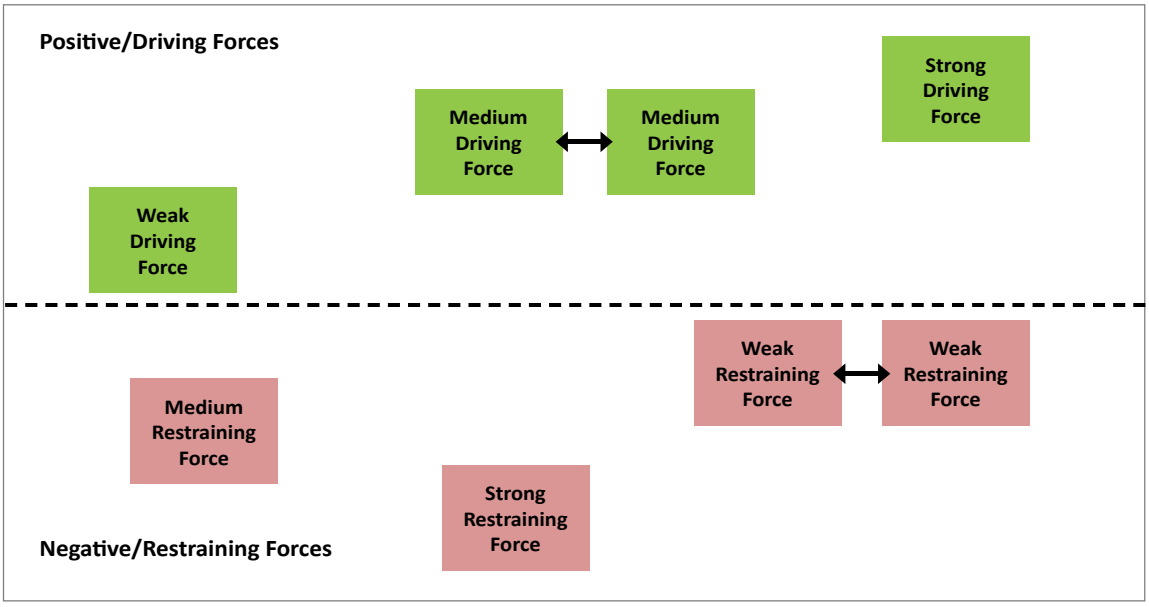
*e.g. there are many public spaces in my community where people can enjoy nature and socialise.*

**- Weakness**

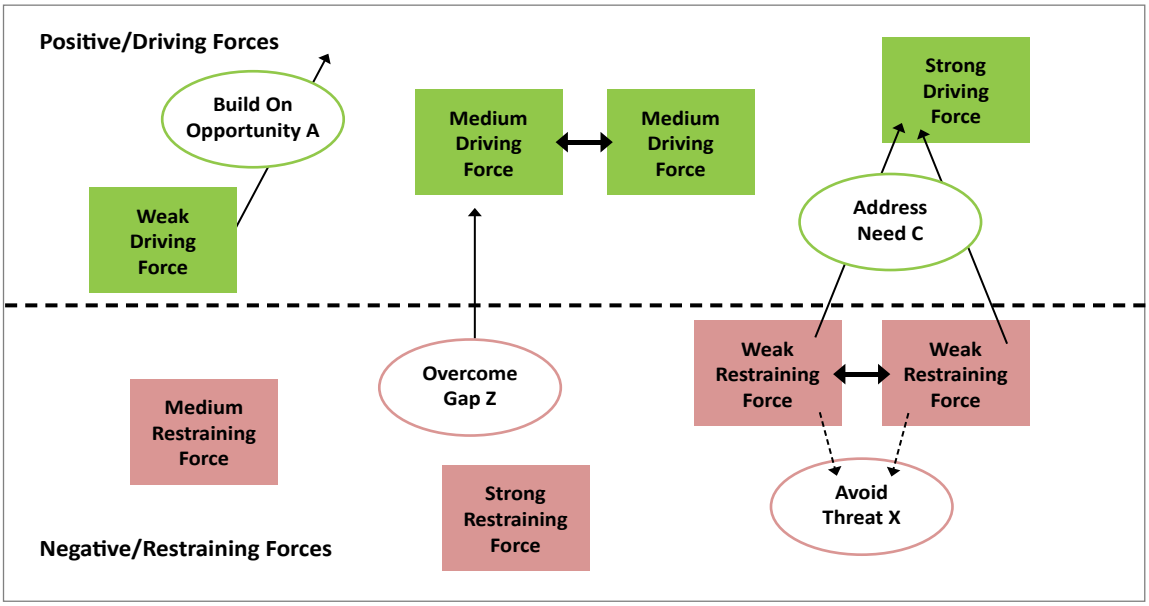
*e.g. the public spaces in my community are not well-maintained, are mistreated and full of litter*

2. Group members should take turns presenting the positive and negative forces that they identified. Groups should discuss the "relative influence" of each factor and their placement on the force field analysis table. Additionally, groups should consider if different factors represent a common element and should be paired together.

3. The sticky-notes are then added to the force field analysis table. This may be prepared on a large sheet of paper or flip chart (or on a white board/chalk board). A middle line should be drawn cutting the paper into two halves (top and bottom). The top half may be labelled as Positive or Driving Forces, and the bottom half may be labelled as Negative or Restraining Forces.
The middle line represents a neutral force. The further a force is placed from the middle, the stronger that force is considered (whether positive or negative). *If desired, a vertical scale may be added to the table. The middle line of the table is denoted with 0. Going up from the middle line +1 to +5 may be added, and going down from the middle line -1 to -5 may be added*.




4. In open discussion, groups should consider how they can improve on this situation. What are opportunities (or needs) that can be leveraged for overall improvement? What are threats (or gaps) that need to be addressed to avoid unnecessary barriers or delay?



