Pedagogia oggi

GreenComp and Migrant Students: Reflections on Training in Sustainability Competencies

GreenComp e studenti migranti: riflessioni sulla formazione alle competenze di sostenibilità

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ABSTRACT

Pedagogical research is increasingly called upon to dialogue with European policies. Regarding to sustainable development, the European Commission is focussing on creating a framework for Life Skills-oriented Competencies. This is reflected in various documents, such as the *Learning for the Green Transition and Sustainable Development* and *The GreenComp*, which define the framework for integrating sustainability skills in schools. Starting out from an investigation entitled: Educating for a Circular and Inclusive Economy: Pedagogical and Guidance courses for Migrant and Non-Migrant Adolescents, the contribution aims to promote training in sustainability skills for migrant and native students. The study, conducted in 2023 with 20 teachers from Provincial Centres for Adult Education and secondary schools, was conducted according to a phenomenological-hermeneutic research paradigm.

La ricerca pedagogica è chiamata sempre più a porsi in dialogo con le politiche europee. Rispetto allo sviluppo sostenibile, la Commissione Europea è orientata alla costruzione di Framework di Competenze mirate alle Life Skills. Ciò è evidente in diversi documenti, come ad esempio il *Learning for the Green Transition and Sustainable Development* e la *GreenComp* che definisce il quadro delle competenze di sostenibilità da inserire nelle scuole. A partire da una ricerca dal titolo: Educare ad una economia circolare e inclusiva: percorsi pedagogici e di orientamento per gli adolescenti migranti e autoctoni, focus del contributo è quello di promuovere la formazione alle competenze di sostenibilità per gli studenti migranti e autoctoni. La ricerca, realizzata nel 2023 con 20 insegnanti dei Centri Provinciali per l'Istruzione degli Adulti e degli Istituti secondari di II grado, è stata condotta secondo il paradigma di ricerca di stile fenomenologico-ermeneutico.

Keywords: Agenda 2030 | sustainability education | migrant students | sustainability competencies | learning time

Parole chiave: Agenda 2030 | educazione alla sostenibilità | studenti migranti | competenze di sostenibilità | tempo dell'apprendimento

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Introduction

Over the past decades, international governing bodies as well as individual countries have been increasingly confronted with many global challenges such as climate change, desertification, biodiversity loss, and pressing issues such as increasing economic crisis, ongoing international conflicts and wars, and widening social and educational inequalities. (https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf). In response to these climatic, educational, and social emergencies, the sustainability paradigm has gained international recognition as a strategy aimed at improving people's quality of life, justice, intergenerational equity, and environmental protection (Lambrechts, Liedekerke, Petegem, 2018, pp. 1284-1300).

International governing systems have also acknowledged the pivotal role of school education in this context. Educational institutions at all levels are recognised as crucial spaces for fostering sustainability education[1]. It is this frame that encloses the present research that has a main objective to delve into the concept of the circular economy as a vital tool for the education of migrant and native students. The field research, aligned with the Goals 4, 8, and 10 of the 2030 Agenda for Sustainable Development, was conducted using a Phenomenological-Hermeneutic research methodology (Giorgi, 2009; Fischer, 2017; Bellingreri, ed., 2017, pp. 269-285). The study focuses on two main issues: what knowledge and skills should be promoted among students to develop sustainable thinking and behavior, and what elements should be included in sustainability education for students in multicultural schools.

Data collection was conducted using Focus Groups and in-depth semi-structured interviews. The action-research (Asquini, ed., 2022), implemented over the 2023/2024 period, involved 20 teachers[2]. Five thematic areas were delineated to address the guiding questions during the in-depth interviews: personal and professional experiences; changes brought about by the advent of digital technologies; civic and citizenship education; career and educational guidance; and the development of social and sustainability competencies.

