



MILLORA DE LES EXPERIÈNCIES D'APRENTATGE: TRANSFORMACIÓ I REPTES

TÍTOL: Sustainable Competences in Adult Education

Subtítol: Aprendizaje informal de Sostenibilidad

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1. RESUM:

Tras constatar que los documentos políticos y los marcos de competencias no abordan adecuadamente la educación (informal) de adultos, el proyecto Erasmus+ 5P desarrolla un marco de competencias para diseñar, implementar y evaluar programas de aprendizaje en el ámbito de la sostenibilidad. Se utiliza un enfoque de tareas identificando 3 tareas de desarrollo sostenible para agregar las competencias individuales y desarrollar una herramienta para la gestión de competencias sostenibles.

2. ABSTRACT:

The Erasmus+ project 5P competences aims to develop a competence framework tailored to the specific needs of adult education in the field of sustainable development. Given the fact that current policy documents and competence framework does not address adequately (informal) adult education, the project develops a sustainable competence framework as a tool to design, implement and evaluate learning programme on sustainability for adults outside the universities.



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3. PARAULES CLAU: 4-6

Sostenibilidad, competencias. Educación para adultos, tercera misión

4. KEYWORDS: 4-6

Sustainability, competences. Adult education, third mission

5. DESENVOLUPAMENT:

The Erasmus+ project 5P competences aims to develop a competence framework tailored to the specific needs of adult education in the field of sustainable development. The competence framework is intended to support the development of courses on sustainability topics, helping to ensure that educational offers are tailored more precisely to the needs of the course participants.

This approach addressed the Third Mission of the Universities contributing to education for sustainability for the whole population. It addressed not the formal education offers of the universities, but its wide range of activities including citizens science project with sustainability contents. The project aims to develop an online sustainable framework of competences that adults must learn in the way to sustainable action. The programme organizers can manage activities to design, implement and evaluate their programs on sustainability topics.

In the first stage of the project, policies documents on adult education in the countries covered by the project (Germany, Greece, Romania and Spain) were analysed for its relevance for the project objective. The results confirm the impression that adult education for sustainability is an underdeveloped area at all education levels. This is confirmed by the analysis of relevant international references published by the United Nations e.g., Incheon-Declaration, the UNESCO's education for sustainable development goals (UNESCO, 2017).or the European Union' Green Competence framework (EU, 2022).

From the perspective of informal adult education, these documents are insufficient for several reasons:

- the learning objectives and the competences are formulated in a very general manner. That means that the justification of their relevance does not necessarily cover the concept of sustainability e.g. like 'systems-thinking competency', strategic competency' or 'self-awareness competency (UNESCO, 2017, p. 10).
- the educational objectives are primarily connected to formal learning at schools, VET and universities. These catalogues are not connected to problems or situations of everyday life. But the everyday life is the reason for informal learning.
- 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 individual persons or which are giving reasons for the order in which the parts of the competences can or should be taught.



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Adult education on sustainability and the respective competence development should address more situations of everyday life outside the formal education environment and the professional life. To do so, 5P-Competence used the development tasks approach as originally proposed by Havighurst (1972) and further developed, for instance, by Hurrelmann (19986) for his socialisation approach. We take this approach as a reference for the development for general development tasks in relation to sustainable development.

Looking at the literature there are three concepts standing in the foreground that are relevant for the competences for sustainability and the learning objectives: Generation, justice and responsibility.

- The topic of generation is closely connected to sustainability and is explicitly mentioned in the competence framework GreenComp. The idea is, that every generation is living in a world (or learning to live in a world) that was influenced and designed by the previous generations. She overtakes the world from these generations, is continuing some things and changing others so that she can give the world to the next generation(s).
- Justice is directly mentioned in some competences of the GreenComp. It is referred to in some sustainable development goals (SDG 5: Gender Equality or SDG 10: Reduced Inequality) and it is implicitly referred to in some other goals (SDG 1: No Poverty or SDG 2: Zero Hunger).
- Feeling responsible was already addressed by Havighurst and Hurrelman. Sustainability is just another aspect of responsibility. It means being responsible for one's own actions, for one's own values and one's engagement related with sustainability aspects.

Related to these topics three developmental goals can be drawn out:

- The maintenance of the own existence and the continuance of the world for the next generations. That means the future of one's own, the future of the society and the future of the forthcoming generations. The main question that is raised is: on what (material) basis can this future be designed? This means our management of resources. The developmental task is to learn how to handle our material resources to give us as persons, other persons and other societies a worthwhile and sustainable future.
- The second developmental task 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 human beings. It is about fairness and values around it. The developmental task is to create social values and a concept of social fairness.
- The third developmental task 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.

Under this perspective, in each country a search for formal and informal learning project on sustainability was undertaken with the objective to analyse if and how they address specifically these three development tasks and which actual competence they are developing.