## *How the Role Play and Stakeholder Analysis activity works*

Role playing is an interactive learning tool that allows learners to examine an issue from different perspectives and reflect upon the interests of different groups and individuals. In this activity, the role play is combined with a stakeholder analysis to further examine and consider the needs of different people that are impacted by or have a role to play in addressing the local challenge.

Learners will identify these key stakeholders and take on the role of representing their interests. In this activity, the learners role play a public forum or town hall meeting where their selected challenge/problem is being debated by members of the local community. In the roles of the various stakeholders, learners then discuss potential solutions, consider the merits and problems of these proposals from different perspectives, and use cooperative decision making to reach consensus on a course of action.

In role plays, learners are put in a setting where they have to act out a certain scenario. There are no fixed lines or rehearsals beforehand. However, the use of a stakeholder analysis serves as preparation for the role play and allows each learner to more deeply engage in their character.

### Role Play and Stakeholder Analysis activity

This activity is best conducted with the full group of learners in order to share their findings and reach a common understanding of the issues they will be working with during the course of their project.

1. In the full group, learners conduct the first part of a stakeholder analysis to identify those groups and individuals who should be considered when working with the selected local challenge. Learners discuss and identify the main stakeholders who are involved in, impacted by or able to influence the selected issue. The following questions may be considered:

- ✔ Who are the main people, groups or institutions that are currently impacted by this issue? Who are the main people, groups or institutions that currently benefit by this issue or from activities that worsen this issue?
- ✔ Who are the main people, groups or institutions that stand to benefit if this issue is addressed? Who are the main people, groups or institutions that may be adversely impacted if this issue is addressed?
- ✔ Which people, groups or institutions are expressing concerns about the current issue? Which people, groups or institutions may be concerned with efforts to address this issue?
- ✔ Who has the power to influence the situation? Who needs to authorise or give permission for taking efforts to address this issue?

While discussing and responding to these questions, learners should write down all proposed stakeholders.

2. Once learners feel they have a completed list, they may want to reflect on this list to prevent overlooking important stakeholders. The following questions may be used:

- ✔ Have all stakeholders been listed?
- ✔ Have all potential supporters and opponents of the project been identified?
- ✔ Have gender aspects been factored in to identify different types of female stakeholders?
- ✔ Have the interests of vulnerable groups (especially the poor) been identified?
- ✔ Are there any new stakeholders that are likely to emerge as a result of the project?

Additional stakeholders can be added to the list when identified.

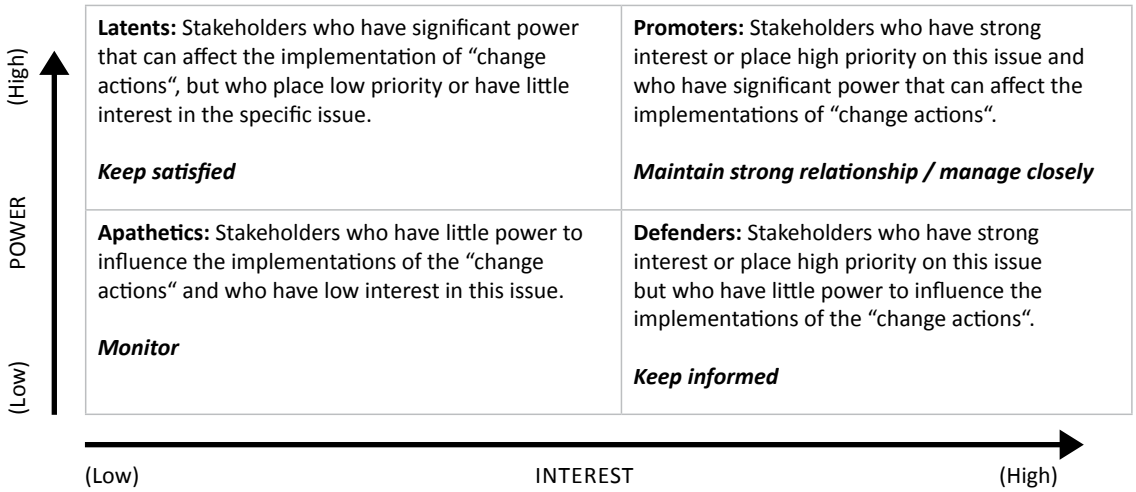



**Figure 5. Mendelow (1991) Matrix - Power Interest Grid**

Possible additional steps in refining the stakeholder analysis:

- Grouping and structuring stakeholders – If the list of stakeholders has become quite long, it may be worthwhile to conduct a secondary analysis where stakeholders are grouped into larger categories. For this step, it is necessary to think both about the power (or level of influence) and the level of interest the stakeholder groups have towards the given issue.
- Based on the Power Interest Grid (Fig. 5), the following categories may be applied to sub-divide the stakeholders into four groupings.
- Alternatively, stakeholders may also be grouped as primary, secondary, and external stakeholders in the following manner:
  - ✔ Primary stakeholders such as direct beneficiaries and direct concerned person (end users, farmers, urban poor, etc.)
  - ✔ Secondary stakeholders, i.e. intermediaries in the process of delivering aid to primary stakeholders (e.g. professionals, advisers, practitioners, consultants, experts, governmental, NGO and private sector organisations, etc.)
  - ✔ External stakeholders such as decision makers , policy makers (politicians, senior civil servants, district level bodies, governmental bodies, etc.)
- This secondary analysis will help clarify how the "change action" should engage with different types of stakeholders.

3. Learners are divided into different groups representing all key stakeholders. Each learner or each group will play the role of a different stakeholder. *Learners may want to choose the stakeholder they will represent based on those that they interacted with most during the investigation phase*.