1. Education for Sustainability between Theories and Practices

Training on sustainable development issues originates within educational institutions, which are encouraged to raise awareness among students and society as a whole about adopting more sustainable practices. Additionally, it necessitates the involvement of the third sector and the academic community in developing responses to sustainability challenges (Malavasi, 2021a; UNESCO, 2020, https://unesdoc.unesco.org/). Regarding training on sustainability issues in Europe, the European Commission's report, *Learning for Sustainability in Europe: Building Competencies and Supporting Teachers and Schools* (https://eurydice.eacea.ec.europa.eu/publications/), provides a comprehensive analysis of sustainability practices in the educational systems of 37 European countries. The report examines how schools foster knowledge and competencies related to sustainability among students.

In the context of the Italian educational system, the education to sustainability is predominantly inte-

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1 In this contribution, the term "education for sustainability" has been employed because it encapsulates the process of teaching individuals the values necessary to act as responsible and active agents. Education for sustainability is based on transformative learning, which engages students, teachers, educators, and learners by equipping them with the knowledge, skills, and values needed to contribute to environmental, social, and economic well-being, as well as the preservation of the natural world (Kidman, Chang, Wi, 2019).

2 This action research, designated as Action IV.6 within the PON "Ricerca e Innovazione. Istruzione e ricerca per il recupero e la transizione verde - REACT-EU" framework, involved 20 Teachers from the following institutions:
- Provincial Centres for Adult Education (CPIA) 2 of Palermo.
- Provincial Centres for Adul Education (CPIA) of Agrigento.
- ENDO-FAP Ente don Orione, Training and Professional Development of Palermo.
Of the 20 participating teachers, comprising 17 females and 3 males, 10 are involved in teaching Italian as a second language (CPIA) and or literary and historical subjects (CPIA and ENDO-FAP. Additionally, 5 teachers specialized in foreign languages (English and German), 3 focus on mathematics and natural sciences, 1 teaches music, and 1 serves as a special education teacher.

grated as a *cross-curricular* theme, addressed through *project-based learning* experiences (Kokotsaki, Menzies, & Wiggins, 2016, pp. 267–277), and integrated into other subjects, particularly within the framework of Civic Education, as provided for by Law No. 92 of August 20, 2019, which introduced the teaching of civic education in schools.

In relation to the goals of the 2030 Agenda for Sustainable Development, what goals have been achieved? According to the United Nations report titled Progress towards the *Sustainable Development Goals: Towards a Rescue Plan for People and Planet* (https://hlpf.un.org/sites/default/files/2023-04/SDG%-20Progress%20Report%20Special%20Edition.pdf), only 12% of the SDG targets are on track to be achieved. Despite some positive advancements, more than half of these targets are rated as 'moderately or severely off track. Moreover, about 30% have made no progress or are worse off than in 2015. In addition to the rise in global temperatures, currently, +1.1°C above pre-industrial levels, and the continued reliance on fossil fuels, a particularly concerning issue is the insufficient progress on one of the foundational objectives of the 2030 Agenda: the reduction of global poverty and the enhancement of access to education.

In attempting to hypothesize the main factors that appear to hinder the progress towards the 2030 Agenda, a study conducted by a team of 61 researchers, titled *Scientific Evidence on the Political Impact of the Sustainable Development Goals*, indicates that the obstacles to achieving the "Agenda 2030" objectives are related to its nature as primarily a discursive construct. What is lacking is a reorganization of institutions with more ambitious policies supported by legislation aligned with the Sustainable Development Goals (SDGs).

Although the category of Sustainable Development is supported by solid theoretical research, it is necessary to propose actions that go through the descriptive phase of issues concerning the relationship between humans, the environment, and society. The focus should shift towards implementing targeted actions in order to enhance practices already present in the territories (Mealy, Teytelboym, 2022, pp. 1-24) and overcoming an ongoing antisocial vision of economic power. Such an approach aims to promote, through the education of future generations, a new paradigm of sustainable development that is both resilient and transformative (Malavasi, 2017, p. 60; Riva, 2018, pp. 33-50).

