

Innovating Italian Secondary School by Fostering Learning Communities

A case study of Bilingual European School

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ABSTRACT

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This thesis delves into the potential for Italian secondary schools to innovate and empower individuals to take on more active roles as citizens, fostering proactive engagement with their surroundings and serving as a remedy for early school leaving. The research focus on the Bilingual European School (BES) in Milan, renowned as a trailblazer in educational innovation at both local and national levels. The primary objective is to advocate for innovation during the planning phase of a new high school at BES by dissecting the school's innovative educational model.

This study, drawing on insights from various stakeholders within the school community, highlights the need to redefine the contemporary Italian secondary school to better align with the elementary level and meet the demands of today's society. The research methodology includes a comprehensive literature review, document analysis, and qualitative and quantitative data collection through questionnaires and focus groups involving teachers, students, and their families. Preliminary findings indicate that although not consistently in the middle school phase, BES's innovative educational practices have significantly influenced students' academic, social, emotional, and creative growth during their primary school years. The study underscores the critical importance of fostering an enabling environment conducive to student's holistic development, encouraging exploration of diverse interests and unconventional learning methods, and fostering a strong sense of belonging and continuous curiosity. The conclusions drawn from this research underscore the potential of innovative practices in creating a wellness learning and teaching environment in which students and teachers feel valued and respected. Recommendations for future research include exploring the long-term impact of BES's innovative approach to education and its potential replication in other secondary schools across Italy. Ultimately, this thesis contributes to the ongoing discourse on the role of schools in nurturing active citizenship and cultivating vibrant learning communities.

Key words: Innovation, Educational Innovation, School Quality, Educational Avant-garde, Active citizenship.

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ABBREVIATIONS AND TERMS

BES	Bilingual European School
BAPS	British American Preschool
PS	Primary School
MS	Middle School
IB	International Baccalaureate
PYP	Primary Year Programme
MYP	Middle Year Programme
DP	Diploma Programme
POI	Programme of inquiry
INDIRE	Istituto Nazionale di Documentazione, Innovazione e Ricerca Educativa
INVALSI	Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione

1 INTRODUCTION

In the educational landscape, we are going through a period of significant transformations that force us to reconsider the role of schools today deeply and their importance in society. As global citizens, we must ask if schools are educating students and teachers to be active in the world, not just watching from the sidelines. Especially in Italy, we wonder if schools are giving students what they need to tackle challenges locally and globally. This thesis explores how the Italian secondary school can innovate to help individuals play a more active role as citizens, promoting proactive engagement with the world around them and acting as an antidote to the rise of early school leaving.

1.1 Background

The Bilingual European School (BES) is a bilingual private institution. It operates with a degree of autonomy, but it is also recognized and subsidized by the government. It is situated in Milan and offers an integrated eight-year academic pathway comprising Primary (Grades 1-5) and Secondary (Grades 6-8) education. Established in 1999 to meet the educational needs of families in Milan and surrounding areas, BES supplies a rigorous bilingual curriculum. Initially conceived by former parents of students at the British American Preschool (BAPS), BES aimed to extend bilingual education into the elementary years. At the institutional level, BES includes two distinct entities: primary and middle schools, which are recognized by the Italian Ministry of Education and adhere to national curriculum guidelines. However, the Primary school exclusively adopts the Primary Years Programme (PYP) curriculum accredited by the International Baccalaureate Organization, making BES the first bilingual PYP primary school officially recognized by the Italian Ministry of Education.

Moreover, in June 2021, BAPS and BES underwent a significant ownership transformation, transitioning to the international foundation Globeducate. Globeducate operates a network of over 55 premium bilingual and international schools and online programs, serving the educational needs of more than 31,000 students across 10 countries (Globeducate, 2022).

To align more closely with the IB transdisciplinary investigation program, BES employs various technological resources and spaces to enhance its educational environment. Initially a public school, BES now occupies a three-story building that has undergone significant changes to meet the need for innovative educational practices. These changes include integrating modern technologies and creating specialized learning spaces tailored to support transdisciplinary learning experiences.

