

Competence Framework

Sustainability Skills in Adult Education | Competence Framework

Research Report



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The aim of the 5P-Competences project was to develop a competence framework based on analyses of developmental tasks, specifically tailored to the life situation of adults.

Moreover, the project developed a competence framework as a basis for lifelong learning. Since lifelong learning is essentially based on informal learning, competence frameworks aiming at formal learning are inadequate for several reasons:

- ... because the learning objectives and the competences are formulated in a very general manner. That means that the justification of their relevance does not necessarily need the concept of sustainability e.g. like 'systems-thinking competency', strategic competency' or 'self-awareness competency (UNESCO, 2017, p. 10). From this the argument is evident, that educational innovations are not necessary, because the objectives always were relevant,
- ... because the educational objectives are primarily connected to
 formal learning at schools and universities. They can be integrated into a catalogue describing skills and competences, which
 are generally important, but this catalogue then will not be connected to problems or situations out of everyday life. But it is everyday life that is the reason for informal learning,
- ... because it is (nearly) impossible to deduce hints for pedagogical actions out of analytical categories which are giving reasons for weighting the educational objectives (or competences) for single persons or which are giving reasons for the order in which the parts of the competences can or should be taught.

From a Lifelong Learning perspective, it is necessary to extend the existing competence frameworks (or lists of educational objectives) by a concept that is orientated at situations of everyday life and from a professional perspective. For these reasons, the competence framework developed in this project is derived from two sources. One source are the programmatic publications of UNESCO and other organisations concerning Education for Sustainable Development (ESD). The second source is the competence atlas developed by Heyse & Erpenbeck (2017).

Starting from the publications of the OECD three core aspects (learning objectives) for ESD were identified: Generation, justice and responsibility.

1. The topic of generation is closely connected to sustainability and is explicitly mentioned in GreenComp, the European sustainability competence framework (supporting fairness, p. 14). The idea is, that every generation is living in a world (or learning to live in a world) that was influenced and designed be previous generations. They inherit the world from these previous generations, continue some things while changing others so that they again can hand over the world to the next generation(s).

One of the conditions for sustainable development is to be conscious about this aspect and to cope with it critically and responsibly. This is concerning the history of mankind as total, of the nation one lives in, the family, as well as one's own history. Norms and values must be questioned and made conscious. People need to ask themselves what they want to leave behind for their own children, the children of their friends and the community they are living in, their country, and the world. In the framework of the Sus-

tainable Development Goals (SDG) of the United Nations this aspect is especially addressed in SDG 8 (Decent Work and Economic Growth). Furthermore, relevant are SDG 1-3 (No Poverty, Zero Hunger, Good Health and Wellbeing), SDG 5-12 (Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry Innovation and Infrastructure Sustainable Cities and Communities, Responsible Consumption and Production) and SDG 16 (Peace, Justice and Strong Institutions).

- 2. Justice is explicitly mentioned in competences of the GreenComp. It is directly referred to in three SDGs (SDG 5: Gender Equality, SDG 10: Reduced Inequality, and SDG 16: Peace, Justice and Strong Institutions) and it is implicitly referred to in some other goals (SDG 1: No Poverty or SDG 2: Zero Hunger). Justice is discussed as justice between nations, between regions and between persons. Closely connected to this are questions about equality and inequality. Those questions relate to the distribution of natural resources, the organization of power or domination.
- 3. Feeling responsible was already addressed by Havighurst (1948) and Hurrelmann (1995). Sustainability just is another aspect of responsibility. It means being responsible for one's own actions, for one's own values and one's engagement for sustainability. This is addressed in the competency framework, too (Valuing Sustainability or Political Agency and Collective Action), but it is also expressed in the SDGs. It is about being and feeling responsible for others and the conditions for having a 'good life'. So, it is also strongly connected with the question of generations.