   Learners/groups prepare for the role play by identifying important information about their stakeholder (or stakeholder group) by completing the following table.

| Stakeholder Name | Primary Interests (in relation to issue and possible actions) | Main Concerns (in relation to issue and possible actions) | Influence / Roles in Implementing Action |
|---|---|---|---|
| | | | |

4. Once learners have prepared their stakeholder information, they are ready to participate in the role play. The role play should be organised as a public forum or town hall meeting where the specific issue and possible actions will be discussed and debated.

## *Materials needed:*

- ✔ Copies of stakeholder tables / role descriptions
- ✔ Name tags with stakeholder role / name (for each student)
- ✔ Optional: Props, costumes, etc., to help students get into their roles

## *Starting the Role Play:*

One learner (or the facilitator) may play the role of the Forum/Meeting host or chairperson. This person will welcome the stakeholders to the forum and explain the key objectives of the meeting:

- ✔ To discuss the identified issue and to consider what makes this an important problem to be addressed,
- ✔ To reflect on the interests and concerns of all participating parties, and
- ✔ To brainstorm and debate on possible options to address this issue.

An additional person(s) should be assigned the role of the meeting rapporteur. This person will take minutes of the meeting, record important points, and describe decisions taken. Throughout the role play, learners should remain in the character of their stakeholders and respond to the discussion from the perspective of their stakeholders. The goal of such a role play is to identify win-win solutions where all stakeholders feel their interests and concerns are adequately responded to and where common agreement around a collective course of action can be reached.

**Note:** The "Six Thinking Hats" technique designed by Edward de Bono is another method of dividing groups into specific roles to analyse a situation from different perspectives and may also be useful.

*Source: colourbox.com*

# Learning Stage 3 – Planning for *Change*

The objective of this stage is for learners to design and prepare a change action to help address and overcome the local SDG challenge they have been investigating. In this stage, learners are challenged to plan a change action that they will implement *(in stage 4)* in order to confront this challenge to local sustainability and to improve the situation (even if not permanently).

The nature of the change action will depend on the selected challenge, and its scale and scope will need to be adjusted in consideration of the actual time to be allocated to the preparation and implementation of the change action in stage 4. The planning conducted in this stage will ensure that the action is well thought, structured and organised, as well as appropriately allocating the roles and responsibilities for preparing and implementing the action.

## *Duration*

- ✔ **Time-effective approach:** This stage may be completed within 2-3 days and is primarily based on classroom activities. However, the more time and facilitation spent at this stage will generally improve the quality and efficiency of project implementation at stage 4.

- ✔ **Extended approach:** For larger, complex projects, there may be multiple dimensions to the project that need to be individually planned and prepared for, as well as different teams who will have responsibility for different components of the project. If the project will occur over a longer time frame, then it will also necessitate a longer period of planning at this stage. A period of 1 week may be sufficient, but it may also be extended to 2 weeks. Throughout a large project, it is also important to incorporate opportunities for review of plans and potential revisions during the next stage. This ensures all team members are on the same track and that any difficulties or problems that arise prior to implementation are adequately addressed.

### How the Planning Stage works:

1. Learners brainstorm, share and discuss potential ideas for their change action. Learners should consider the merits of each proposal, what type of impact it might have, and how feasible it is to achieve this action.

   **What are you going to do to change this problem or challenge?**
   *You are going to carry out the action you are planning, not just think about a solution.*

   Describe here what activities will be carried out during the project, how you will organise its implementation, and what you think the change action can contribute or what impact it will have.

   *If the learners have used the force-field analysis in the previous stage, they may also reflect on how the potential actions would relate to the different identified forces*.

2. *Reflection on change action:* Learners discuss the following questions and provide answers.
   - ✔ Why is this an important topic or challenge to address?
   - ✔ How will the action contribute with positive change?
   - ✔ What other actions could be used to help solve this challenge?
   - ✔ Which SDGs are relevant to the proposed change action, and how does this intervene in the sustainability goals?
   - ✔ How does the action relate to each of the 5Ps? How will the action have positive effects for planet, people, prosperity, peace and partnership?

3. *Practical action planning:* Learners now make a plan for the change action. They have already identified the challenge or problem that they want to work with, and they should begin to develop the plan for how to change the problem and make the situation better.

   A well-developed action plan will support the effective implementation of the learners' change project. It is thus important that they consider and prepare for all practical aspects of their action's implementation.

   Learners should discuss and respond to the following questions:
   - ✔ What are the main targets and objectives of this action?
   - ✔ What steps/activities will this action require? What will be implemented?
   - ✔ What preparations need to be made?
   - ✔ What resources are needed?
   - ✔ When do things need to be completed by?
   - ✔ Who is responsible for what in the action? Who should do what and when?
   - ✔ Who must be contacted? What permissions are needed to carry out this action?
   - ✔ Are there other potential partners you want to involve?
   - ✔ How will you ensure that the change action meets it target actors?
   - ✔ How will you promote and document the change action?

4. *Action schedule / timeline:* The action should be sub-divided into individual steps/stages and ordered in a schedule to provide a clear timeline for effective management and implementation. It is good if learners not only clarify the specific steps to be taken but also clarify the required resources and responsible persons at each stage.

   *It is useful to consider including in the schedule specific times for meetings and status updates during which the schedule is reviewed to see if there are outstanding issues to be dealt with and to discuss upcoming activities. In addition, in larger actions it is useful to consider some slack/flexible time added in between major stages of the actions (thus meaning that delays at one stage of the project do not necessarily disrupt the later stages of the action).*

   **Example schedule format**

| Dates | Action | Resources required | Responsible persons |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

5. Preparations for action implementation. With the action schedule now prepared, it is useful to consider if there are any preparations to be completed before the official implementation of the action. For example, it might be useful to prepare all required resources before beginning the action implementation, or if specific venues must be arranged this could be done at this point. *This preparatory phase may be noted in the action schedule with specific activities and responsible persons included*.