BES has consistently positioned itself as a pioneer in educational innovation, both locally and nationally, to the extent that it has become part of the network of recognized National Educational Avant-gardes by INDIRE. Since 2019, the school has embarked on a fruitful collaboration with INDIRE to develop new teaching models, experiment with the use of recent technologies in educational pathways and promote the redefinition of the relationship between learning and teaching spaces and times.

For this reason, a series of choices have been made that have led to significant changes in daily educational practice. Three main changes in terms of the introduction of innovative technologies and the restructuring of spaces have stood out.

2015, the LEGO Education Innovation Studio was inaugurated, focusing on robotics, programming, mathematics, and mechanics using LEGO educational tools. A training program ensured the integration of these activities into the curriculum. With clear communication with families and careful planning to manage this transformative process, a 1:1 iPad program launched in 2016 promotes independent exploration alongside guided instruction. Integrating digital tools fosters constant engagement, offers diverse learning tasks, accommodates various learning styles, and promotes differentiation and personalized instruction. The "Knowledge Centre" and the "Lab 1+1", respectively, dedicated to the use of bibliographic resources and research and art and sciences, were designed by Rosan Bosch in 2019. They also serve as spaces for small and large meetings. Aligned with the educational principles of BES, educational environments ought to facilitate students' exploration of various interests and unconventional learning methods. This aspect underscores the significance of establishing a conducive atmosphere that nurtures students'

holistic development, encompassing academic, social, emotional, and creative dimensions. All these choices align with BES's dedication to innovation and transdisciplinary inquiry and reflect the concept of student agency promoted by the International Baccalaureate (Brittain & Zelleke, 2021).

As Maria Montessori defined, educational space should provide and foster democracy (İslamoğlu, 2018): I share materials, put them back in their place when one has finished using them, and leave the environment tidy because I am aware that after there is another person to use it. Carefully defining materials and establishing collective spaces has the potential to work on the collective growth of a group. Thinking about education from this perspective means educating the student in life by making him or her self-aware; the final goal, as Montessori argued, was freedom of thought and a future free choice in the future world of work (Montessori, 1970).

1.2 Objective

For the past few years, BES has been actively engaged in strategic planning to establish a new high school. This initiative aims to integrate innovative models from both primary and secondary education.

The research aims to understand how to structure a secondary school that aligns with the innovative principles and practices of primary education through the involvement of various stakeholders. In doing so, the research seeks to identify the key stakeholders involved in shaping the educational experience and examine their perspectives and roles in implementing innovative practices. Furthermore, the study will investigate the potential challenges and barriers that may arise while aligning secondary education with primary school innovation and strategies to overcome them.

The final goal of this research is to develop a comprehensive plan and define actionable guidelines for the leadership group to implement innovative practices within the secondary school setting effectively. By doing so, the study aims to enhance the quality of education at BES and positively impact the professional development of educators (Priyambodo & Hasanah, 2021).

The three most essential stakeholders identified for this thesis are:

- Students:** Most students at BES are either Italian citizens or children of non-Italian parents born in Italy. According to data from the latest PASS test (Pupil Attitudes to Self and School), conducted in autumn 2023, BES students demonstrate high satisfaction and enthusiasm in the school environment and towards inquiry-based learning. They are encouraged to explore the surrounding world by formulating questions and interacting with their environment. BES promotes a learning approach where knowledge results from discoveries and investigations collaboratively built with classmates and teachers. In line with the IB concept of agency, students are encouraged to use their voices to highlight problematic situations and propose solutions. These initiatives are documented and shared on the action wall present in each classroom. To further enhance their involvement, the primary and secondary schools have established the Student Council and the Eco Committee in the last five years, coordinated by three teachers from the school.