The competence approach has gained in the last decade high relevance in the design of school and university education, as well as in IVET and CVET. It can be understood as steering a functional oriented learning process for instance to societal demands of knowledge and



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behaviour or labour market requirements. Adult education - excluding here CVET - often has not such functional orientation (e.g. universities' programmes for older people, talks, discussion on sustainability for a broad public, broad offer of activities in civic centres or the participation of citizens science projects). Other local activities on sustainability do not even have the declared learning objectives in spite of that learning occurs.

To promote sustainable behaviour in society, these informal learning activities are essential. In so far, the development of a framework of sustainable competence could be a useful tool to foster learning on sustainability in these activities.

The identification of a wide range of projects in sustainability and the analyse of the competences – defined in terms of knowledge, skills, and attitude – brings up a wide range of singular competences, which requires an aggregation to general competences. To do this, the project take as reference the work of Erpenbeck & Heyse (2007) who have developed a so-called competences atlas (see Figure 1). It includes 64 individual competences, which could be used to assemble profiles of competence behaviour in specific areas as water management, waste management, caring of the environment, etc. This competence atlas is used as an example for the development of a flexible framework for sustainable competence as a tool for the tailored design of learning programmes and other type of activities, which include learning.

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 (Figure 2). Again, the mapping cannot be done clearly and unambiguously, but it is plausible. 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 sustainability 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



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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



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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 under-taken 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 re-quired 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.



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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:

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

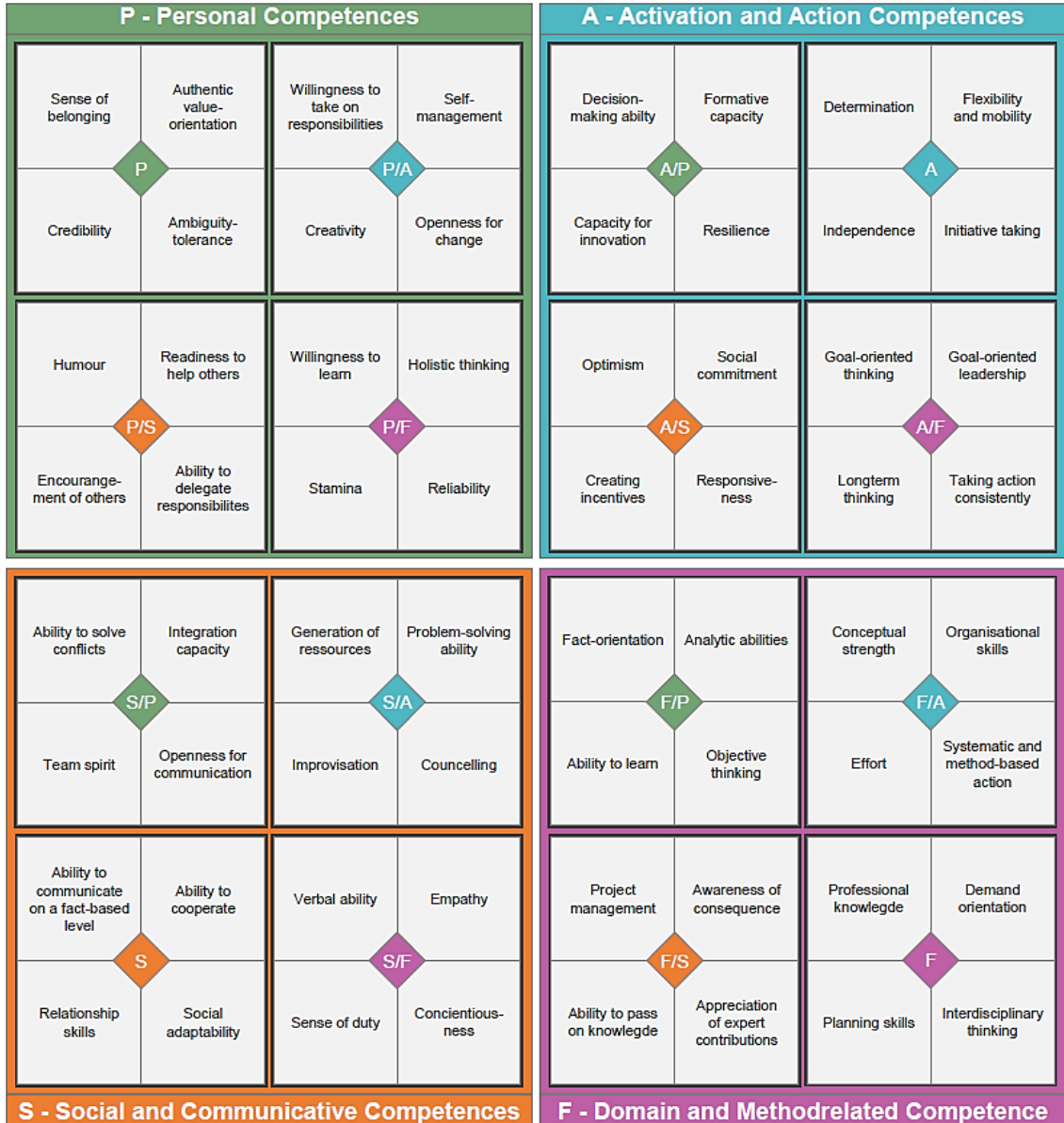
More than three quarters of the projects are located on the micro level, which is corresponding to the fact, that informal learning is the focus of this project. Nearly 37 % of the project are connected to the macro level. That means that they are aiming at a political level. Most of the projects are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



