

Curriculum and the Italian Education System: a Critical Analysis and Future Perspectives for Upper Secondary School (2022–2024)

Valentina Della Volpe¹, Salvatore Vitiello²

¹(Phd Special Education and Tutor – Initial Teacher Education Program (PEF), University of Roma Tre, Italy)

²(Tutor – Initial Teacher Education Program (PEF), University of Roma Tre, Italy)

Abstract:

Background: The school curriculum represents a fundamental component of education systems, significantly influencing social inclusion, access to employment, and the development of competencies for global citizenship. In Italy's upper secondary education, the curriculum has undergone notable transformations between 2022 and 2024, particularly in connection with national reform initiatives and digital innovation policies.

Materials and Methods: This article adopts a critical-pedagogical approach to analyze recent curricular reforms in upper secondary education in Italy. The study focuses on ministerial guidelines related to educational guidance—such as the mandatory 30 annual hours and the introduction of a digital E-Portfolio—as well as the broader digitalization process promoted by the “School 4.0” Plan. The analysis is conducted through a review of policy documents and theoretical models, including critical pedagogy, constructivism, and technocratic approaches.

Results: Findings highlight both progress and critical issues. While new guidance measures aim to improve the school-to-work transition and personalize educational pathways, significant implementation challenges persist. These include operational inefficiencies and marked regional disparities, which hinder equal access and full curricular integration. Additionally, current curriculum models display theoretical inconsistencies and practical limitations in aligning pedagogical goals with systemic reform.

Conclusion: The article proposes future directions for a more inclusive and innovative curriculum design. Key recommendations include reinforcing continuous professional development for teachers, reducing territorial inequalities, and establishing mechanisms for monitoring reform effectiveness. The overall objective is to promote greater coherence between educational policies and their practical application in schools.

Key Word: School curriculum, Upper secondary education, National Recovery and Resilience Plan (NRRP) – School 4.0, educational guidance.

Date of Submission: 01-07-2025

Date of Acceptance: 09-07-2025

I. Introduction - Valentina Della Volpe¹

The school curriculum, in its essence, represents far more than a mere sequence of topics or subjects to be covered throughout the educational journey. It defines the formative trajectory across disciplines, considering both the educational content and its pedagogical organization (Cottini, 2019). Most importantly, the curriculum is the axis around which educational policies, social dynamics, and a country's economic needs revolve. In a time of rapid technological, economic, and social change, the curriculum becomes a privileged lens through which to examine the challenges and opportunities of education (UNESCO, 2015).

In the Italian context, analyzing the curriculum as a key category is particularly urgent to understand persistent territorial inequalities, infrastructural deficits, and the gap between the competencies required by the labor market and those actually developed in schools. Recent regulatory interventions, such as the National Recovery and Resilience Plan (NRRP) and the Ministry's guidelines on educational guidance (Ministry of Education and Merit, 2022a, 2023b), emphasize the centrality of the curriculum as a tool to address systemic issues such as school dropout, lack of inclusion, and the digital divide.

Despite these initiatives, the education system remains fragmented, with a disconnect between political objectives and practical realities. This misalignment underscores the need for in-depth research that treats the curriculum as an analytical category capable of illuminating the intersections among educational aims, pedagogical innovation, and socio-economic transformations.

II. A structural crisis and its multiple facets - Salvatore Vitiello²

2.1 The curriculum in Italian upper secondary education

The curriculum in Italian upper secondary schools is currently facing a crisis that intertwines social, economic, and cultural dimensions. According to ISTAT (2022), the national dropout rate stands at 12.7%, significantly higher than the European average of 9.7% (Eurostat, 2022). This statistic not only highlights the inadequacy of the education system in retaining students, but also reflects a misalignment between the school curriculum and labor market demands, which increasingly require skills not sufficiently addressed by traditional academic pathways.

The 2022 Guidelines on Educational Guidance, issued by the Ministry of Education and Merit, introduced measures aimed at personalizing educational trajectories, with a strong emphasis on professional orientation and creating connections between school, work, and higher education. Nevertheless, the current curriculum structure, still based on overly compartmentalized disciplinary boundaries, poses a significant obstacle. This fragmentation hampers the effective integration of transversal and digital skills—competencies that are essential in today's economic landscape.

Regional disparities further exacerbate these challenges. Data show that students in Southern regions such as Campania and Calabria are more vulnerable to early school leaving, with rates exceeding 20% (ISTAT, 2022). This highlights the urgent need for curricular reform that considers territorial specificities, avoiding a one-size-fits-all approach that fails to address local needs.