Level 1: Whole cohort profile

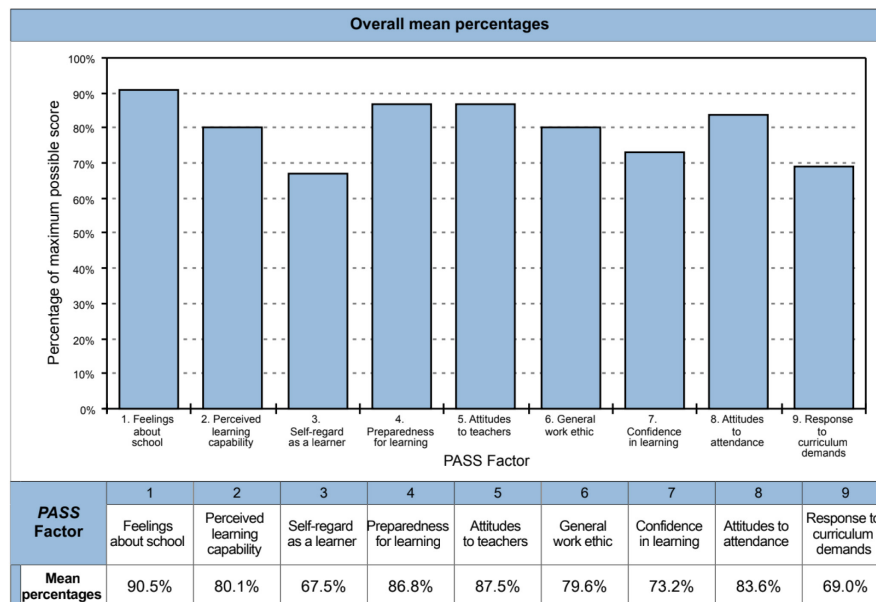


FIGURE 1. Primary School Whole Cohort Profile from PASS test results in November 2023 (BES Internal document)

Level 1: Whole cohort profile

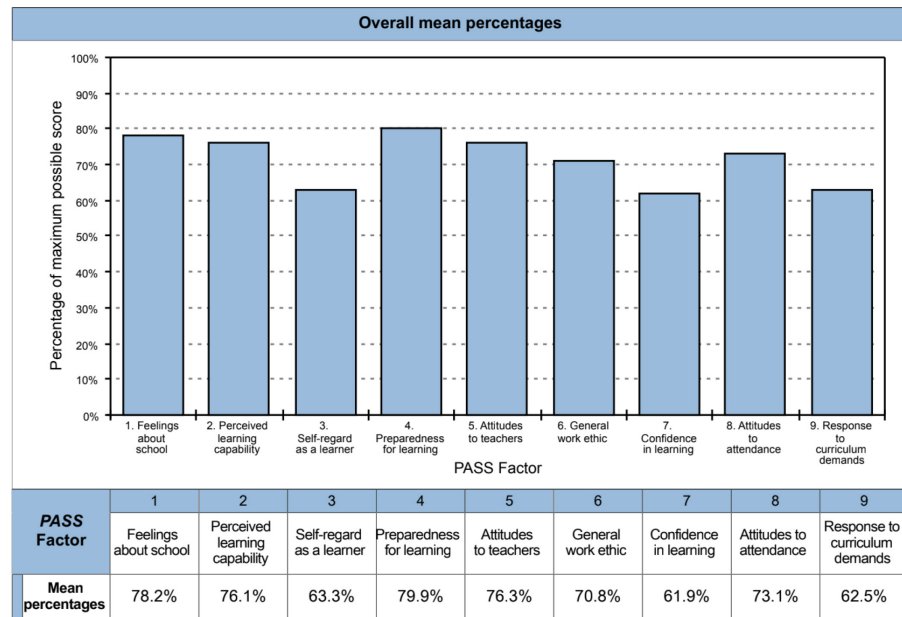


FIGURE 2. Middle School Whole Cohort Profile from PASS test results in November 2023 (BES Internal document)

- Teachers:** The BES teaching team encompasses diverse experiences and backgrounds, with educators averaging between 25 and 40 years of age, both newly qualified teachers who bring fresh perspectives to the school and seasoned educators who have played pivotal roles in shaping the BES curriculum and teaching practices over time. This diversity ensures that students benefit from various learning opportunities and perspectives. To maintain cohesion and alignment, coordinators collaborate closely with teaching teams to ensure adherence to Italian Ministry guidelines while supporting and celebrating critical elements of the PYP program. This collaborative effort has allowed BES to name certain teaching practices integral to the BES educational model. In contrast, other practices have evolved or have been introduced in response to changing educational trends and teachers' varied passions and training.
- Families:** The Bilingual European School is a private institution recognized by the Ministry and predominantly attended by Italian citizens and native Italian speakers. The families of BES students typically have a medium to high Socio-Economic Status (SES), characterized by relatively