Several international and national educational programs, such as the Eco (Green) Schools program and the UNESCO Associated Schools Network, appear to be progressing in this direction. These programs prioritize fostering a sense of responsibility towards oneself, others, and common goods as a fundamental component of sustainable thinking and behavior (Wals, Lenglet, 2016). In addition to the responsibility that sustainability necessitates from both the educational and civic communities, it is necessary that institutions receive adequate *financial resources* to first design and then implement targeted educational initiatives focused on environmental sustainability (Consiglio Europeo del 2022 https://eur-lex.europa.eu/legal-content/). Additionally, the development of sustainable knowledge and skills within the educational *sphere* requires a sufficient learning time and dedicated *spaces* for the effective implementation and sharing of sustainability practices (Cebrián, Junyent, Mulà, 2020; Winter, Kranz, Möller, 2022).

2. Sustainability Knowledge and Skills: Field Research with Schools

In Italy, one of the key implementation tools of the 2030 Agenda for Sustainable Development is the *RiGenerazione Scuola Plan* (https://www.istruzione.it/ri-generazione-scuola/index.html), which aims to advance sustainability initiatives by engaging educators, students of every order and grade, and third sector organizations (Brundiers, Barth, Cebrián, Cohen, Diaz, Doucette-Remington, Zint, 2021, pp. 13-29).

Regarding the outcomes of the research, the knowledge and skills identified through the Focus Groups and semi-structured in-depth interviews have been subsumed within three core competency areas: Knowledge, Skills and Attitudes (Delors, 2005, pp. 79-90). Additionally, a new competence, "Learning to live", was introduced (De Carlo, Toti, 2023, pp. 127-140). In order to enhance the focus on Lifelong and Lifewide Learning, the knowledges and skills identified have been grouped according to the 2018 *Key Competencies for Lifelong Learning* framework established by the European Council (https://eur-lex.europa.eu/legal-content/). These competencies encompass digital, multilingual, and social skills; the ability to learn how to learn; citizenship and entrepreneurial competences.

In the definition of conceptual frameworks and competency descriptors (Glasser, Hirsh, 2016; Bianchi, 2020), the *GreenComp* Areas were taken as a reference (Bianchi, Pisiotis, Cabrera Giraldez, 2022). These Areas include: 1. Embodying sustainability values; 2. Embracing complexity in sustainability; 3. Envisioning sustainable futures; and 4. Acting for sustainability[3]. In order to bring out some significant aspects of the research, knowledge and skills were systematically adapted into interpretative categories, which allowed the precise definition of descriptors for educational practices in multicultural classrooms[4].

Regarding the competency areas, the research underscores the relevance of codified knowledge and general and specialized information that educators consider valuable for advancing sustainability education. Notably, digital knowledge, specifically the confident and responsible use of digital technologies for the digital transition ICT (Information Communication Technologies), emerges as significantly pertinent. According to the *GreenComp* framework, this knowledge is reflected in Sector 3, "Imagining Sustainable Futures", particularly in points 3.2 and 3.3: "Digital Thinking" and "Exploratory Thinking". The research reveals the tight connection between the cultivation of sustainable thinking and digital knowledge (e.g., Teachers 3, 6, 16, /20). This connection aims to foster student curiosity regarding classroom subjects, enhance creativity, and promote knowledge of innovative methods (e.g., Teacher 7/20).

The research further identifies the significance of legal, religious, citizenship, and cultural heritage knowledge. These areas of Knowledge are associated with Sector 2, "Embracing Complexity in Sustainability", specifically point 2.3, which highlights the ethical and political dimensions of education (e.g., Teachers 6, 14/20). In the context of educational practice, this involves the implementation of educational activities aimed at addressing and overcoming the various social, political, economic and bureaucratic obstacles that students encounter, particularly those from migrant backgrounds (e.g. Teachers 11, 16, 17/20).