Out of these topics three developmental tasks (referring to Havighurst's theory) can be drawn that are described in the following paragraphs:

- 1. The first developmental task (material resources) is aiming at the existence and the continuance of the world. This refers to one's own future, the future of the society and the future of forthcoming generations. The main question raised is: on what (material) basis can this future be designed? This puts an emphasis on our management of resources. The developmental task here is, to learn how to manage our material resources to allow for a worthwhile and sustainable future, as persons, other persons and other societies.
- 2. The second developmental task (social cohesion / justice / social fairness) is focussing on the social cohesion of a society, on the social contact of persons among themselves and on the results of a comparison between a person and other persons. It is about fairness and values around it. The developmental task is to develop social values and a concept of social fairness.
- 3. The third developmental task (self-efficacy) is connected to one's own position in the world. This is not ascribed as it might have been the case in former times, it is earned, and it can be assured by one's own efforts. Therefore, it is important to be convinced of one's own self-efficacy and to be engaged in sustainability as far as one's own abilities and interests allow that.

The second source, the competence atlas from Heyse and Erpenbeck (2017) is an 8*8 Matrix of abstract competences. The authors define competences as dispositions for self-organisation in coping with new tasks

and situations for which established routines are not available. Competences in this understanding are skills to get a clear orientation in incalculable, open, complex, and dynamic situations. Self-organized action needs reflexive persons. Competences are the basic condition of a person to adapt to changing conditions in a situation and to adapt one's own strategies of behaviour to be successful (Meigel, 2022, p. 57).

Therefore, a person needs (1) personal competences, (2) social-communicative competences, (3) domain and method-related competences, as well as (4) action competences to navigate live in a sustainable way. Those four basic competences can further be subdivided, as it is shown by Heyse and Erpenbeck (2017) in the field of occupational research. The single competences cannot be derived by a logical deduction from basic competences. Instead, they represent a mixture of the basic competences with a varying individual focus.

Adapting the model from Heyse and Erpenbeck (2017) to informal learning in the field of sustainability, the following matrix (competence atlas) can be formulated:

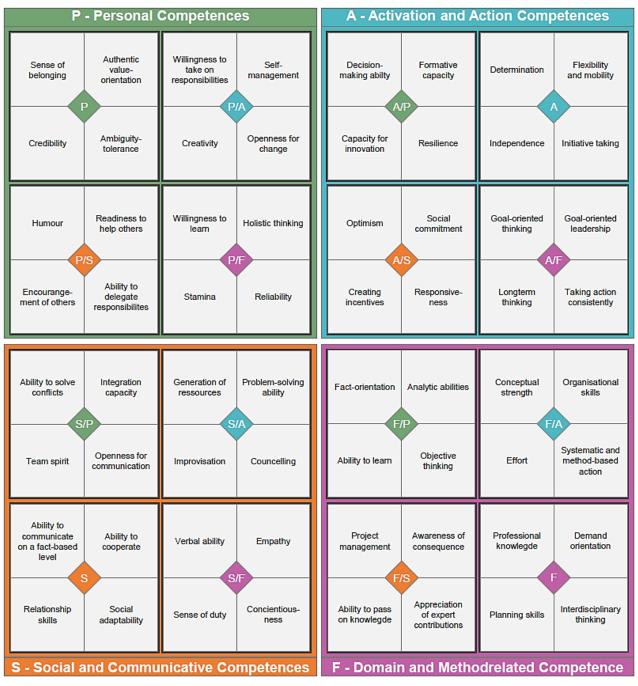


Figure 1: Competence Atlas for Sustainable Development

In the next step the three above mentioned developmental tasks (material resources, social cohesion / justice / social fairness, self-efficacy; see also the definitions above) can be integrated into the model as it is shown

by the colours red, green and yellow in the next figure. Again, the mapping cannot be done clearly and unambiguously, but it is plausible.

