

# EKO - Report 02/2020



## Input Paper and Recommendations Circular Economy in Youth Education

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**Summary:** In the face of an unabated growth of global resource consumption, and the consequent environmental degradation and climate change effects, the shift to a circular economy is considered as an urgent need, if we want to ensure a viable future for humans on this planet. Education is our most effective tool when it comes to shaping our future, hence, we must prioritize the readjustment of our current education model, into a system that can nurture young people who are aware of the sustainability challenges that our world faces and who are equipped with ideas, values, attitudes and skills on how to tackle them.

### **Introduction**

Our current global economic system is based on a “produce-use-dispose” model that at the current rate of consumption is exhausting the limited natural resources of our planet. In parallel, it is resulting in copious waste production coupled with severe environmental degradation and greenhouse gas emissions, which contribute decisively to one of the most pressing challenges of today, i.e. the climate change. Circular economy (CE) is an alternative economic model that can decrease the risk of resource scarcity and has been proposed as a climate change adaptation response, which decouples economic activity from the consumption of finite sources through an environmentally harmful production process. Thus, rethinking our current economic model and redirecting growth from a linear to a circular pathway, is an urgent need for our society, if we want to ensure a viable future for the generations to come on this planet.

### **Enabling the transition to a Circular Economy**

The transition to a CE cannot be based solely on technological and economic innovation, because no such innovation can change the attitudinal/cultural underpinnings of consumption behavior, waste generation, waste management and all other social practices that enable and perpetuate linear economic activity. To make the move from our current, overconsumption-society to a circular economy we need an organizational, cultural and individual shift, in which a sense of “ecological stewardship” will characterize all layers of society, all stakeholders, all citizens.

Education from an early age to the level of higher education is in the position to cultivate and sustain new visions for society, and is, thus, a key factor to attaining a sustainable, circular economy and a collaborative and caring society.

### **Recommendations on Youth Education Strategies for a Circular Society**

As the transition to a circular economy necessitates a systemic change, education for the circular economy and sustainable societies should include teaching and engagement practices aiming to transform youth into change agents, who are capable of inducing holistic sustainable change. An effective youth education scheme will be comprehensive, which will not only focus on conceptual knowledge, but will have a threefold goal: to enhance CE-literacy, to foster a sustainability mentality and to cultivate eco-responsible citizenship. To achieve this goal, the following is recommended:



### *1) Increase investment in early childhood education for sustainability and “circular-thinking”*

Sustainable societies can only be built, if children start developing a strong foundation for environmentally conscious, active and responsible citizenship throughout their most crucial formative years, when they develop their basic values, attitudes, skills, behaviors and habits. Early childhood education for sustainability should be much broader than traditional environmental education, i.e. not limited to information about the natural environment and outdoors activities for appreciating the beauty of nature, but also including opportunities for children to be involved in thoughtful discussions about sustainability and in concrete environment-protection actions. For instance, children can be introduced to the 7Rs for sustainable development (reduce, reuse, recycle, respect, repair, reflect and refuse) and explore how these principles can apply to their daily experience. They can also be encouraged to think critically about things taken for granted and to find alternative “circular” solutions (e.g. questioning overconsumption patterns through conversations about familiar foods, toys, clothes and facilities).

Based on the core values of sustainable development, the learning objectives of young children’s education for circular economy should include cultivating their awareness, knowledge, values, behaviors and habits related to sustainable development, and to strengthen their capacity to transfer the ideal of circular economy into reality.

### *2) Prioritize effective training for educators and teachers*

Educating is an extremely complex task, necessitating a solid knowledge base along with a wide-range of skills and virtues (e.g. understanding and planning, communicating, empathizing, transmitting both information and values, guiding and inspiring). Educating for sustainability and circular economy is even more complicated, as the teachers are called to not only have new, specialized knowledge, but also instill ethical and social commitment for a novel perception of society in youth. To meet these high demands, it is crucial that the policy makers, at all levels, support and train teachers and educators, so that they can understand the cardinal role they play in building a circular and sustainable society, and develop all skills and competences necessary to perform this role effectively. Through life-long learning opportunities it is important that educators develop a deep conceptual understanding on circular economy, an ecosystem view of reality that will allow them to apprehend connections between old and new information and the ability to use contemporary pedagogical approaches (e.g. audiovisual materials, case studies, experiments and field work, in-class group activities and group projects on local problems/issues, peer-to-peer learning, use of ICT tools, collaboration with the local community, etc), so that they prepare learners who can pose challenging questions and have the ability to, and interest in solving problems, as CE-literate and eco-responsible citizens.