According to the "Skills" framework, which relates to the capacity to apply, utilize, and implement knowledge through intellectual abilities, there is a significant emphasis on the necessity for educators to promote an inclusive and participatory pedagogy. This involves valuing the *developmental time of students* and the effectiveness of educational interventions. This emphasis is aligned with Sector 1, "Embodying Sustainability Values", which highlights the importance of the educational care time. Within this sector, sustainable thinking is defined by the ability to pausing and deliberating before acting (e.g., Teachers 4, 9/20). The aim is to respect not only the growing time of the students and their life history but also, especially in multicultural contexts, their cultural heritage (e.g., Teachers 11, 16, 20/20).

An additional competency within the domain of "Skills" pertains to the ability to networking and create supportive and generative educational environments. In the context of education, this involves, as indicated by the research and aligned with Sector 4, "Acting for Sustainability", implementing initiatives related to sustainability and citizenship education by engaging external stakeholders, such as community educators working with migrants or representatives from businesses where students might seek employment opportunities (e.g., Teachers 1, 5, 11, 15/20). The aim of educational institutions should be to integrate external figures into the school system, facilitating students' post-education and enhancing their entry into the labour market through the involvement of business (e.g., Teachers 13, 18/20).

Regarding the "Attitudes" and "Learning to live" competencies, they reveal that the teachers should cultivate the ability to internalize the values of migrants, fostering a dialogue with their cultural and value frameworks while allowing them the freedom to err and learn from those errors. As for the students, educators emphasize the need to develop reflective and critical thinking about their personal life experiences. The goal is to instil a positive appreciation for school education and their future professional development.

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3   For a detailed analysis of the *GreenComp* framework and its sustainability competence sectors, refer to the document published by the European Union in 2022 titled: *GreenComp: The European Sustainability Competence Framework*. (https://op.europa.eu/it/publication-detail/-/publication/bc83061d-74ec-11ec-9136-01aa75ed71a1/language-en).

4   The analysis of the data facilitated the identification of knowledge and skills crucial for managing complex scenarios, such as multicultural classrooms, to define the competencies to be promoted in sustainability education. In synthesizing the findings presented in this section, the researcher has chosen to reference specific participants using the format: (Ins. followed by the interview number and /20, indicating the total number of teachers involved). This approach highlights those participants who particularly emphasized the noted aspects. However, it should be noted that these insights were not exclusive to a few individuals; rather, a substantial proportion of participants, across various thematic areas, consistently highlighted the issues discussed in this section.

As for education, it means proposing paths of education for sustainability that have as their goal that of educating about the appreciation for personal identity and the natural environment (e.g., Teachers 7, 17/20). In alignment with Sector 1 of the *GreenComp* framework, "Emboding Sustainability Values", educational institutions are required to foster equity by addressing social and economic injustices that adversely affect individuals with migratory backgrounds. For students, this entails developing the capacity to opening up to the news, to learn from both their peers and previous generations (e.g., Teacher 15/20).

3. Training in Sustainability Skills: Educational Implications

Global citizenship education is closely intertwined with sustainability education, a connection that is prominently emphasized in the "Agenda 2030" framework. This framework urges educational institutions to foster intercultural dialogue and to view peacebuilding as a conflict resolution process.

Recalling the earlier discussion regarding the role of schools in implementing participatory pedagogical approaches in order to cultivate sustainable ways of thinking and acting – while addressing the dimensions of time and space within multicultural classrooms (Zoletto, 2020) – the following section will explore key reflections related to environmental sustainability education (Marescotti, 2022, pp. 128-144; Pegalajar-Palomino, Burgos-García, Martinez-Valdivia, 2021, pp. 99-114).