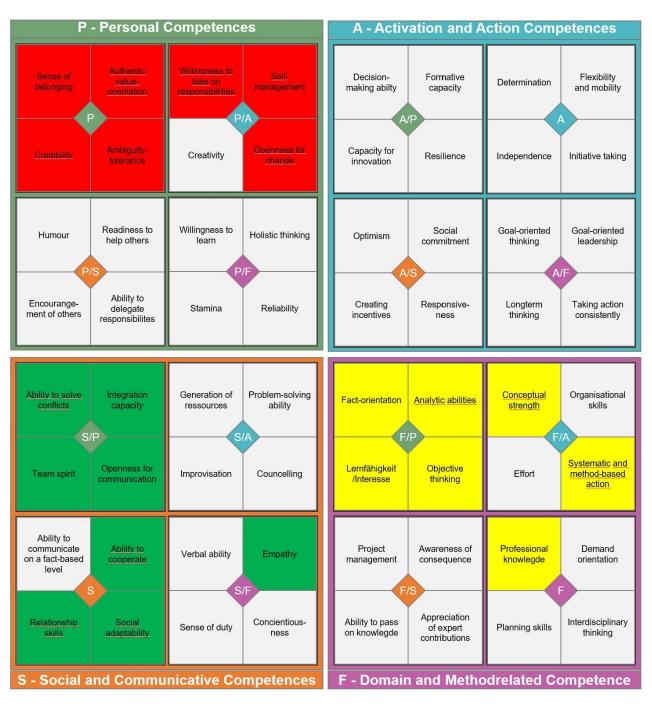


Figure 2: 5P Competence Atlas - Developmental Tasks

The marking of the competences affected by the developmental tasks shows, that there is a clear focus in the conceptual literature about ESD by the UNESCO. That does not mean that the competences that are not highlighted in the figure are not important. Their acquisition is primarily either a more general competence (such as organisational skills, verbal ability, or problem-solving ability) or it is specialized (such as planning skills or decision-making activity).

Our competence framework is derived from integrating projects in the field of ESD on the international, national, and regional level in each country. For this purpose, the competences that are required to reach the goals of the projects mentioned are deduced from information gathered from projects and initiatives in the field of sutainability development. Therefore, categories are created inductively from the projects' goals mentioned. The categories can be subordinated to the developmental tasks, and they can so be integrated into the competence atlas as well.

Competences concerning material resources

Competences for handling items of every-day use in a sustainable way

To manage items that we are using in our every-day-life (such as clothes, paper, water) in a sustainable way means that we take care of their life cycle. This implies being informed about where they are coming from, how they were produced and how they are distributed, or how they can be acquired. As well as treating things carefully, using them in a sustainable way, avoiding waste, and disposing them in a way that fits into a natural life cycle.

Competences for recycling, zero waste, and emission management These competences contain the knowledge necessary for participation in product cycles (e.g. recycling), avoiding waste and an ecological friendly way of handling emissions. The competences are especially related to the motivation for own action and for improving both private and public behaviour.

Competences for sustainable nutrition

Persons with competences for sustainable nutrition are able to grow or to buy food in a healthy and sustainable way. They know about the relevant classifications of food and healthy ingredients. They can prepare and cook in a healthy way and they know about ways of balanced nutrition and its necessity. Furthermore, they are able to dispose the rests of their food in a sustainable way.

Competences necessary to understand the scientific background of ecology

To keep up with the current knowledge and techniques supporting sustainable living it is important to address scientific discovery. This is also important to understand interrelations between different aspects of living and of regional differences in order to come to an own opinion.

Competence for integrating Education for Sustainable Development into educational activities

These competences are important to spread the knowledge and competences concerning sustainable development within formal and non-formal learning activities. This also includes competences to establish and support online-learning activities.

Competences for integrating Education for Sustainable Development into political and entrepreneurial activities

Education for Sustainable Development (ESD) allows every human being to acquire the knowledge, skills, attitudes, and values necessary to shape

a sustainable future. To bring ESD further it is important not only to apply the strategies on a personal level but also at work, together with friends, the community and – on a political level – to engage in local and national politics.

Competences concerning social values

Sense of belonging to the world (Sustainability values)

Perceiving and understanding oneself as part of the world and the critical reflection on this. Being part of a group is central for the development of values and to act within one's community. This includes the reflection of one's own role as an individual as part of different communities and society as a whole, as well as an understanding of how relationships and groups form and develop. The development of values also includes learning about other persons values, to understand, discuss, and respect these to create shared values and applying them as basis for shared sustainable action and visions for a more sustainable future.

Conscientiousness (Awareness)

Developing a more sustainable way of living requires awareness of current changes in the world that call for more sustainability. Understanding the influence an individual person can have on their community, local politics and direct surroundings can be a key towards implementing sustainable change in one's own everyday life and to start learning necessary skills. This includes the ability to understanding one's responsibility for own actions and the state of one's environment and the ability to act accordingly. These competences also include an openness for new information and for learning especially about the interconnected systems in one's direct surrounding and to keep up with new issues and ideas.