2.2 The urgency of a systemic and coordinated reform

OECD studies (2022) confirm that aligning curricula with the needs of contemporary society could reduce educational inequalities by up to 25% by 2030. However, this potential is undermined by fragmented approaches to curricular design, as evidenced by the most recent experimental four-year education pathways.

Through Ministerial Decree No. 344 of December 3, 2021, the Ministry of Education and Merit allowed up to 1,000 first-year classes, in both state and private schools, to join a pilot project aimed at reducing the duration of upper secondary education from five to four years. This experimental phase has been extended to general and technical high schools, with plans to include vocational schools starting in the 2023/24 academic year—pending completion of the reforms introduced by Legislative Decree No. 61/2017.

However, the reform, which aims to modernize vocational education and training (VET), is still ongoing, leaving numerous uncertainties regarding its coordination with the four-year pathways. This experimental extension is motivated by the goal of promoting greater flexibility and responding to the objectives outlined in Mission 4, Component 1 of the National Recovery and Resilience Plan, which focuses on reforming the system of educational guidance (Ministry of Education and Merit, 2022b).

At the same time, Italy's system for assessing competencies, while improved in recent years, still does not fully meet the real needs of the labor market and local communities. Although legislation such as Legislative Decree 13/2013 on the certification of competencies and Decree 328/2022 on educational guidance highlights the importance of transversal competencies, their actual implementation remains limited.

These issues underscore the urgency of a systemic and coordinated reform capable of linking legislative measures to a broader understanding of contemporary educational demands.

2.3 PNRR “School 4.0” and its transformative potential

The National Recovery and Resilience Plan (NRRP), through its “School 4.0” component, represents one of the most ambitious initiatives to transform the Italian school system. With an investment of €1.5 billion, the project aims to digitize classrooms, modernize learning environments, and provide continuous professional development for teachers. However, practical implementation reveals several obstacles.

One of the main challenges lies in the structural heterogeneity of the Italian school system. Schools in more economically developed regions such as Lombardy and Emilia-Romagna are better equipped to quickly integrate technological innovations, thanks to pre-existing infrastructure and greater availability of human and financial resources. By contrast, schools in economically disadvantaged regions, particularly in Southern Italy, often lack the basic resources necessary to implement such changes. These territorial disparities risk further widening the educational gap between North and South, undermining both social cohesion and national economic development.

Furthermore, teacher training remains a critical challenge. Educators are increasingly required to adapt to new pedagogical approaches and integrate digital technologies into their teaching practices—tasks that demand both time and targeted support.

2.4 European Recommendations and delays in implementation

In 2021, the European Council emphasized the need to develop digital and transversal skills by 2025, establishing clear objectives for all member states. These include integrating competencies such as critical thinking, creativity, and problem-solving—alongside digital literacy—into national curricula (UNESCO, 2022). While Italy has adopted these recommendations through the NRRP and the national educational guidance guidelines, their implementation has been significantly delayed.

According to a Eurydice study (2023), only 42% of Italian schools have adopted structured programs for developing transversal skills, compared to the European average of 63%. Additionally, 38% of Italian students report feeling unprepared for the labor market, a figure that reflects inadequacies in current educational guidance pathways. This issue is particularly evident in rural and urban peripheral areas, where access to guidance services and technological resources is limited.

Another critical barrier is the fragmentation of responsibilities across administrative levels. The management of financial and organizational resources is often slow and inefficient, leading to delays in funding and project initiation. This affects not only implementation timelines but also the overall quality of interventions, leaving many schools in a state of operational uncertainty.

In conclusion, the challenges facing the curriculum in Italian upper secondary education are wide-ranging and complex. While the NRRP and European policies provide a clear roadmap for reform, their realization requires stronger commitment to addressing inequalities, improving teacher training, and streamlining administrative systems. Only through an integrated and inclusive approach can the education system become a true driver of innovation and national development.

III. Between progress and obstacles in the Italian school system - Valentina Della Volpe ¹

3.1 School Guidance: potential and limitations of current policies

The introduction of the mandatory 30 hours of annual school guidance for upper secondary students (Ministry of Education and Merit, 2022a) marks a significant step toward greater awareness of students' competencies and future possibilities. This program, based on the 2022 national guidelines, aims to provide students with tools to better understand their aptitudes and interests, as well as to facilitate the transition to either the labor market or higher education. Activities include the use of digital platforms such as the E-Portfolio and personalized interviews with experts, offering tailored guidance based on each student's needs.