high income and education levels. Families primarily choose BES for its quality-price ratio in bilingual education. A small percentage of BES students come from bicultural families, with a notable increase in Chinese families over the past five years. At BES, families are integral to the school community and actively participate in their children's educational journey. Upon enrolling their children, all families are invited to carefully read and sign a bilingual pact of educational responsibility. This pact reflects the school's and families' mutual commitment to supporting student's academic and personal development. The engagement of families in shaping the educational offering is highly valued. Through surveys, open dialogues, and collective meetings on specific topics, families can express their needs and concerns, which are listened to, evaluated, and, when possible, integrated into the school's educational context. Families are actively involved in defining the School Regulations and other relevant documents for school life, as they are considered fundamental members of the educational relationship. The school regularly organizes meetings with external and internal specialists for parents, addressing topics related to their children's developmental growth and aspects of the methodology adopted at BES. Continuous and ongoing dialogue with families is crucial to support students' growth. To this end, two annual meetings are organized among students, families, and teachers, during which strengths and individual student goals are defined together. Lastly, families are actively engaged through events such as Learning Celebrations and Portfolio Days and the opportunity to teach lessons to students, providing them with further opportunities to participate actively in their children's educational journey.

1.3 Research question

The main question guiding this research is: Which strategies and approaches can be adopted to promote innovation in the structuring phase of a BES secondary school?

To achieve this goal, six sub-questions have been identified:

A. What does educational innovation mean today?

- B. How can BES secondary education be made innovative?
- C. How can BES secondary education be improved by integrating and adapting practical principles and practices from primary school?
- D. What criteria can be used to identify innovative educational practices effectively?
- E. How can the friction between the two levels of schooling be overcome to ensure a smoother educational journey at BES?
- F. Which fundamental principles and practices provide the most benefits for the stakeholders involved?

1.4 Context

The research is set within the context of secondary education at the Bilingual European School in Milan, Italy. Following the vision of one of the school's founders, BES has developed an innovative approach to bilingual and inquiry-based education by adopting the principles of the International Baccalaureate.

Since its foundation, BES has placed the fundamental principles of bilingualism, active research, and socio-constructivist theories at the center of its teaching approach, especially in primary school. BES primary school has established significant partnerships with educational institutions in Italy (University of Milan-Bicocca and University of Pavia) and foreign institutions (Harvard University and IB) to pursue these goals. These partnerships allow the school to offer a curriculum that is always up-to-date, in-depth, and able to meet contemporary and future cognitive, existential, and work challenges. Thanks to these fruitful synergies, BES primary school has become a proper research and development laboratory, contributing to expanding the frontiers of learning and teaching. The school presents itself as a rigorous institution, constantly oriented towards the avant-garde in terms of its didactic framework, curricular and extra-curricular offerings, and educational offerings. Using Yuval Noah Harari's metaphor (Harari, 2022), the commitment of the BES school community is to enable the students (and consequently their families growing up with them) to equip themselves with a flexible and elastic tent, a tent that can be quickly opened and fixed to the ground, but that can also be quickly dismantled and moved to a different scenario.

The INVALSI 2022 and 2023 test data show a trend in Italian schools, especially in secondary schools, characterized by an approach that favours solidity and richness of content at the expense of flexibility. This trend is evident in BES secondary schools, where the teaching staff and leadership figures keep a traditional conception of education focused on mere knowledge transfer. Two years ago, despite the introduction of the innovation coordinator figure in the BES middle school and the launch of units of inquiry inspired by the BES primary school model, resistance to change in the teaching model persists, generating friction between the two school orders. This difficulty is partly attributable to all primary school teachers having comprehensive didactic, pedagogical, and psychological training (having obtained a degree in Primary Education). In contrast, middle school teachers have a predominantly disciplinary university education.

The two realities involved in this research project, primary and middle school, have been consistently characterized by a climate of hostility, which has given rise to several challenges and difficulties over the years. Many families who chose to attend the whole school at BES reported the feeling of two distinct school realities. This dichotomy appears from the two different institutional cultures despite sharing the same educational mission and vision.