A significant aspect to consider is the *temporal dimension of learning*. Sustainability education necessitates adequate time for understanding the importance of sustainable practices for personal, communal, and environmental well-being, and time for practical implementation. A major challenge observed among teachers in the Provincial Centers for Adult Education (CPIA) and students is the *brief duration of their involvement in educational and inclusion projects*. This challenge primarily stems from the premature cessation of the educational plan for host communities and the didactic plan for schools, leading to discrepancies between educational structuring and the integration of students into the host society (Alba, 2021, pp. 108-115).

At the same time, positive aspects emerge despite the short duration of students' involvement in the educational system. As indicated by the interview, the teachers seem to demonstrate a significant commitment to the educational relationship. This includes maintaining consistent and reciprocal dialogue, engaging in storytelling, and reconstructing the stories of life of the students, which often include experiences of abuse and psychological trauma from their countries of origin or during the process of migration.

Particularly notable is the teachers' ability to address motivational aspects to help students understand the value of educational and vocational training. Additionally, there is a demonstrated capacity to "be present in the world of the other", which involves remaining silent and respectful in front of the migrant's personal experiences. This aspect is especially relevant to sustainability education. If sustainability concerns both individual well-being and the environment, the starting point for education should be to enable these students to reclaim their life stories. This process facilitates a deeper understanding of the meanings to which their consciousness is exposed (Ricoeur, 1990, pp. 99-100), ultimately guiding them towards a more equitable and sustainable future through education.

The second aspect concerns the opportunity for the students to access *spaces for learning and implementing sustainable and citizenship actions*. While the school is indeed the primary venue for civic and sustainability education, many migrant students lack opportunities to exercise certain rights and express themselves outside of school, including through physical activities. From a pedagogical perspective, this highlights the absence of external spaces where these students can be visible and thus express themselves. Many migrant students, particularly those attending Provincial Centers for Adult Education (CPIA), are marginalized within our societies and are often denied certain rights, such as citizenship under the *Ius Scholae* framework (Nanni; Fucecchi, 2024; Alba, 2022, pp. 35-48), which would facilitate their ability to plan their futures and engage in civic life. In this direction, an activity to be conducted within multicultural classrooms, particularly with migrant students, involves bringing into the school, during civic education activities, certain experiences related to the moments when migrants access services to receive legal advice or to apply for a residence permit. The role of the teacher is to introduce students to the issues concerning their rights, offering them the opportunity to live and experience these rights first-person, using the advice of external experts.

In the absence of opportunities for civic participation outside of school, one potential approach is to integrate external realities into the school environment. Teachers have reported efforts in this direction, such as incorporating civic education and sustainability activities through collaboration with external experts, including community educators and legal advisors. These efforts aim to help students understand their rights and reduce bureaucratic obstacles that impede their full integration into the host society. Despite the crucial role of civic and sustainability education within the educational plans of these schools, challenges persist, particularly in southern Italy, where the difficulty of establishing collaborative networks with external entities is compounded by limited financial resources for community-based green transition initiatives (https://education.ec.europa.eu/sites/default/files/2022-02/input-paper-whole-school-approach-sustainability.pdf.).

In concluding this reflection and considering the dimensions of time and space in education, an additional aspect to emphasize is the responsible use of digital technologies. Despite evidence of significant social participation among Italian youth aged 14 to 24 in activities related to civil rights, peace, and environmental protection, such as those organized by networks like *FridaysForFuture, Extinction Rebellion*, and *Last Generation* (Francesconi, Symeonidis, Agostini, 2021, pp. 1-10), various forms of civic engagement increasingly occur within digital spaces. The digital realm, being highly accessible, particularly to young people, serves as a platform for expressing views on citizenship and environmental protection. It is, therefore, the responsibility of educational institutions to promote the responsible use of digital technologies. The goal is to equip current and future generations of students with digital wisdom, enabling them to practice digital citizenship effectively (Pasta, Rivoltella, 2022). This involves fostering critical digital literacy skills to navigate and contribute to digital platforms responsibly and constructively.

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