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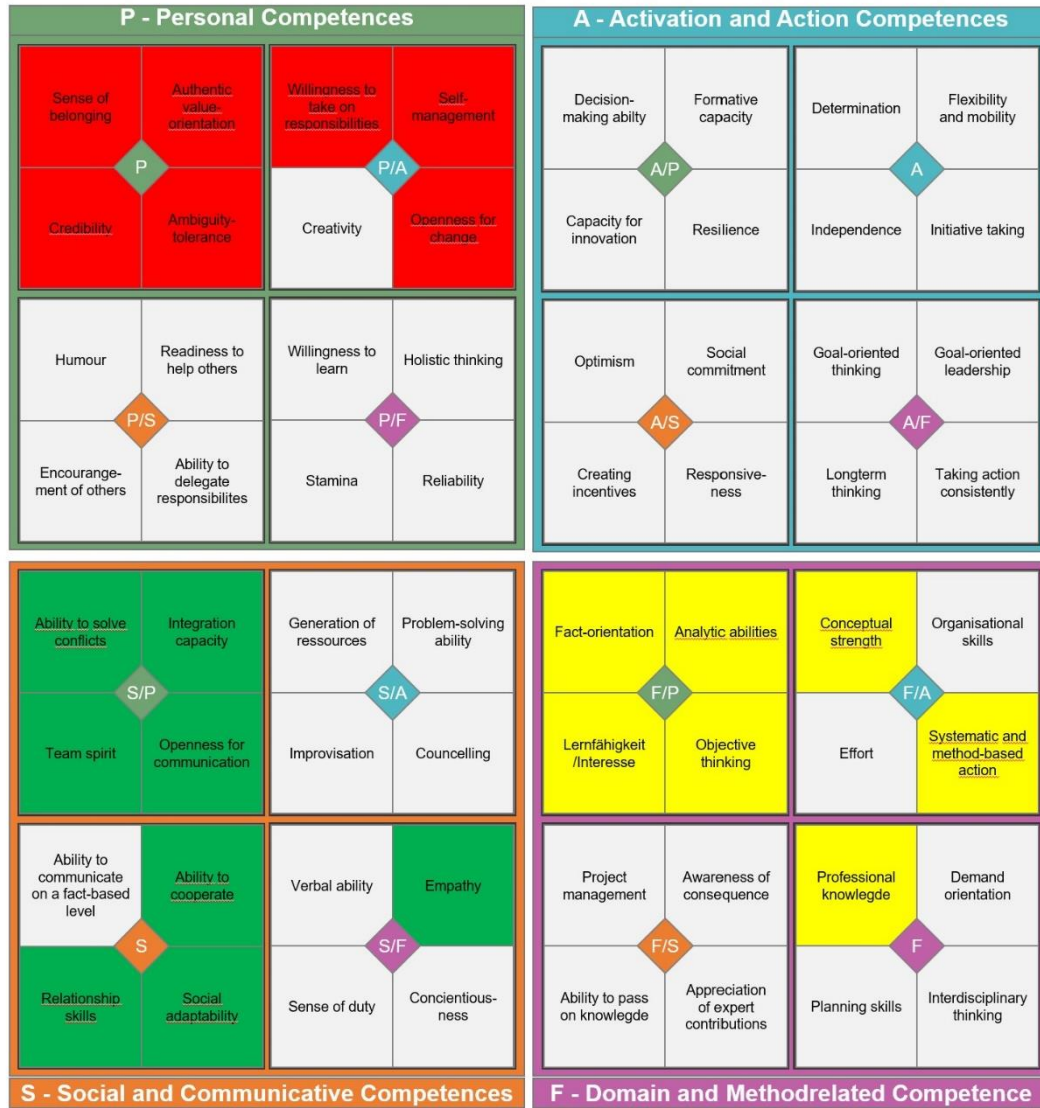
5.1. FIGURE 1: COMPETENCE ATLAS FOR SUSTAINABLE DEVELOPMENT





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5.2. FIGURE 2: 5P COMPETENCE ATLAS - DEVELOPMENTAL TASKS



On the basis of Hezse, V. & Erpenbeck, L. (2017). KODE® KompetenzAtlas



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