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Advancing Sustainable Development Through Higher Education: A Policy Perspective

The education system plays a vital role in building all the required knowledge and capacities for a more resilient society that aligns with the achievements of the Sustainable Development Goals (SDGs). Research and education are known as factors in shaping and mapping environmental awareness starting from an early age and following all the stages of learning. These priorities are crucial and relevant for advancing sustainable development in the Western Balkans (WB) region.

This policy paper examines how the integration of SDGs into higher education curricula is being facilitated through EU-supported initiatives. Specifically, it explores how the European Green Deal framework informs and enhances educational reforms. The key measures include the enhancement of academic programs that already exist, the development of new education materials, training of the education staff, and the promotion of research in sustainability and climate science.

The following sections will outline strategies for strengthening regional capacities in embedding SDGs into higher education, incorporating a more proactive approach to environmental sustainability, climate action, and resilience. The policy paper concludes with policy recommendations that align with the broader EU integration goals of WB countries, emphasizing the importance of regional cooperation in addressing shared challenges, exchanging knowledge, and transferring best practices.

Education and Sustainable Development

The Sustainable Development Goals (SDGs) set out by the United Nations advocate that learners need the knowledge and skills to promote sustainable development. There are various ways to integrate sustainable development issues into the education system. Education for Sustainable Development (ESD) is a multidisciplinary and comprehensive approach that not only includes essential content knowledge on disasters, climate change, and other sustainability topics but also emphasizes the importance of making schools and education systems resilient, sustainable, and climate-proof. While sustainability education presents considerable challenges, it also offers significant opportunities. Education plays a crucial role in building adaptive capacity, as it provides people with the knowledge and skills needed to make informed decisions about how to adapt their lifestyles and choices to a changing environment.

Teaching sustainability requires reorienting education toward new methods of instruction that address the interdisciplinary nature of sustainability issues. The focus here is not just on expanding educational content, but also on ensuring that it is relevant and suitable for promoting sustainability (Hopkins & McKeown, 2002). Consequently, pedagogy in the field of sustainability is complex. Instructors often need to extend beyond their areas of expertise, incorporating new content and methodologies to foster critical thinking and problem-solving skills in students. In addition, to effectively address sustainable development issues it is essential to establish interfaculty collaboration in order to capture the interdisciplinary nature of teaching within the field (Makrakis & Kostoulas-Makrakis, 2016). Boeve-de Pauw et al (2015) indicate that when teachers incorporate the environmental, social, and economic aspects of sustainability issues into their teaching curriculum –considering their historical, present, and future contexts, as well as their local, regional, and global implications—students develop a deeper understanding of the complexities of sustainable development (SD).

This teaching method fosters sustainability consciousness among students. Luckily, the responsibility for ESD does not rest solely on formal education. Other channels of education, such as the non-formal education, promoted through agencies through training and other awareness campaigns, along with informal education sources like general media, in collaboration with formal education institutions, contribute to educate people across all ages and backgrounds and facilitate the development of policies that lead to effective ecological and social outcomes (Hopkins & McKeown, 2002).

Finally, besides new approaches on teaching and learning, sustainability challenges have urged schools and educational institutions to adopt green policies that promote sustainability through eco-friendly building designs and maintenance practices, thereby reducing their own ecological footprint (Berchin et al, 2021; Leal Filho et al, 2019; Fourati-Jamoussi et al, 2015).

In summary, the education system can influence the achievement of SDGs by enhancing literacy, employing teaching and learning methodologies that foster critical thinking and problem-solving, and by making university operations more sustainable and environmentally friendly (Kopnina, 2012; Anderson, 2012; Hamilton, 2011). However, as the role of education in addressing these challenges is increasingly recognized, its potential to contribute to adaptation and mitigation efforts has yet to be fully integrated into mainstream development thinking. Designing and employing appropriate and adequate research methods to address the complexity and multiplicity of learning requires further investigation and innovation. (O'Flaherty & Liddy, 2018; Glavič, 2020). This is particularly true for the Balkan region.

The Needs for Education for Climate Change in the WB Region

A thorough evaluation of the needs for education for sustainable development in the WB region is provided in the following section. This needs analysis has used a systematic approach to studying the state of knowledge, ability, interest, and attitude of stakeholders included in the process of ESD. We have organized the needs analysis in 4 main parts:

• *impact*, outlining how education system can reach the targeted audience; *awareness*, outlining the gaps in the education provision within the existing programs and the needs to raise awareness among stakeholders; *demand*, outlining the potential demand of stakeholders for the knowledge and capacities on SD issues; *approaches*, outlining the methodologies used to reach the stakeholders.