1.5 Scope of the research

The primary objective of this study is to investigate strategies for enhancing secondary education within the BES context by integrating and adapting principles and successful practices from BES primary education. The goal is to make BES secondary school a more flexible environment that fosters community well-being. *"A school that overcomes not only the division into classes and orders, but also the rigid disciplinary scansion, always in the direction of enhanced learning and education"* (Anichini et al., 2023, p. 8).

The research questions guide the investigation into what educational innovation means today, what criteria can be used to identify practical, innovative practices, and how to overcome challenges transitioning from primary to secondary school. The aim is to find the fundamental principles and practices that maximize the

benefits for the stakeholders involved, thus helping to promote a more integrated and meaningful educational journey at BES.

2 THEORETICAL FRAMEWORKS

2.1 Innovation in education: an attitude to a changing world

In recent times, especially in the wake of the health crisis caused by the Covid-19 pandemic, an urgent need has arisen within the educational landscape to examine the Italian school system. The unprecedented challenges posed by the pandemic have emphasised the urgency of re-evaluating and renewing educational practices to ensure resilience and adaptability in the face of unforeseen disruptions: the difficulties of the Italian educational system are increasingly clear and have highlighted how the quality of teaching learning is increasingly important (Ricci, 2021).

This need appears both at national and international level. Since 1971, UNESCO, with the establishment of the International Commission for Educational Development, has been promoting the need to routinely analyse the international educational scenario and thus provide directions for the future to come (Cornacchia, Marescotti, 2023). In 2022, UNESCO, in its report "Reimagining our futures together: A new social contract for education" invites the entire educational community, in this scenario of overlapping crisis, "to think differently about learning and the relationships between students, teachers, knowledge, and the world" (UNESCO, 2022, p.3).

The central players within the contemporary educational milieu must recognize that current pedagogical approaches should transcend mere accountability, thereby shifting away from methodologies grounded solely in repression and traditional paradigms (Giroux, 2019). Instead, emphasis should be placed on fostering adaptability among both students and educators to navigate the dynamic world. Schools' ought to be envisioned as proactive agents shaping the future, with the explicit aim of equipping individuals to excel amidst perpetual change.

Conversely, the current educational landscape in Italy is under the sway of a Ministry of Education that has introduced the notion of 'merit' alongside 'education.' This decision may be construed as a divergence from future-oriented

perspectives, reverting instead to a bygone conception of education predicated on competition and rote learning, promoting a model centred on reaching superiority. However, it is imperative to underscore that this analysis does not intend to give judgment but rather aims to elucidate the diverse viewpoints prevalent within the educational panorama. Within this framework, the prospect arises of taking part in a broader narrative, where educational policy choices may reflect a capitalist ethos, potentially conflicting with the principles of inclusive education inherent in a democratic system (Dewey, 2013). On one hand, there is a national prevailing emphasis on the imperative of achieving excellence; on the other hand, UNESCO underscores the contemporary significance of pedagogical frameworks structured upon principles of cooperation, collaboration, and solidarity, developing interdisciplinary curricula and bringing professionalism to teachers (UNESCO, 2022, p.4).

Society must acknowledge the inherently political nature of education, with schools serving as primary institutions through which future global citizens engage (Kohan, 2021). Amidst the challenges stemming from the 2020 pandemic, we are presented with a pivotal opportunity to reevaluate the role of educational institutions. It has become increasingly clear that schools transcend their traditional roles as mere sites of instruction, evolving into dynamic learning environments that require nurturing (Lorenzoni, 2023).

They function not only as physical spaces but also as inclusive communities where individuals feel welcomed and valued, places where a positive synergy is created between teaching and learning practices (Pastena, 2020). Sustaining an atmosphere of caring, well-being, and inclusion requires unwavering dedication and continuous critical reflection and emphasises the indispensable role of educational leadership in fostering an environment conducive to holistic growth and development. In a changing environment, learning becomes an act of rebellion, a way to challenge conventions and embrace change, and in the 21st century, we can no longer think of school as merely a transmission of knowledge and content but must be a place akin to sustainability. We can no longer define school to the exclusion of critical thinking, equity, resilience and collaboration (Ashoka & INDIRE, 2023).