However, despite these innovations, field results reveal substantial challenges. In particular, school-based job placement services—which are intended to support students' entry into the workforce—are often inadequate due to a lack of qualified staff and the absence of stable partnerships with local business networks. According to a survey from the INAPP report (2024), fewer than 40% of schools are able to establish effective partnerships with companies and universities, a limitation that reduces the potential of guidance initiatives to mitigate youth unemployment.

Another critical issue concerns family involvement. Despite their pivotal role in supporting students' educational decisions, families receive limited assistance in understanding the opportunities provided by the school system and the demands of the labor market. This problem is especially evident in disadvantaged contexts, where access to high-quality information is often restricted. For instance, in southern regions of Italy, only 28% of families report active participation in school-organized guidance activities, compared to 55% in the northern regions (ISTAT, 2022).

Finally, the absence of a systematic monitoring system represents a significant gap. No structured mechanisms currently exist to evaluate the impact of the 30 hours of guidance on school-to-work transitions or on the effectiveness of students' educational pathways. This deficiency hinders the identification and national scaling of best practices, thereby slowing the continuous improvement of the system. As highlighted by Della Volpe (2025), the transformative potential of current guidance policies lies not merely in structural investments, but in their pedagogical coherence with the development of transversal competencies—an essential pillar for fostering equity and innovation in European education systems. Without such alignment, guidance risks remaining a bureaucratic formality rather than evolving into a genuinely inclusive and empowering educational tool. This requires concrete measures to integrate orientation pathways with inclusive pedagogies, sustained teacher training, and meaningful collaboration between schools, families, and local communities.

3.2 Digitalization and staff training

The National Recovery and Resilience Plan (NRRP), with its emphasis on digitalization through the "School 4.0" initiative, has introduced significant measures to modernize school infrastructure and foster pedagogical innovation. Investments have enabled many schools to acquire advanced technological tools such as interactive whiteboards, virtual reality devices, and digital learning platforms. Simultaneously, continuous training programs for teachers have been launched, aimed at enhancing their technological competencies.

Despite these advancements, the effectiveness of these initiatives is often limited by teachers' difficulties in integrating technology into their pedagogical approaches. Many educators—particularly those with longer teaching experience—struggle to adapt to innovative methodologies such as online collaborative learning or problem-based learning. According to a study conducted by Eurydice (2023), only 35% of Italian teachers report being fully confident in using digital technologies in the classroom, compared to a European average of 50%.

Territorial inequalities pose an additional challenge. While many schools in northern Italy have rapidly benefitted from PNRR resources, those in the South continue to grapple with basic infrastructure issues, such as lack of high-speed internet or adequate devices for all students. In regions such as Calabria and Sicily, fewer than 60% of schools have Wi-Fi accessible in all classrooms, a figure that severely undermines the effectiveness of digitalization policies (ISTAT, 2023).

Another critical issue concerns the sustainability of technological investments. Many schools report insufficient funds for maintenance and upgrading of digital equipment, as well as for the renewal of training contracts for support staff. This threatens to turn initial investments into short-lived interventions with limited long-term impact.

3.3 Equity and Access to Resources

Territorial disparities remain one of the main barriers to the effective implementation of educational reforms in Italy. Schools in northern regions such as Lombardy and Veneto show greater capacity to integrate innovations, thanks to better infrastructure and more efficient resource management. Conversely, many institutions in southern Italy still struggle to ensure quality education due to infrastructural deficiencies, lack of qualified personnel, and financial constraints.

This disparity is not limited to material resources but also affects access to educational opportunities. For example, students in rural and peripheral areas have fewer chances to participate in extracurricular projects or internships with local businesses, thereby reducing their career prospects. A recent report by Save the Children (2024) highlights that 15% of students in the South lack access to school support programs, compared to only 5% in the North.

These disparities are also reflected in educational outcomes. Data from the INVALSI assessments (2023) show that students in the South score significantly lower in subjects such as mathematics and science compared to their peers in the North. This gap stems not only from economic differences but also from inefficient management of available resources.

Finally, the issue of equity also manifests at the social level. Students from disadvantaged backgrounds—such as low-income families or those with a migrant background—face greater difficulties in accessing high-quality educational opportunities. Addressing these challenges requires the adoption of targeted policies that consider local specificities and promote a more inclusive and sustainable educational system.

3.4 Monitoring and Evaluation of Educational Policies

Another critical weakness in the current state of the Italian education system is the lack of an effective monitoring and evaluation system. Reforms introduced in recent years, though ambitious, are often not accompanied by structured mechanisms to assess their medium- and long-term impact. This limits the ability to identify successful areas and those in need of improvement.