## Planning for communication, dissemination and sharing:

*An important part of the action project methodology is to communicate about the action project and share the results of the change actions with the local community, governments, learners from other schools and from other countries, etc. Through this effort, learners can promote a wider awareness of these sustainability issues, motivate others to take actions at a local level to support the SDGs, and to highlight positive efforts that can be taken by communities to achieve a sustainable future*.

While communication and sharing are part of the final stage, it will be necessary, in this stage to:

1) communicate about the action project prior to it being implemented if there is a desire to attract participants or to use the change action to engage with community members, and
2) to communicate to document the change action as it is being prepared and implemented in appropriate formats so that this can be used in stage 5 for communication.

Thus, it is useful to structure documentation and communication activities into the overall action plan and schedule. Additionally, specific persons may take the lead responsibility for these activities as their primary contribution to the action's implementation. Learners should consider how they will document and share their experiences from this change project. There are several possible opportunities for documenting the action, including videos, posters, case studies, "newspaper" article, etc. An effort should be made to explain how the local sustainability challenge was identified and why it is considered important, as well as to highlight the activities and impacts of the change action.

*Source: pexels.com*

# Learning Stage 4 – Taking Action as *change agents*

The objective of this stage is for learners to initiate and conduct their change action. This stage of the action project involves the implementation of the activities, and the action plan and schedule prepared in the previous stage will provide the main structure and guidance for the steps to be carried out in this stage. *There are limited instructions provided for this stage since the learners' own action plan and schedule should be followed as the main process for this stage*.

### Project management role:

When an action has multiple activities occurring at the same time and with different people responsible for different activities, it can be valuable to assign one person with a general project management role who will stay updated on progress across all activities, liaise with different groups/teams, and trouble shoots potential problems.

## *Duration*

- ✔ **Time-effective approach:** The action schedule prepared in the previous stage should provide a clear timeline for the implementation of the action project. However, if the learners were given a specific timeframe for this stage, it should already be reflected. For a time-effective action project, you may target 1 day for implementation, but 1-2 weeks preparation may be needed.

- ✔ **Extended approach:** This stage is perceived as the most substantial stage of the overall methodology and can be allotted an extended period of time. This stage may require 1-3 months depending on the scale and scope of the change action, or it can be set-up as an ongoing implementation process over an extended period, such as a full semester.

*Source: pexels.com*

# Learning Stage 5 – Reflect and Share

The objectives of this final stage are two-fold. First, learners should review and reflect on their change actions, how the process went and what were its impacts. They should also consider lessons learned from this process, what things worked well and what things they would do differently, and consider how they would renew or replicate their change action.

Second, learners are expected to find ways to record, share and promote the outcomes of their change action. Other people can learn from and be inspired by a change action project, and it is an important part of the action project framework that the process completes with learners communicating about and advocating for more sustainable practices.

## *Duration*

- ✔ **Time-effective approach:** While this stage provides an important part in completing the expansive learning cycle, it is possible to condense this into 2 or 3 lessons. The first part of this stage (reflecting and renewing) may be completed in one lesson, while the second part of this stage (communicating and sharing) may be completed during one or two lessons. Both stages are primarily based on classroom activities or incorporated into a take-home assignment.

- ✔ **Extended approach:** In the extended version, it may be possible to set more substantial follow-up activities to complement each stage and also have learners use their own experiences to advocate for wider change. The reflection part can begin with learners having a debriefing session the day after the implementation was completed to discuss with each other how they think things went. This could be followed by the learners individually preparing reflection essays as a take-home assignment. After this, the learners can undertake a group review and discussion. This would mean that the first part of this stage may require 2-4 days.

  For the second part of this stage, a substantial communication campaign is possible to develop over 1 or 2 weeks. If a targeted advocacy campaign is added as a component of this stage, then the necessary work may extend to 3-4 weeks as it will necessitate more direct contact and engagement with relevant stakeholders.

### STEP 1: Reflect and Renew

After completing their change action, learners will reflect on their experiences and consider future improvements that could be made for the potential renewal/replication of their change action. As facilitator, you can ask the learners to use the questions below to start their initial reflection.

## *Reflection Questions*

- ✔ Why was this an important sustainability challenge to address?
- ✔ How did the change action contribute to positive change in the local environment or community?
- ✔ Which SDGs did this action address and how did it contribute to their achievement?
- ✔ What were the main success factors of this action?
- ✔ What were the major difficulties faced during this action?
- ✔ Was the action well designed, organised and implemented?
- ✔ Could any improvements be made to the action planning or implementation?
- ✔ Were there specific action objectives that were not possible to achieve?
- ✔ Were there certain external factors that were not possible to account for or address within the context of this action? Did any of these create significant barriers for action implementation?
- ✔ If you were to implement this action again, what would you do differently?
- ✔ What other actions could have been done to address this challenge?

## *Self-reflection and evaluation*

Both as a reflection activity and to support the assessment of individual learners inputs into the change actions, it is possible to provide the learners with an essay assignment where they are asked to explain their role in the change project and consider how important it was to the overall success of the action. The learners may be prompted with the following questions:

- ✔ What specific responsibilities did I have during the change action and what job did I do in relation to the change action?
- ✔ How did my inputs contribute to the overall result of the change action?
- ✔ How did my inputs compare to those of the other group members?
- ✔ How important was the collaboration among the group members to the overall success of the action?