Within this reflection, educational innovation appears as the pivotal element aimed at supplying effective and efficient responses to evolving educational needs (Pastena, 2020).

2.2 Defining innovation

To redefine the purpose of Italian education and analyse practices at both macro and micro levels, it is necessary to clarify the contemporary understanding of educational innovation. Definitions of innovation vary in both national and international literature, and, for this purpose, I have chosen to reference two reports, one national and one international, for this purpose.

- The Italian report “Strade d’innovazione - percorrendo la trasformazione dell’educazione in Italia” published on December 2023 by INDIRE and Ashoka;
- The report “Innovating Pedagogy 2023: Open University Innovation Report 11” published in August 2023 by The Open University.

2.2.1 National definition of innovation

In recent years, in Italy, the education sector has been carefully examining various practices to address the misuse of the term "innovation". The aim is to find the best methods and practices to prepare students (and teachers) for an increasingly complex and interconnected world (Ashoka & INDIRE, 2023).

Ashoka and INDIRE, drawing on the definition proposed by GIIN (Global Impact Investing Network) in 2007, which was also taken up by Mario Calderini in his speech at the CSR and Social Innovation Fair (Calderini, 2020), base their conception of innovation on three fundamental pillars:

- **Intentionality:** Social impact is looked for deliberately, with actions aimed at generating benefits for the community. This translates into a clear and upfront statement of goals, together with the active pursuit of activities to create social value.
- **Measurability:** in addition to pre-defining the social impacts one intends to generate, one must also be aware of how one intends to measure them.
- **Additionality:** Planned actions focus on areas and contexts that are often neglected and not beneficiaries of social improvements, adapting the design of innovation initiatives to affect aims to generate positive change. In this context, additionality refers to the ability to create something new that is useful to society.

However, these three pillars are based on the definition provided by INDIRE in 1925, the National Institute for Documentation, Innovation and Educational Research, which investigates and promotes pioneering educational experiences in the country. According to INDIRE, educational innovation is a process that revolutionizes educational practice in terms of space and time. This concept is also developed by integrating the principles of the *Avanguardie Educative* (INDIRE, 2018), an action-research project launched in 2014 by INDIRE, aimed at exploring strategies to give and systematise innovation in the Italian school system, considering both the factors that favour and those that hinder its diffusion. The *Avanguardie Educative* schools, in collaboration with INDIRE, are implementing experiments aimed at revolutionising and innovating the school organisational and educational model, inspired by the fundamental principles outlined in the Movement's Manifesto (Anichini, A., Bartolini, R., Greco, S., Nardi, A., Pestellini, F. et al., 2023).

Thanks to this theoretical framework, INDIRE and Ashoka, in outlining Italy's innovative realities, highlighted in the 2023 report an educational model characterised by a greater propensity to collaboration than the individualist approach, which, however, continues to be mainly widespread in Northern Italy (Ashoka & INDIRE, 2023).