Participation and Inclusion

Developing a more inclusive society that allows participation of minor groups, young people and for example people from rural areas. This includes persons to actively engaging others, their ideas, and critical discussions of perspectives, as well as making Education for Sustainable Development accessible. It also includes an increased awareness of societal and political structures (both local and national).

Social adaptability

The ability to adapt to new situations, people or information, including active transfer of knowledge and skills for example to solve problems or educate target groups on how to adapt a more sustainable way of living.

Competences concerning self-efficacy

Evaluation of one's own sustainable actions (Role distance)

To evaluate one's sustainable action in private, social, and political life in relation to own and societal expectations.

Empowerment

Empowerment means to encourage people to take charge of their lives and to be active citizens. With regards to sustainable action this can happen through the integration of Sustainable Development Goals into the personal social network (at work, personal networks, local community among others). It is important to show enthusiasm and commitment to one's values and by this one can inspire others to get engaged for sustainable development as well.

Perseverance

Perseverance can be understood as a crucial element of self-management. It is a competence to motivate oneself to continue with one's activities and to take over responsibility for the actions undertaken by oneself and from others.

Cooperation competences (Solidarity)

Cooperation is a central aspect in sustainable action which requires shared efforts at local levels in concrete activities and initiatives. These competences include intra and interpersonal skills, such as ambiguity tolerance, authentic value orientation and the ability to solve conflicts to successfully work on tasks in teams and create solutions and shared visions for a more sustainable future. These competences are also required to sustain cooperation activities between persons and within projects and includes teaching and learning activities.

Organizational competences

These competences are important for being well organized as a person – for example for creating a structured plan of actions, to pursue a target and to manage projects.

Independently from the coding of the competences it is important to mention the level, the projects are aiming at the psychological distance of the actions and works, and the goals connected with them. According to Bronfenbrenner's social-ecological socialisation theory the following differentiations are important (including examples from Germany).

Micro level

 Actions that are directly connected to a person or those who are in a direct contact with her.

Example: Rehab republic (https://rehab-republic.de/) because it addresses concrete persons to take part in the actions

Meso level

Actions aiming at the (personal) environment of a person, including for example persons who are closely connected to each other such as e.g. family or close friends.

Example: Bergwaldprojekt (https://www.bergwaldprojekt.de/). This project allows volunteers to gather for a weekend or a week inside a forest in Germany. There they will help plant new trees and take care for the existing forest (e.g. in the subproject "Neihaufeschte (Pflanztage)" or "planting days" in English). The organisation provides accommodation, tools and food, as well as a workshop on how to plant trees correctly and then supervises the volunteers during their work. It is coded as a meso-level project, since it involves the individual volunteers and their relationship to the group they are cooperating with.

Exo level

 Actions referring to groups or events in the direct environment of a person. An environment in which persons are not a member by themselves, but which has a strong effect on the possibilities of action, such as changes for sustainable consumption or sustainable usage of energy.

Example: Community Kitchen in Share (https://www.br.de/nachrichten/bayern/die-community-kitchen-lebensmittel-retten-fuers-klima,T034FGv) because it provides food for the people and children of a certain region.

Macro level

 Actions aiming at things that relate to the whole of a society, such as values, conventions, traditions, rules and regulations, laws or ideologies.

Example: Girls Day/Boys Day

(https://www.bmbf.de/bmbf/de/forschung/chancengerechtigkeit-und-vielfalt-im-wissenschaftssystem/girls-day/girls-day-maedchen-zukunftstag.html) This project offers children the opportunity to discovers jobs that are traditionally "not for girls" or "not for boys". The children get one day off of school for participating in this project and receive the opportunity to "work" for one day in a job they are interested in (for example in a kindergarten, a media company, a construction site, in a research facility, ...) to learn that specific jobs are not only for one gender and to get more ideas about what they would like to do or learn in their own future. As the project – besides other goals – is aiming at societal changes of values on "appropriate" jobs for different genders and operates on the macro-level here.

More than three quarters of the projects are located on the micro level, which is corresponding to the fact, that informal learning is the focus of this project. Nearly 37 % of the project are connected to the macro level. That means that they are aiming at a political level. Most of the projects are affecting more than one level.