## *Review of competency development*

It may also be useful for learners to reflect on their own learning during the course of this change action. Has it changed them? *Has it changed the world around them?*

- ✔ Do they understand sustainable development differently then before?
- ✔ Have they gained new knowledge about the SDGs?
- ✔ Have they gained new knowledge about their local environment / community?
- ✔ How have the perceptions of their own roles changed …. as an actor for the SDGs? …. as a member of their community?
- ✔ Have they gained new skills and competences that will help them in …. living a more sustainable life? …. collectively creating and realising a sustainable future?

**Note:** The Key Sustainability Competences identified by Rieckmann in UNESCO's publication (2017) *Education for Sustainable Development Goals: Learning objectives* may provide a useful framework for discussing and reviewing competency development: See Annex 3 for this list.

## *Renewal and replication*

Whether learners will be involved in replicating this change action or not, it is useful to the learning process that they reflect on and discuss possibilities for follow up or continuation of this change action. Would it be worthwhile to replicate or upscale this change action? If so, is it something that this group would do, or is it a change action that other groups could implement in their own setting. If the change action is to be upscaled or mainstreamed, are there additional actors that will need to be involved?

### STEP 2: Communicate and Share

Learners should consider how they will document and share their experiences from this change project. There are several possible opportunities for documenting the action, including videos, posters, case studies, "newspaper" articles, etc. Learners will also need to decide who is their target audience and how they will effectively reach them. As their change action targeted the local community, this is one obvious audience. It is also possible to communicate with other youth and potentially with other schools engaging in similar action projects.

An effort should be made to explain how the local sustainability challenge was identified and why it is considered important, as well as to highlight the activities and impacts of the change action. If there is a desire for others to follow up in relation to this change action, this is also used to promote wider engagement or uptake of this initiative.

## *Policy advocacy*

If the change action has proven highly successful, a next step may be to advocate for its integration into local SDG activities and/or to discuss with the local government to support replication of the change action.

# Sum-Up and Reflection

At the end of each stage, learners are encouraged to reflect on and summarise the learning that has occurred at this stage. The **KWL Chart** is a basic format that can be used for learners' to summarise the knowledge they have gained and reflect on learning.

- **K** stands for what you already KNOW about the project.
- **W** stands for what you WANT to learn.
- **L** stands for what you LEARNED from the lesson or activity.

The chart may be completed by each learner, before they share and discuss their findings.

| **K**<br>What I ***know*** | **W**<br>What I ***Want*** to Learn | **L**<br>What I Have ***Learned*** |
|---|---|---|
| | | |

## *Reflection Questions*

- ✔ What did you enjoy in this stage? What did you not enjoy in this stage?
- ✔ What aspects of this stage did you find challenging or difficult to deal with?
- ✔ What things did you encounter that surprised you or were unexpected?
- ✔ Did you learn anything that challenges the way you previously looked at this issue, topic, or situation?
- ✔ Which points of learning or pieces of information from this stage do you think are most important to ensure they are included or addressed in the next stages?

### Future thinking/reflection assignment – at the end of the action project

It may be possible to provide learners with a follow-up assignment that encourages them to creatively think about how this experience has influenced their perceptions of the future. For example, they could be asked to write short essays discussing how their Change Action led to motivating wider community engagement in creating a local, sustainable future together. The learners could then write about what the future of their community looks like in 2030 or 2050, and how they got there.

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# Annex 1A.
# Intensive Action Project – 1 to 2 weeks *school-based action project* model

| Learning Stage | Main Steps | Objectives | Activities | Time |
|---|---|---|---|---|
| **1. Engage and Explore** | 1.1 Introduce and Engage | • Develop interest and curiosity in subject;<br>• Consider linkages between own lifestyle and subject; | • Short introduction to topic and action project;<br>• 1 Active learning activity: either Images & Objects, Roll the Dice, or Newspaper Front Page (p.18-22). | 60 min |
| | 1.2 Identify, Explore and Prioritise | • Explore relevance of subject in local context;<br>• Prioritise issue for further investigation. | • Identification of school-based sustainability issues (i.e. ways to be more sustainable) and prioritise one issue to work with. | 60-90 min. |
| **2. Investigate and Understand *Complexity*** | *Interview stakeholders and examine different dimensions* | • Investigate and construct multi-modal explanations of complex issues;<br>• Develop competences for systems thinking and collaborative knowledge generation. | a) Conduct a simple stakeholder analysis (using steps 1 and 2 in activity on p.30);<br>b) In teams of 2-3 learners, each team is assigned 1 stakeholder group and conducts interviews with 1 or 2 representatives from that group. Interviews question may focus on what they see as strengths, weaknesses, opportunities, and threats in relation to the selected issue;<br>c) Findings are shared in class using the Force-field Analysis activity (p.28). | a) 30-45 min.<br>b) 1-2 hrs.<br>c) 45-60 min. |
| **3. Planning for *Change*** | *Planning an activity or initiative* | • Planning a change action;<br>• Develop competences for integrated problem solving, strategic thinking and futures thinking. | a) Following step 1-2 of learning stage 3, learners identify an activity or initiative to address the selected issue;<br>b) Following step 3 of learning stage 3, learners design and plan their activity or initiative;<br>c) The various responsibilities for this activity are defined and individuals are assigned roles/tasks.<br><br>*Learners must gauge what is possible and feasible to achieve within the given time frame for stage 4 of the project.* | a) 30-45 min.<br>b) 45-60 min.<br>c) 30-45 min. |
| **4. Tacking Action *as change agents*** | *Prepare and implement* | • Actively engage in local communities;<br>• Develop skills for sharing responsibilities, time management and project implementation. | a) Preparation for the activity – *if needed, this step benefits from being carried out over multiple days to allow different arrangements to be made;*<br>b) Implementing the activity or initiative. | a) e.g. 20-30 min. per day over 2-3 days<br>b) 3-5 hrs. |
| **5. Reflect and Share** | 5.1 Reflect and Renew | • Self-reflection on own learning;<br>• Evaluation of action project;<br>• Identify further possibilities; | a) In group discussion, learners reflect on and evaluate the activity or initiative;<br>b) Learners discuss how the lessons learned might apply to addressing sustainability issues in the local community. | a) 30 min.<br>b) 30-45 min. |
| | 5.2 Communicate and Share | • Promote and advocate for sustainable change and improvement in wider society. | • Learners prepare a future vision of a sustainable school or a sustainable local community. This can be done in different formats: essay, story, picture board, or drama activity. | 45-60 min. |