Awareness. An analysis of sustainability awareness in the WB reveals a significant disparity in climate education between the EU and the WB. A review conducted within an EU project identified over 107 programs across the EU and UK focused on resilience and risk management, many integrating technical disciplines like climate science, economics, and finance (K-force, 2017a). Similarly, Holloway (2014) documented around 100 master's programs in 48 countries covering climate change and sustainability. In contrast, WB education systems exhibit limited integration of green economy, climate change, and sustainability topics, resulting in a shortage of qualified professionals to meet regional needs (K-force, 2017b). By addressing this gap it is important for strengthening social,infrastructural and economic resilience in the WB region.

Since the post-communist transition, the education curricula in the WB region have been revised with the Bologna Process, with the EU-backed reforms. Even though the undergraduate programs remain mostly traditional, postgraduate studies are shifting towards environmental awareness through collaboration between the EU and WB institutions. However, WB higher education offerings still fail to meet sustainability demands. While there is absence of sustainability terminology and climate in the Balkan languages, including the rigid education structures, constrained labor market, and cultural barriers undermine the progress.

Impact. Global discussion on climate change and sustainability has been present since the 2015 UN Paris Agreement. It is important to achieve the European Green Deal's objectives that require cooperation beyond EU borders, as we know climate challenges are transnational and affect all of us. All sectors—institutions, households, and businesses must collaborate to achieve sustainable economic development. As mentioned above, education plays a crucial role in improving and cultivating awareness and resilience. In the WB region, the educational systems are still struggling and trying to shape higher education with the ongoing reforms. The research done by Knez et al. (2022) highlights that the EU should leverage its resources to support its neighbouring countries in advancing sustainability efforts by understanding the climate mitigation initiatives in the WB region remain limited. This happens due to the lack of insufficient awareness and policy commitment.

Approaches. Given the pressing need for sustainability education, WB higher education institutions are actively developing strategies to meet regional demands for Education for Sustainable Development (ESD). Key approaches include:

- Curriculum Innovation: Integrating topics related to climate into existing academic programs and development of courses.
- Learner-Centred Pedagogy: Adopting problem-based and learning methodologies to advance student engagement.
- Industry Collaboration: Strengthening ties with business through partnerships and joint programs.
- Research and Innovation Networks: Establishing important technological and scientific exchange between the EU institutions and WB.

These approaches have already been implemented through various higher education initiatives in the region. The following section will examine innovative projects that have successfully advanced ESD in the WB, demonstrating the potential for continued progress in climate education.

Demand. The demand for climate education is evident among various stakeholders, including students and businesses. A Youth Safety Culture survey (K-Force, 2017c) found that 59% of young people in WB countries lacked exposure to resilience training in their educational institutions. However, the interest in courses on climate change, resilience and sustainability is strongly present in 20% that consider a master's degree in the field. This emphasises a significant opportunity for a climate-conscious culture and developing human capital in this regard. Similarly, Finger et al. (2021) reported demand among WB students for environmental education and underscored the need for more international cooperation and funding to integrate climate-focused curricula in the universities.

The business sector is also important due to the increased vulnerability to climate risks. Companies that fail to meet and adapt face operational and financial setbacks, whereas those companies that embrace sustainability can use it for their leverage and new opportunities. The OECD SME Policy Index (2022) states that the economies of the Western Balkans have improved their performance in enabling business environments. Regardless of their difficult circumstances, they managed to perform best in the areas of support services for SMEs, public procurement, standards and technical regulation and internationalisation. However, there are still improvements needed that include innovative policies for SMEs and SMEs in a green economy. Furthermore, K-force (2017d) found that WB vocational education systems are not enough to support lifelong learning in climate resilience and empathise with the need for theoretical and practical skills.

Moreover, two other researchers reinforce these findings. Shyle (2018) discovered that students and businesses in Tirana exhibit low awareness of sustainable development, reinforcing the urgency for improved education. Meanwhile, Grabova and Pojani (2021) conducted stakeholder interviews with municipalities, ministries and the UNDP Climate Change Program in Albania. The respondents stressed the importance of consolidating climate-related legislation and institutions to work better for sustainability-focused careers. The focus group also highlighted the need for specialized education to reduce the reliance on international professionals.

Also, some of the research in Kosovo emphasises the misconceptions regarding climate change and its understanding. For example, Ramadani et al. (2025) found that there are misconceptions regarding climate change with 64% attributing to natural processes. 94% of respondents were not aware at all of the scientific explanation of climate change. However, most of the respondents replied that climate change is affecting their health outcomes. In addition, Lleshi (2024) states in his research the key findings of incorporating ecological education in all levels of education and implementing the efforts for responsibility in environment protection and practices.