Similar to that are the results concerning the developmental tasks. Most of the projects (75 %) are aiming at competences concerning material

resources, 54 % on competences concerning self-efficacy and 56 % on competences concerning social values.

Appendix: Mapping of the Competences

Abbreviations

Descriptor (D)
Knowledge (K)
Skills (S)
Attitudes (A)
Examples (E)

Competences concerning material resources

Competences for handling items of every-day use in a sustainable way

- **D:** To manage items that we are using in our every-day-life (such as clothes, paper, water) in a sustainable way means that we take care of their life cycle. This implies being informed about where they are coming from, how they were produced and how they are distributed, or how they can be acquired. As well as treating things carefully, using them in a sustainable way, avoiding waste, and disposing them in a way that fits into a natural life cycle.
- K: Having the necessary information about local and global items and objects used in daily life, their origin, the ecological footprint of their production and transport/distribution. Knowing about options of how to acquire these things and how to use them while considering the lifecycle of the products in use. Knowledge of how to capitalize on local products to avoid the excessive costs of export products.
- **S:** Being able to use every-day-items properly, parsimoniously, and in an ecological way. Having the necessary skills to consider ecological aspects in using things and to put them into an ecological life cycle.
- **A** Being committed to respecting and incorporating ecological aspects in every-day-life and in objects of daily use.

- Knowledge about the negative effects of water pollution
- Knowledge about different forms of composting
- Skills about biodiversity protection
- Skills for combating pollution (e.g. in rivers or the ocean)
- Skills about possible consequences of environmental changes on the earth's biosphere
- Skills about the importance of vegetation in urban areas

- Skills about planning and caring for trees
- Skills of gardening at home

Competences for recycling, zero waste, and emission management

- **D** These competences contain the knowledge necessary for participation in product cycles (e.g. recycling), avoiding waste and an ecological friendly way of handling emissions. The competences are especially related to the motivation for own action and for improving both private and public behaviour.
- K Knowledge about the properties of things used in everyday life and options for their ecological use, such as technical procedures of parsimonious heating and necessary tools for this, the ecological footprint of things, procedures of recycling things of daily use or (e.g. buying second hand products), or how to dispose things correct and avoid waste.
- S Persons can select among different options with the aim to minimize their ecological footprint concerning energy (e.g. heating or travelling) and concerning tool use or reuse in daily life. They are able to integrate things of their daily use into ecological friendly cycles at the place they are living.
- A Persons are aware of their own contribution to pollution and want to reduce their ecological footprint. They are open for innovative technologies and techniques to reduce pollution of air, water and soil. They want to undertake efforts to reduce pollution.

E

- Skills about concepts such as sustainability, gas emissions, pollution, global warming, ecology
- Skills about classification, sorting and recycling of litter
- Skills about sustainable transport
- Skills about urban biodiversity
- Skills of resources for a more sustainable city
- Willingness to make efforts to reduce pollution.

Competences for sustainable nutrition

D Persons with competences for sustainable nutrition are able to grow or to buy food in a healthy and sustainable way. They know about the relevant classifications of food and healthy ingredients. They can prepare and cook in a healthy way, and they know about ways of balanced nutrition and its necessity. Furthermore, they are able to dispose the rests of their food in a sustainable way.

- K Knowing how to grow food in an ecological way or where and how to buy ecological friendly food, the classifications of food and the meaning of ingredients (e.g. of labelling). They know about balanced nutrition and its importance, as well as corresponding recipes for healthy food preparation and methods for managing the leftovers or kitchen waste.
- **S** Having the necessary farming skills to grow food in a healthy way. Being able to buy necessary ingredients, prepare healthy meals and handling leftovers while avoiding waste.
- A Interest to live healthy and to act for one's own well-being and the well-being of one's family and the society as a whole. Commitment to prepare food in a healthy way.