# Annex 1B. Time Effective Approach – 4 week model

| Learning Stage | Main Steps | Objectives | Activities | Possible Connections to Subjects and Lessons* | Time | |
|---|---|---|---|---|---|---|
| **1. Engage and Explore** | 1.1 Introduce and Engage | • Develop interest and curiosity in subject;<br>• Consider linkages between own lifestyle and subject; | a) Introduction to topic;<br>b) Images and Objects activity (p.18);<br>c) Roll the Dice – linking lifestyle practices with the SDGs activity (p.20). | The 5Ps of the SDGs (see fig.4, p.27) can be used as entry points for different subjects to discuss related | a) 30 min.<br>b) 30-45 min.<br>c) 15-25 min. | **Week 1** |
| | 1.2 Identify, Explore and Prioritise | • Explore relevance of subject in local context;<br>• Prioritise issue for further investigation. | a) Take-home activity (p.23);<br>b) Introduction to action project;<br>c) Identification of challenges (p.23-24). | topics and consider different perspectives on sustainable development in a holistic manner. | a) 30-45 min.<br>b) 30 min.<br>c) two sessions, each 40-50 min. | |
| **2. Investigate and Understand *Complexity*** | *Interview stakeholders and examine different dimensions* | • Investigate and construct multi-modal explanations of complex issues;<br>• Develop competences for systems thinking and collaborative knowledge generation. | a) Design a research plan to investigate the selected issue(s) – group activity;<br>b) Conduct research components – in small groups (*note: some open days may be needed between a and b for time to arrange interviews and site visits);*<br>c) Analysis of data and results – using Force-field Analysis (p.28) and Role Play and Stakeholder Analysis (p.30). | Subjects can have lessons focussed on discipline-based approaches for investigation and research methods. They can also discuss how their subject creates and frames new knowledge. | a) 60-90 min.<br>b) carried out over 2-4 days.<br>c) two sessions, each 60-75 min. | **Week 2** |
| **3. Planning for *Change*** | *Planning an activity or initiative* | • Planning a change action;<br>• Develop competences for integrated problem solving, strategic thinking and futures thinking. | a) Brainstorming and reflection on change action (steps 1 and 2);<br>b) Practical action planning (step 3);<br>c) Preparing an action schedule and timeline (steps 4 and 5). | Subjects can have lessons that look at issues related to innovation and social entrepreneurship from their discipline basis. | *Conducted over 2-3 days:*<br>a) 45-60 min.<br>b) 60-90 min.<br>c) 45-60 min. | **Week 3** |
| **4. Taking Action *as change agents*** | *Prepare and implement* | • Actively engage in local communities;<br>• Develop skills for sharing responsibilities, time management and project implementation. | a) Preparations for change action;<br>b) Implementation of change action. | | a) carried out over 3-4 days.<br>b) implemented in 1 full day. | |
| **5. Reflect and Share** | 5.1 Reflect and Renew | • Self-reflection on own learning;<br>• Evaluation of action project;<br>• Identify further possibilities; | a) Reflection and evaluation of change action;<br>b) Considering renewal and replication. | Subjects can discuss how to address other issues related to relevant SDGs. | a) 45-60 min.<br>b) 30-45 min. | **Week 4** |
| | 5.2 Communicate and Share | • Promote and advocate for sustainable change and improvement in wider society. | a) Activity/assignment to document and share experience from change action and/or to advocate for wider change. | Subjects can examine disciplinary approaches to incorporate sustainability principles in practice. | a) 60-120 min. | |