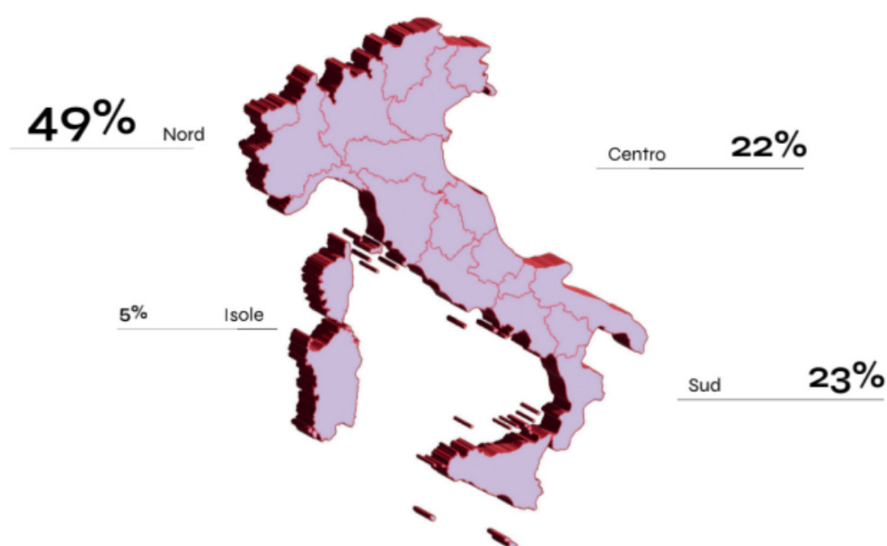


FIGURE 3. Geographic distribution of innovation experiences in Italy (Ashoka & INDIRE, 2023).

2.2.2 International definition of innovation

On an international scale, the report titled "Innovating Pedagogy 2023: Open University Innovation Report 11" shows the teaching, learning, and assessment methodologies that have exerted considerable influence on the global education landscape in 2023. The focus lies on delineating ten pedagogical innovations with the greatest potential to instigate paradigm shifts in contemporary educational practices (Kukulska-Hulme, et al., 2023).

The ten modes identify as catalysts of change in 2023 are:

1. Pedagogies using AI tools
2. Metaverse for education
3. Multimodal pedagogy
4. Seeing yourself in the curriculum
5. Pedagogy of care in digitally mediated settings
6. Podcasts as pedagogy
7. Challenge-based learning
8. Entrepreneurial education
9. Relational pedagogies
10. Entangled pedagogies of learning spaces

The named ten practices epitomize a dual emphasis within the educational sphere. On one hand, a predominant focus is directed towards the integration of technology, notably artificial intelligence, into educational practices. On the other hand, there is a substantial recognition of the significance attributed to fostering a culture of care and well-being as foundational elements within the educational milieu.

Both reports emphasize the centrality of change within the educational landscape, highlighting practices that drive transformative shifts. Discussing innovation thus entails conceptualizing schools not as static entities but as dynamic organisms in constant evolution, underscoring the imperative of fostering adaptable approaches to meet evolving educational needs. While terms such as well-being, mindfulness, and prioritizing well-being over academic achievement occupy a significant space in the discourse, it is imperative to recognise that well-being encompasses not only students, but all actors in education. Given the rapid pace of change in pedagogy, there is an incessant

demand for adaptation and professional development (Alejandro, David, 2018). As a result, individuals in the educational sphere find themselves caught in what can be termed an 'acceleration trap', in which the relentless pace of change generates feelings of frustration and anxiety (Olds et al., 2023).

2.2.3 Innovation in educational environments

In the context of pedagogical innovation and the strain experienced by the actors of the educational scenario, it is crucial to emphasize the significance of collaboration within the educational environment (Harris, Jones, Huffman, 2017). This entails recognizing the professional ability of educators and integrating their competencies into policy discussions, rather than relegating them solely to the confines of their classrooms. Teacher professionalism transcends individual traits, relying instead on collaborative learning, design, and networking initiatives (Alejandro, David, 2018). Such an approach not only fosters a supportive environment for educators but also enhances the efficacy and adaptability of educational practices.

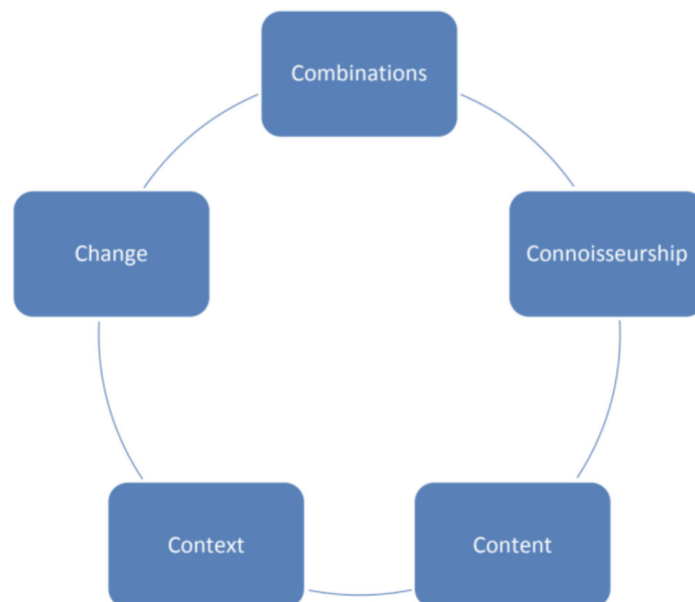


FIGURE 4. The five C's Framework. (Alejandro & David, 2018, p.22)