### *3) Apply critical pedagogy principles and teaching methods*

Since the transition to a circular economy requires not only technological and economic innovations, but also a sociocultural shift, so that the community is willing and able to make use of these innovations, effective education for a circular economy demands a socially-critical pedagogy, i.e. education that facilitates a process of reflection as a preparation of action enabling personal and social change.



Current education approaches should, thus, undertake the difficult task of preparing youth to reconsider consumption habits and values, and to readjust the perception of product cycles and waste, as well as of relations of humans with nature and natural resources. Applying the principles of critical pedagogy, has the potential to nurture the competences and values youth needs to succeed in the above tasks for an effective education for a circular economy:

- i. thinking critically and challenging social structures (principle 1) will enable youngsters to imagine a different society, where production and growth are redefined;
- ii. changing the classroom layout and dynamics, so that youth are not passive receptors but active creators of learning (principle 2) will help the education process become more relevant and connected to the learners' own lives, effectively increasing their engagement and awakening to personal responsibility and individual potential for change;
- iii. bridging the gap between theory and transformational action ["praxis"] (principle 3), by facilitating youth to participate in collective actions for sustainability and awareness, will empower youth to not just critically reflect on experiences and information and synthesize into new knowledge, but also apply it to address real life situations.

#### *4) Set up peer-to-peer education programs*

Peers play a critical role in the social development of most young people, and tend to influence each other in both positive and negative ways. Peer education builds upon this strong influence by providing youth the opportunity to teach, share and learn from each other, within a supportive environment, and in a structure manner oriented towards positive results. Peer-to-peer learning education can serve as a valuable tool for educators in their efforts to foster a new sense of concern for global ecological problems, a pro-environmental attitude, a sense of empowerment, and the CE-literacy necessary for youth to take sustainable actions and assume ecological responsibility. There is a wide-range of peer-to-peer learning tools, which can be adapted to circular economy education needs, such as role-plays and games about the future of humanity in the face of climate change, having students give presentations to their fellow students on sustainable development issues, or having them organize educational activities and awareness events within the school or open to the public, through which they can cultivate a sense of leadership and ownership for making the transition to circular economy happen.

#### *5) Pay attention to out-of-classroom learning contexts*

Although particular educational processes may be needed after class, education itself does not. Informal learning about sustainable development occurs outside schools and official educational curricula, and has a huge impact on the development of pro-ecological attitudes in children and young people. To affect human mentality and behavior, one must simultaneously inspire the attitudes of role models, peers and the community as a whole, because the consistency between what is learned in the classroom with what is experienced outside of it is the determining factor of education efficacy for any field that depends on attitudinal changes.



To achieve this, it is important that issues about sustainable development and circular economy are disseminated and communicated to young people through advertisements, social media and ICT tools, so that learning about and for sustainability is sustained in informal settings and becomes part of life for the young generation. Along the same line, there should be opportunities for decision-makers, experts and professionals in key positions of influence to act as role models for youngsters with regards to sustainability issues (e.g. frequent discussion events in schools/universities, interviews of leaders by youngsters about their lifestyles, to find out whether these are abiding to the principles of sustainable development).

In conclusion, introducing circular economic thinking and facilitating the development of an ecologically proactive attitude could have a profound impact on our education system and contribute decisively into making our societies less wasteful and more resourceful. This novel education approach could help us nurture future generations with more eco-responsible mindsets and more sustainable habits, that also have the tools with which to help our planet. However, the potential of CE-education will not be unlocked unless we take the necessary steps to impart the right values and messages from early childhood on to adulthood and higher education, and from the educators and methods inside the classroom to the broader learning context and the whole community.

#### **References**

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