**Additional time required for connecting to other subjects and lessons.*

# Annex 1C. Extended Approach – Semester-long action project *(approximately 12-24 weeks)**

| Learning Stage | Main Steps | Objectives | Activities | Possible Connections to Subjects and Lessons* | Time |
|---|---|---|---|---|---|
| **1. Engage and Explore** | 1.1 Introduce and Engage | • Develop interest and curiosity in subject;<br>• Consider linkages between own lifestyle and subject; | a) Introduction to the concept of sustainable development:<br>b) Images and Objects activity (p.18);<br>c) Introduction to the SDGs;<br>d) Roll the Dice activities (p.20);<br>e) Discussion and reflection on what would a more sustainable future entail;<br>f) Newspaper Front Page activity (p.21). | The SDGs provide various topics that different subjects can engage with related to health, poverty and inequality, environment, climate change, economy, justice systems, infrastructures, energy, etc. Try to have lessons addressing all 17 SDGs across different subjects. | *Potentially over 1-3 weeks:*<br>a) 30 min.<br>b) 30-45 min.<br>c) 30 min.<br>d) 60-75 min.<br>e) 45 min.<br>f) 30-45 min. |
| | 1.2 Identify, Explore and Prioritise | • Explore relevance of subject in local context;<br>• Prioritise issue for further investigation. | a) Take-home activity (p.23);<br>b) In-class sharing of take-home activity;<br>c) Introduction to action project;<br>d) Identification of challenges (p.23-24): with separate sessions for steps 1-3, 4-5, & 6-8. | The different issues identified by learners in activity a) can be used as entry points for further lessons in relevant subjects with a focus on exploration of real-world topics and addressing local challenges. | *Potentially over 1-2 weeks:*<br>a) 30-45 min.<br>b) 45-60 min.<br>c) 30 min.<br>d) 3 x 45 min. sessions. |
| **2. Investigate and Understand *Complexity*** | *Interview stakeholders and examine different dimensions* | • Investigate and construct multi-modal explanations of complex issues;<br>• Develop competences for systems thinking and collaborative knowledge generation. | a) Define research dimensions, focus areas and questions:<br>b) Develop a research plan to investigate different dimensions of selected issue(s) and define roles and responsibilities;<br>c) Make arrangements for research activities, e.g. interviews and site visits;<br>d) Individual teams conduct research. *(Note: The required time for research period is highly dependent on the scope and scale of the research, but a limit for this can be set at the start of the project. School time may be used over several days, or learners may be asked to make arrangements outside of school time).*<br>e) Individual research teams compile and present their results;<br>f) Analysis of data and results – using Force-field Analysis (p.28) and Role Play and Stakeholder Analysis (p.30).<br>g) Prepare a final research report identifying key findings of this stage. | In this stage, learners will undertake various forms of investigation and research, depending on the selected issue(s).<br><br>Subjects can support this process by providing lessons based on discipline-specific research methods and approaches, as well as examining the processes, frameworks and theories that support inquiry, investigation and new knowledge generation within their respective subjects.<br><br>Learners will benefit from learning both quantitative and qualitative research methods, as well as different forms of data analysis including systems mapping and statistical approaches. | *Potentially over 3-6 weeks:*<br>a) 30-45 min.<br>b) planning 60-90 min. & review of plan 30 min.<br>c) 20-30 min. per day over 3-5 days.<br>d) depending the scope and scale of research, this may be conducted over 1-4 weeks.<br>e) 2-3 hrs. for compiling (possible as take-home assignment) and 10-15 min. per group for presenting.<br>f) two sessions, each 1.5-2 hrs.<br>g) 3 x 45 min. sessions. |

| Learning Stage | Main Steps | Objectives | Activities | Possible Connections to Subjects and Lessons* | Time |
|---|---|---|---|---|---|
| **3. Planning for *Change*** | *Planning an activity or initiative* | • Planning a change action;<br>• Develop competences for integrated problem solving, strategic thinking and futures thinking. | a) Brainstorming and reflection on change action (steps 1 and 2);<br>b) Practical action planning (step 3);<br>c) Preparing an action schedule and timeline (step 4);<br>d) Double-checking the preparations and arrangements that need to be made prior to the change action, and ensure responsible persons are assigned for each item (step 5);<br>e) Planning for communication, dissemination and sharing (and incorporate into schedule/ timeline). | In this stage, learners identify solutions that they can implement to create a change action. Subjects can support this process by examining different innovations or social entrepreneurship efforts that are addressing challenges related to their subject. It is also possible for subjects to work with strategic thinking and problem solving. | *Potentially over 1-3 weeks:*<br>a) 45-60 min.<br>b) 2 x 45-60 min. sessions.<br>c) 60-90 min.<br>d) 30-45 min.<br>e) 45-60 min. |
| **4. Taking Action *as change agents*** | *Prepare and implement* | • Actively engage in local communities;<br>• Develop skills for sharing responsibilities, time management and project implementation. | *The main schedule for this stage should follow the action schedule and timeline prepared in the previous stage.*<br>a) Preparations for change action;<br>b) Implementation of change action.<br><br>*(Note: The required time for this stage is highly dependent on the scope and scale of the change action, but a limit for this can be set at the start of the project. In-class time may be provided on a regular basis during activity a, but learners may also be required to work on this outside of class time).* | As learners prepare to implement their change action, subjects can provide time to develop relevant dimensions of their project and can use the 5Ps of the SDGs (see fig.4, p.27) framework as entry points for different subjects.<br><br>Subjects may also promote further work with strategic thinking, examining action and consequence, algorithmic thinking, problem solving and whole systems perspectives. | *Potentially over 4-8 weeks, but it can be completed in less or more time.*<br>- A simple action can be a) prepared in 1 week, and b) implemented in 1 day.<br>- A complex action may require a) 3-6 weeks for preparation, and b) 1-4 weeks to implement. |
| **5. Reflect and Share** | 5.1 Reflect and Renew | • Self-reflection on own learning;<br>• Evaluation of action project;<br>• Identify further possibilities; | a) Group reflection and evaluation of change action;<br>b) Self-reflection assignment on group work and personal inputs into change action (potential for take-home assignment, p.38)<br>c) Considering renewal and replication. | As part of the reflection, renewal and replication steps, learners consider how their experience can be applied to new situations. Subjects can discuss how to address other issues related to relevant SDGs. | *Potentially over 2-4 days:*<br>a) 1-2 x 45 min. sessions.<br>b) 30-45 min.<br>c) 30-45 min. |
| | 5.2 Communicate and Share | • Promote and advocate for sustainable change and improvement in wider society. | a) Document change action process and the impacts of the action;<br>b) Communicate and share experience with others;<br>c) Prepare and carry-out an advocacy campaign based on the results of the change action;<br>d) Sum-up and reflect on overall experience. | In this stage, learners focus on promoting wider societal transformations. Subjects can examine how and why perspectives towards society, environment, economy, governance, human rights, etc. have changed over time. | *Potentially over 2-4 weeks:*<br>a) 2-3 x 30 min. sessions.<br>b) 45 min.<br>c) work over 1-3 weeks.<br>d) 45-60 min. |

** In the extended approach, more time is given to individual activities, and time between activities is also extended to both allow for more preparation time between activities and for additional time where individual subjects may provide lessons with relevance to the action project themes.*
***Additional time required for connecting to other subjects and lessons.*
**** Step 5.2 can be simplified to a class-based activity like the future thinking/reflection activity (p.39), or it could be saved until the next semester as a new project.*