Monitoring is particularly lacking in the areas of school guidance and digitalization. For example, no systematic data exists on the effectiveness of the mandatory 30 hours of guidance or the impact of new digital tools on student learning. Without such information, it is difficult to assess whether the investments made are producing the desired outcomes.

Another issue is the fragmentation of available data. Information collected by various institutions—such as OECD, ISTAT, and Eurydice—is often not integrated, making it difficult to gain a comprehensive view of the education system. Overcoming these difficulties would require the creation of a unified platform for data collection and analysis, allowing real-time monitoring of policy implementation and its impact.

IV. Theoretical and practical perspective for curriculum renewal Valentina Della Volpe ¹

4.1 Towards an emancipatory curriculum: theoretical approaches and applied models

The theoretical approaches that have influenced the development of the curriculum in upper secondary schools in Italy form a fundamental basis for understanding current educational policies and designing more effective future interventions. Among these, the critical pedagogy developed by Paulo Freire in the 1970s plays a central role, as it emphasizes the potential of the curriculum as a tool for social emancipation. Freire views education as a process of dialogue and awareness that can liberate individuals from oppressive structures, turning them into active agents of social change. This approach is reflected in efforts to make educational

pathways more inclusive, particularly for marginalized population groups, and has inspired practices aimed at combating gender, ethnic, and social class inequalities.

Constructivist theories, rooted in the work of psychologists such as Piaget (1952) and Vygotsky (1978), are another key pillar in curriculum research. These theories stress the importance of learning as an active and participatory process, in which students build new knowledge by integrating it with their previous experiences. In a school context, this translates into the adoption of methodologies such as collaborative learning, which encourages students to work together to solve complex problems, and problem-based learning, which centers on critical thinking (Jonassen, 1999) and the ability to address real-world situations. These approaches are especially useful for developing transversal skills such as teamwork and adaptability, which are increasingly in demand in today's labor market. However, their implementation requires a radical rethinking of traditional teaching practices, which are still often dominated by frontal lessons and standardized assessment approaches.

On the other hand, technocratic models, widely adopted in the educational systems of many countries, focus on standardizing learning objectives and implementing uniform evaluation systems. This approach is useful for ensuring a certain level of quality and consistency across educational systems, particularly in national contexts marked by significant regional inequalities, such as Italy. However, technocratic models are often criticized for their rigidity and the risk of flattening education, reducing it to the mere transmission of measurable knowledge and skills. The exclusive emphasis on measurement and accountability may indeed overlook fundamental dimensions of education, such as the development of creativity, critical thinking, and reflective capacity (Ball, 2003; Biesta, 2015; Giroux, 2019).

Integrating these approaches is both a challenge and an opportunity to create a curriculum that better responds to the needs of the 21st century. While critical pedagogy and constructivist theories offer an emancipatory and participatory vision, technocratic models can provide the necessary structure to implement innovative practices on a large scale. Striking a balance among these different approaches requires deep reflection on the ultimate aims of the education system, which should aim not only to prepare individuals for the workforce but also to form conscious and engaged citizens.

These theoretical approaches are not only conceptual frameworks, but also analytical tools used to critically interpret recent curricular reforms in Italian upper secondary education. Specifically, the introduction of the mandatory 30 annual hours of guidance, the digital E-Portfolio, and the "School 4.0" Plan reflect, to varying degrees, elements linked to the critical, constructivist, and technocratic logics discussed here.

4.2 Future perspectives: inclusive policies and integration strategies

To address current challenges and build an educational system that meets the needs of contemporary society, it is necessary to develop strategies that integrate different theoretical approaches into a flexible, inclusive curriculum model capable of adapting to change. One of the main priorities is the strengthening of continuous teacher training. In a context characterized by rapidly evolving technologies and labor market demands, teachers must be constantly updated on the most innovative teaching methodologies, with particular attention to digital skills. This training should go beyond technical learning to include critical reflections on how to meaningfully integrate technologies into teaching and how to promote participatory and inclusive learning.

At the same time, it is essential to invest in the development of monitoring and evaluation programs to measure the impact of educational reforms. Currently, one of the major shortcomings of the Italian education system is the lack of tools for systematically and continuously evaluating the effects of curriculum policies. For example, it would be crucial to monitor not only students' academic achievements but also their ability to apply acquired skills in real-life contexts, such as work or civic engagement. This requires the creation of integrated data collection platforms and the adoption of metrics that account for different dimensions of learning, including the socio-emotional aspect.