E

- Knowledge about food processing
- Knowledge about healthy nutrition including understanding of balance, timing and variety
- Knowledge about buying of ecological friendly food
- Skills about how to build a garden
- Skills about how to buy ecological friendly food
- Skills about planting and caring for trees
- Engagement on sustainable patterns of food consumption and production

Competences necessary to understand the scientific background of ecology

- **D** To keep up with the current knowledge and techniques supporting sustainable living it is important to address scientific discovery. This is also important to understand interrelations between different aspects of living and of regional differences to come to an own opinion.
- **K** Understanding of scientific concepts and terms concerning different aspects of living, their intercorrelation and relevant regional differences; Knowing where and how to access scientific information to solve concrete problems and knowing how to take this as a basis for one's own argumentation.
- S Persons are able to read or to listen to scientific publications and can integrate this knowledge into their own concepts. They can build a critical view on scientific discovery (e.g. being able to distinguish between scientific and non-scientific knowledge) and can draw practical conclusions, own argumentation, and scientifically informed actions from it.

A Persons are interested in scientific discovery, want to stay informed thoroughly on specific topics, and take part in discussions on specific topics.

E

- Skills about topics of sustainable development from a scientific perspective
- Understanding of scientific backgrounds of attributes, consequences, and action plans
- Skills about causes and effects of climate change
- Knowledge about balance between consumption and resources
- Scientific skills about plant ecosystems
- Skills about the healthy development of local communities
- Understanding of concepts of equality and equity

Competence for integrating Education for Sustainable Development into educational activities

- **D** These competences are important to spread the knowledge and competences concerning sustainable development within formal and nonformal learning activities. This also includes competences to establish and support online-learning activities.
- **K** Knowledge about effective learning and teaching methods. Knowledge about the importance of informal learning and how to facilitate informal learning-activities. Knowledge of institutions already engaged in Education for Sustainable Development (ESD) and how to further support them.
- S Ability to act as role model for sustainable development and to lead by example. Being able to explain complex contexts to interested persons in a passionate way, for example through design or selection of appropriate learning activities such as online-courses.
- **A** Engagement in teaching. Passion to disseminate knowledge and experience on sustainable development.

- Skills concerning fundamental personal competences, including skills about self-regulation, flexibility, and wellbeing
- Skills about self-reflection on the topic of human rights education, in relation to citizenship education based on the 'Framework for the Key Citizenship Competences'
- Knowledge about curriculum development on the topic of environmental sustainability

- Skills about implementation of citizenship education in EU countries based on the 'Framework for the Key Citizenship Competences'
- Skills about staff training on sustainability
- Skills on how to help learners to develop sustainability
- Knowledge of methods on the application of human rights education, in relation to e.g. children, culture and sports, or the environment

Competences for integrating Education for Sustainable Development into political and entrepreneurial activities

- **D** Education for Sustainable Development (ESD) allows every human being to acquire the knowledge, skills, attitudes, and values necessary to shape a sustainable future. To bring ESD further it is important not only to apply the strategies on a personal level but also at work, together with friends, the community and on a political level to engage in local and national politics.
- K Knowledge of formal and informal structures in relevant institutions and their relevance as well of their interdependence. Knowledge of the decision-making processes at work and in local and national politics.
- Skills necessary to understand (social) systems and to create and organize networks. Skills to convince persons to participate in sustainable development. Being able to organize shared actions in the field of sustainable development. Networking and Entrepreneurial skills. Leadership skills. Being able to engage concretely, together with other people in public activities.
- A Engagement for sustainable development in private and public contexts. Political interest and will for own engagement in sharing knowledge and experiences with sustainable development. The willingness to use own ideas in actions and to contribute to change.

- Experience in collaborating with local communities and large partnerships on the topics like justice, human rights, sustainable development, and democratic participation
- Knowledge about tools for political advocacy on the topics like justice, human rights, sustainable development, and democratic participation
- Knowledge about applying ESD training frameworks for teams and organisations to their own settings and purpose

 Knowledge about local and wider community cooperation on the topic of environmental sustainability

Competences concerning social values

Sense of belonging to the world (Sustainability values)