# Annex 2.
# Sustainable Lifestyle domains and influencing factors

| Lifestyle domain | What's included | Factors influencing consumers |
|---|---|---|
| **Food**<br>*What we eat?* | • What we eat and drink<br>• How it is produced, processed and provided<br>• How we dispose of it | • Cost<br>• Freshness<br>• Health impacts<br>• Presentation (e.g. packaging)<br>• Place of origin<br>• Convenience, taste and culture |
| **Housing**<br>*Where we live?* | • Where we live<br>• Building materials<br>• How we heat, light and cool our living spaces<br>• How we decorate and choice of fixtures and fittings | • Cost and size of the building<br>• Building characteristics<br>• The neighbourhood and available amenities<br>• Aesthetics |
| **Transport**<br>*How we get around?* | • The forms of transport we choose for day-to-day journeys and longer trips<br>• How often we travel and the distance travelled, as well as the supporting systems and infrastructure | • Cost<br>• Preferences<br>• Traffic conditions<br>• Convenience and time efficiency<br>• Connectedness<br>• Environmental Impacts |
| **Consumer Goods**<br>*What we buy?* | • The types of products we buy<br>• The type and quantity of materials used to produce goods<br>• How we use goods<br>• How often we replace them | • Cost<br>• Convenience<br>• Time<br>• Peer competition<br>• Aspiration<br>• Cultural norms<br>• Appearance<br>• Function |
| **Leisure & Entertainment**<br>*What we do for fun?* | • How we spend leisure time<br>• Our choice of tourism destinations and activities<br>• The facilities we use | • Cost Convenience<br>• Time<br>• Peer competition and recommendations<br>• Aspiration<br>• Cultural norms |

Table prepared by Patricia Vilchis Tella and Caspar Trimmer, based on the publication: UNEP (2016). A Framework for Shaping Sustainable Lifestyles. DTI/1717/PA. Nairobi.

# Annex 3.
# Key Sustainability Competences

As identified by Marco Rieckmann in UNESCO's publication (2017) *Education for Sustainable Development Goals: Learning objectives* may provide a useful framework for discussing and reviewing competency development.

- ✔ **Systems thinking competency:** the abilities to recognise and understand relationships; to analyse complex systems; to think of how systems are embedded within different domains and different scales; and to deal with uncertainty.

- ✔ **Anticipatory competency:** the ability to understand and evaluate multiple futures – possible, probable and desirable; to create one's own visions for the future; to apply the precautionary principle; to assess the consequences of actions; and to deal with risks and changes.

- ✔ **Normative competency:** the ability to understand and reflect on the norms and values that underlie one's own actions; and to negotiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions.

- ✔ **Strategic competency:** the ability to collectively develop and implement innovative actions that further sustainability at the local level and further afield.

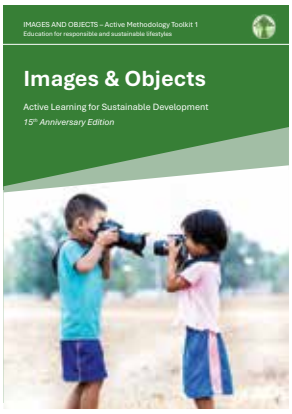
- ✔ **Collaboration competency:** the ability to learn from others; to understand and respect the needs, perspectives and actions of others (empathy); to understand, relate to and be sensitive to others (empathic leadership); to deal with conflicts in a group; and to facilitate collaborative and participatory problem solving.

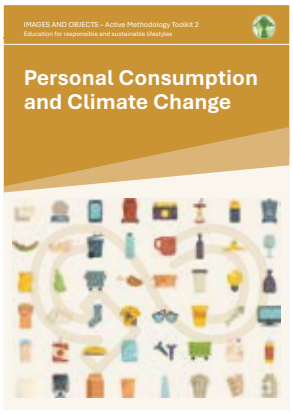
- ✔ **Critical thinking competency:** the ability to question norms, practices and opinions; to reflect on one's values, perceptions and actions; and to take a position in the sustainability discourse.

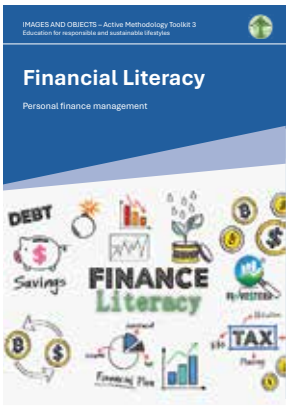
- ✔ **Self-awareness competency:** the ability to reflect on one's own role in the local community and (global) society; to continually evaluate and further motivate one's actions; and to deal with one's feelings and desires.

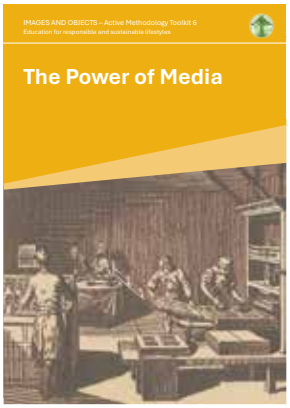
- ✔ **Integrated problem-solving competency:** the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive and equitable solutions that promote sustainable development, integrating the above mentioned competences.

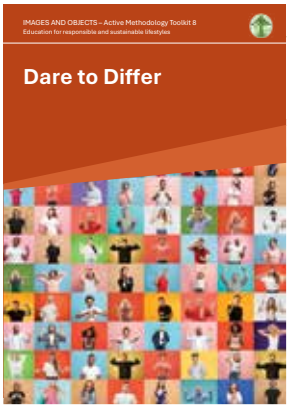
# The *Images and Objects* Active Methodology Toolkit series







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***"What you do makes a difference, and you have to decide what kind of difference you want to make."***

**Jane Goodall**