Policy Recommendations for Climate Change Education for Youth in WB

Addressing climate change remains a critical issue for the WB region as it requires a comprehensive and strategic approach within higher education institutions. WB region has challenges when it comes to the environment and it needs integration of climate change education in the education system to build sustainability. The integration includes cooperation between the WB institutions and the EU by enhancing research capabilities and developing standardized frameworks. The Higher Education Institution plays a crucial role in advancing climate action. These policy recommendations state key strategies to strengthen networking, coordination, capacity building, economic efficiency and mutual learning in climate change education in the whole region.

Enhancing Networking Opportunities

There should be initiatives between the EU and Western Balkans higher education institutions focusing on expanding networking capacities. These initiatives should promote joint projects that are on existing partnerships, fostering new synergies and ensuring sustainability. By using the network and cooperation, the network opportunities give a chance to plan for future initiatives, open new funding opportunities, and include key stakeholders for the business community to reinforce the cooperation.

Promoting Excellence and Capacity Building

It is important to prioritise international cooperation to advance research capacities and teaching excellence in the WB region. Collaborative efforts between the EU and WB institutions should address the challenges related to the EU Green Deal and climate change. Programs and capacity building should induce study visits, on-field coaching, and training sessions. The adoption of European instruments and infrastructures in climate research will help WB institutions enhance their innovation potential. Moreover, digital tools should be present to maximize knowledge exchange and ensure cooperation among stakeholders by pushing efficient capacity building.

Coordinating Critical Mass for Climate Action

While understanding the complexity of climate action projects and their reliance on multidisciplinary cooperation, EU support remains crucial to provide financial, strategic guidance, expertise and knowledge exchange. Policies should be shared and coordinated in different sectors and industries to ensure a collective response to the challenges of climate change. It is crucial to strengthen cooperation through EU funding as it will advance the competitiveness and outreach potential. Additionally, project outputs should be made accessible in multiple languages to ensure broad participation and impact.

Fostering Mutual Learning and Harmonization

Policies should encourage the harmonization of teaching and research practices between EU and WBC HEIs, promoting standardization that aligns with EU educational frameworks. Knowledge transfer from EU institutions should enable WBC HEIs to improve service delivery in the education sector while developing expertise in project management, quality control, and ethics. Establishing common operational frameworks will ensure the long-term compatibility of WBC HEIs with EU education systems, extending beyond individual project lifecycles.

Ensuring Rationality and Economic Efficiency

To maximize resource efficiency, policies should support multi-partner collaborations that pool costs and expand impact. Joint initiatives should align with EU priorities, particularly the Green Deal, to contribute to economic and societal objectives. By integrating climate action into higher education policies and practices, institutions can optimize resource allocation while driving broader EU policy goals. Encouraging long-term partnerships will help sustain impactful initiatives and ensure economic efficiency in addressing pressing global challenges.

Conclusion

The integration of Green Deal Goals into the education agenda is an important strategy for developing sustainability within the WB region. It is elementary to focus on higher education, which is why this paper states the critical role teaching materials learning, and faculty training play in addressing environmental issues and challenges. The analysis of the selected EU projects explains the impact of these initiatives on advancing the Green Deal objectives and strengthening regional capacities. In addition, the ESD remains an important tool to advance climate change as part of transforming the education system.

The findings presented in this paper illustrate the targeted education reforms and strategic support from the EU projects as important instruments for advancing resilient and environmental support. These efforts are not only contributing to the major goal that goes beyond the region; they address environmental issues, collaboration and best practices.

About the Fast Forward Project

The project "Engage, connect and empower youth for a sustainable green future" is focused on two European Youth Goals: quality learning and sustainable green Europe. It aims at implementing a creative strategy in terms of capacity building for the new generation actually facing the problems of tomorrow related to environment degradation, climate change, and sustainability issues. The target group of the project is youth trainers/workers, organizations, young activists in Albania, local/national authorities, and citizens of Albania and Europe. The project will focus in bringing the EU practices and translate them into tangible tools for youth in Western Balkan in order to fast forward the green transition.

The core of the project, capacity building, will be achieved through a critical number of activities, such as ToT, Youth exchanges, toolkits and manuals. These activities will spill over throughout non-formal learning providers benefitting staff, youth, and key stakeholders in the process.

This project is implemented in partnership with six organizations: Build Green Group and AlbanianSkills from Albania, BRAVO – Bosnian Representative Association for Valuable Opportunities from Bosnia and Herzegovina, Eco – Logic from North Macedonia, The Balkan Forum from Kosovo and Brigaid EU Project from Spain.

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