- Perceiving and understanding oneself as part of the world and the critical reflection on this. Being part of a group is central for the development of values and to act within one's community. This includes the reflection of one's own role as an individual as part of different communities and society as a whole, as well as an understanding of how relationships and groups form and develop. The development of values also includes learning about other persons values, to understand, discuss, and respect these in order to create shared values and applying them as basis for shared sustainable action and visions for a more sustainable future.
- K These competences contain knowledge about values and their relevance to persons thinking and behaviour as well as to group dynamics. They also include knowledge about how individual and societal values interrelate with sustainable behaviour and why such behaviour is relevant for the world (e.g. through how climate change impacts different social groups)
- **S** People can communicate with others, build and maintain relationships, develop their own personality as individual and as part of a group and the world. They can reflect on and show empathy for own and other's values as well as debate diverging principles.
- A People are aware of their contributions to a group and their potential impact to their community, they are open for being an active part of a group and take on responsibilities. They are curious and willed to listen to perspectives and ideas of others, including those of minorities. They are aware of the concept of sustainable goals (SDGs) and willing to participate in resolving unsustainable problems.

- Skills about fundamental social competences, including skills about empathy, communication, and collaboration
- Skills about values, skills, and attitudes of mutual respect in accordance with human rights and democracy
- Skills about how to embody sustainability values
- Skills about solving problems through teamwork

- Getting a feeling of togetherness by meeting many likeminded persons
- Getting a feeling of togetherness by cooperating with likeminded persons
- Reflecting about the own value to visit side in all parts of the world and its impact on sustainability
- Knowledge about SDGs and their implementation in the own local social communities

Conscientiousness (Awareness)

- Developing a more sustainable way of living requires awareness of current changes in the world that call for more sustainability. Understanding the influence an individual person can have on their community, local politics and direct surroundings can be a key towards implementing sustainable change in one's own everyday life and to start learning necessary skills. This includes the ability to understanding one's responsibility for own actions and the state of one's environment and the ability to act accordingly. These competences also include an openness for new information and for learning especially about the interconnected systems in one's direct surrounding and to keep up with new issues and ideas.
- **K** These competences contain knowledge about how people, their behaviours and their local or global environment are interconnected. They also include an understanding of one's own perception and how this (in-)forms one's opinion and how to search for and find information.
- S These competences contain skills concerning self-awareness, self-reflection, and self-efficacy. This includes the critical reflection of own perceptions and concepts, the search for and differentiation of trustworthy from unreliable information and the critical integration of new information into one's own concepts.
- A Persons are open for taking responsibility for challenging tasks, are willed to face inconvenient truths and to both learning or teaching new things. The pay attention to their environment and other people and seek exchange and new information.

- Understanding how own actions can make an impact
- Develop a sense of responsibility in favour of the protection of the planet's ecosystems and for a clean environment
- Feeling of responsibility for the well-being of one's city and the neighbourhood

- Ability to identify barriers that prevent people from having equal rights and living in dignity
- Skills about enacting one's citizen's rights
- Getting a feeling of responsibility to mobilize local authorities to implement the 2030 Agenda in their towns
- Feeling of responsibility for taught topics
- To become aware of generated marine pollution
- Awareness about pollution dangers
- Social conscience about sustainable transport

Participation and Inclusion

- **D** Developing a more inclusive society that allows participation of minor groups, young people and for example people from rural areas. This includes persons to actively engaging others, their ideas, and critical discussions of perspectives, as well as making Education for Sustainable Development accessible. It also includes an increased awareness of societal and political structures (both local and national).
- **K** knowledge about societal structures and societal minorities, the local and national political systems, as well as existing options for participation and how to create new ways for participation.
- **S** Engaging others in participatory action, develop shared visions of sustainability.
- **A** Openness for learning, new perspectives, and respectful interaction.

E

• Skills about values, skills, and attitudes of mutual respect in accordance with human rights and democracy

Social adaptability

- D The ability to adapt to new situations, people or information, including active transfer of knowledge and skills for example to solve problems or educate target groups on how to adapt a more sustainable way of living.
- **K** These competences contain knowledge about one's own resources and how knowledge can be transferred, communicated or shared.
- **S** These competences contain skills concerning self-reflection and the ability to teach and transfer knowledge.
- A Persons are perceptive of their (social) environment and are willed to focus on unknown or challenging things and to learn or teach others.