Another crucial issue is reducing regional and social inequalities, which remain one of the major obstacles to the full implementation of reforms. Investing in modern infrastructure and qualified human resources is essential to ensure equal learning opportunities for all students, regardless of their geographic origin or socio-economic background. This might include, for instance, strengthening internet connectivity in rural and peripheral areas, equitable distribution of digital devices, and providing tutoring programs for students from disadvantaged backgrounds.

Lastly, a key future perspective involves promoting greater collaboration between schools, families, and local stakeholders. Building support networks and sharing best practices can be powerful tools to address educational challenges in a collective and coordinated way. For example, the active involvement of families in educational decision-making can foster a greater sense of shared responsibility, while partnerships with companies and civil society organizations can enrich the curriculum with practical and stimulating experiences.

If implemented in an integrated and coherent way, these future perspectives can transform the Italian education system, making it not only more effective and inclusive but also more resilient in the face of future

challenges. However, the success of these initiatives will depend on the ability to overcome resistance to change and to mobilize sufficient resources to support the necessary transformations.

V. Conclusion - Salvatore Vitiello ²

The analysis of the 2022–2024 period highlights the complexity and multidimensionality of the challenges the Italian education system must address to ensure the effectiveness of curriculum and digital reforms. Despite progress made through the National Recovery and Resilience Plan (NRRP) and initiatives such as Scuola 4.0, significant gaps remain that risk undermining the positive impact of adopted policies. Among the main critical issues are persistent territorial inequalities, insufficient continuous teacher training, and the lack of systematic monitoring of innovative practices. These elements call for more coordinated and integrated action to consolidate achievements and promote an educational system capable of responding to the needs of contemporary society.

One of the central issues that emerged from the analysis is the need to reduce territorial and cultural disparities, which continue to disadvantage schools in southern regions and rural areas of the country. While some schools in Northern Italy stand out for their ability to adopt innovative educational practices, many in the South still face infrastructural difficulties and a chronic shortage of human and material resources. Solving this problem cannot be limited to sporadic or sectoral interventions but must involve a comprehensive plan including structural investments, the enhancement of digital infrastructure, and the strengthening of the administrative capacity of school institutions. Only a systemic approach can ensure equal learning opportunities for all students, regardless of their geographic or socio-economic background.

Another priority area concerns the continuous professional development of teachers, a key factor for the success of educational reforms. As the data show, many teachers struggle to adopt new pedagogical approaches and technology-based methodologies, thus limiting the effectiveness of investments made in the digital sphere. It is essential to design training programs that not only provide technical skills but also address pedagogical and methodological issues, promoting a critical and conscious use of technologies in teaching. Furthermore, training must be personalized and ongoing to meet the specific needs of teachers and keep pace with the rapid changes characterizing today's educational landscape.

Monitoring and evaluation of innovative practices represent another crucial point for improving the education system. To date, one of the major weaknesses is the lack of systematic data and effective tools to measure the impact of education policies at local and national levels. To address this, it would be appropriate to develop integrated data collection platforms capable of providing detailed information on various aspects of the educational process, including academic results, students' transversal skills, and the effectiveness of teaching methodologies. This kind of monitoring would not only assess the success of reforms but also allow for the timely identification of critical issues, enabling targeted and corrective interventions.

A crucial element for the future of the Italian education system is the adoption of a more inclusive and sustainable approach. Inclusiveness must not be limited to guaranteeing access to education but should translate into learning paths that recognize and value student diversity, promoting the academic success of all. This requires a revision of curricula toward greater flexibility and personalization, taking into account local specificities and individual needs. At the same time, a sustainability perspective must be adopted, considering not only environmental but also social and economic aspects. In this sense, schools should be encouraged to develop educational practices that promote responsible use of resources and foster active, conscious citizenship.

Another key to successful reform is promoting more effective synergy between institutions, families, and local stakeholders. Schools can no longer be seen as isolated entities but must become central hubs of collaboration and innovation. Families must be actively involved in decision-making processes, while partnerships with businesses, local authorities, and civil society organizations can provide additional resources and experiential learning opportunities for students. In this context, school networks can play a fundamental role by facilitating the exchange of good practices and strengthening the innovative capacity of individual institutions.

Finally, the success of the Italian education system will depend on the ability to build a shared and long-term vision for education policy. This requires political and social commitment that goes beyond short-term logic and places education at the heart of development and social cohesion. It is essential that reforms be accompanied by transparent communication and ongoing dialogue with all stakeholders, to ensure that decisions are understood, shared, and supported.

In conclusion, Italy faces a historic opportunity to transform its education system, making it more equitable, inclusive, and resilient. This requires courage, vision, and strong political will, but the potential benefits—in terms of human, economic, and social development—are immeasurable.

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