- Understanding that the own actions can make a difference
- Raising awareness and spread the culture of sustainability
- Skills about fundamental social competences, including skills about empathy, communication, and collaboration

Competences concerning self-efficacy

Evaluation of one's own sustainable actions (Role distance)

- **D** To evaluate one's sustainable action in private, social, and political life in relation to own and societal expectations.
- **K** Knowledge about differentiated impact of sustainable actions at local and global level in the ecological, economic, and social dimension and how to evaluate the impact on local and global level
- S Being able to estimate the impact of sustainable action, being able to reflect critically on the own action and being able to deduct and initiate or propose corrective action
- A Openness for critical thought and opinion; Openness for self-reflection

Empowerment

- **D** Empowerment means to encourage people to take charge of their lives and to be active citizens. With regards to sustainable action this can happen through the integration of Sustainable Development Goals into the personal social network (at work, personal networks, local community among others). It is important to show enthusiasm and commitment to one's values and by this one can inspire others to get engaged for sustainable development as well.
- K Knowledge about own resources and about how oneself and other people can be motivated for taking up actions and how to sustain both motivation and action. Knowledge about Social Development Goals and possibilities of their implementation into daily live. Knowledge about how knowledge can be shared.
- S If someone is an empowering person, they can excite others to engage in a topic, to change their behaviour, and/or to participate in movements concerning sustainable development. It includes reflecting on and increasing self-determination.

An empowering person must have self-determination, social interest and willingness for engagement with relevant topics and self-development. This can also include persuasive skills and empathy.

E

 Skills on strategies aiming at changing from "awareness" to "active engagement" that will strengthen the capacities of citizens, trainers, local authorities and civil society organisations.

Perseverance

- **D** Perseverance can be understood as an essential element of self-management. It is a competence to motivate oneself to continue with one's activities and to take over responsibility for the actions undertaken by oneself and from others.
- **K** Understanding on psychological barriers of perseverance and how to address them.
- S Patience and endurance. Leadership. Competence of being active and holding on in doing one's own things. Taking over responsibility. Carry others along and working together over a long time.
- A People are not only used to take strong efforts to reach their goals, but they also continue their efforts after having failed. They are strongly convinced that patience and endurance are important to reach their goals and that they will be successful.

E

• Activist capacities

Cooperation competences (Solidarity)

- D Cooperation is a central aspect in sustainable action which requires shared efforts at local levels in concrete activities and initiatives. These competences include intra and interpersonal skills, such as ambiguity tolerance, authentic value orientation and the ability to solve conflicts to successfully work on tasks in teams and create solutions and shared visions for a more sustainable future. These competences are also required to sustain cooperation activities between persons and within projects and includes teaching and learning activities.
- **K** These competences contain knowledge about how people act and think, how groups function and how people can help each other to learn. For any cooperation with regards to initiatives it is important to

- understand one's partners to stay connected with them even if there are difficulties.
- S Persons can participate in the definition of sustainable goals. They can communicate with others, find their own role in a group (e.g. as leader), build and maintain relationships, develop solutions to problems together. They can uphold contact to relevant persons and show central skills such as empathy, stress and ambiguity tolerance, role distance.
- A Persons have an interest on others and understand that actions are often more effective if people work together. For this a sense of solidarity and reciprocity is essential. Persons are aware of their own standpoints and can negotiate shared goals and maintain the intention to solve problems together. They are open to contributions from others and maintain a flexible way of thinking to find good compromises.

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- Competences of social cooperation for sustainable cities and their well-being
- Getting a feeling of responsibility for the well-being and image of the city by realizing that the group can make a difference
- Feeling of togetherness with like-minded persons and solidarity
- Developing an attitude of togetherness by meeting many people with similar goals
- Skills about civic participation
- Understanding group dynamics
- Knowing the local social networks

Organizational competences

- **D** These competences are important for being well organized as a person for example for creating a structured plan of actions, to pursue a target and to manage projects.
- **K** Understanding of how to divide problems into sub-problems which can be solved and others for which a solution needs to be developed. Knowledge on how to conduct structured planning of ways to find solutions for the problems at hand.
- Skills necessary to solve problems, Coordinating activities of different persons. Ability of being a leader and thinking ahead in terms of setting goals for an initiative.

A People are convinced that success is not a matter of fate or good luck, but rather a matter of effort. Also, they are willed to take effort in a structured and rational way.

- Competences for organizing advocacy events
- Organizational skills
- Skills of the organisation and management of waste collection

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