Showing the 5 Cs, Alejandro and David (Alejandro & David, 2018) elaborate on the notion that the definition of effective educational practices, which could then possibly be considered innovative, requires in-depth analysis. The effectiveness

of an educational practice is not primarily determined by surface aspects, such as specific teaching methods or classroom organization, but rather by deeper levels of instruction, such as the quality of interactions between teachers and students in a meaningful context. With the introduction and definition by the OECD (OECD, 2013) of the concept of Innovative Learning Environments (ILE), an attempt has been made to identify a method to distinguish and analyse innovative ways of organizing learning at the micro level (learning environment), and to understand how this connects to the macro level (networks and communities of practice) and strategies for implementing learning change at the macro, system level.

Within this context, the concept of *affordance* (Young, Cleveland, Imms, 2020) has been introduced, which defines the outcome of the interaction between the student and the learning environment. Affordance is not physically present within the learning environment but is what the student can perceive, grasp, or get from it: it encompasses the learning opportunities and actions that the student can see or perceive within the educational setting. Consequently, it is possible to distinguish various affordances within the same learning context among different individuals.

2.3 Fostering communities of learning (or learners)

As Biesta (Biesta, 2015) explained, the point of education is not the student's learning, but to put people together. Bringing together a group of people, of different ages and genders, means generating change in the personal dimension of one's identity, in the social dimension and in one's qualifications.

For innovative practices to spread, it is therefore necessary for key figures in the Italian school system to take an active stance today and begin to think critically about the education system, putting themselves in the shoes of lifelong learners. Teachers and school leaders need to recognise that good pedagogical practices should not only be guided by superficial procedures, but rather by values and principles (Brown, 1994). This approach allows pedagogical techniques to be selected and adapted appropriately to promote effective and meaningful learning. In the context of child learning, Vygotsky's theory of the zone of proximal development highlights that much of cognitive development occurs through social interaction (Vygotsky, 1978/1935). The "zone of proximal development" (ZPD)

stands for the gap between what a child can carry out independently and what they can achieve with the help of a more knowledgeable adult. These are tasks that the child cannot solve alone but can complete with the support of a more capable partner (Van den Broek, 2012).

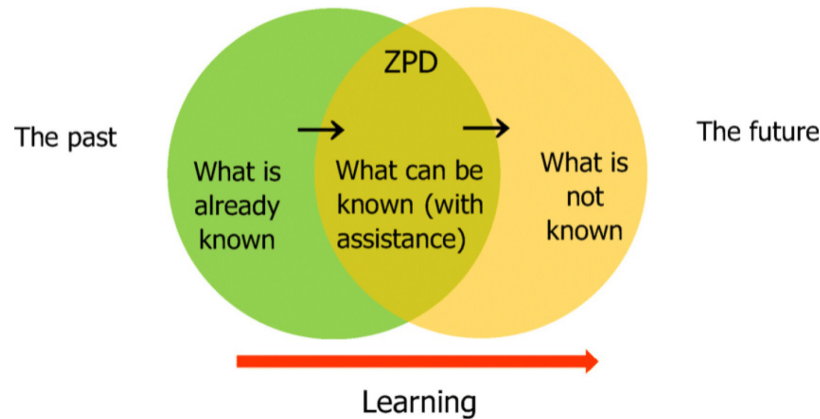


FIGURE 5. Vygotsky's zone of proximal development (ZPD)

Applying these principles to the role of the teacher underscores the need for educators to model and promote cooperative and collaborative practices. The teacher, as a guiding figure, should be the first to actively engage in these dynamics both within the classroom with students and outside, interacting with colleagues, leaders and families (when families are involved). In doing so, they not only show the importance of such behaviours but also give a practical example of how to effectively implement them. This proactive involvement of the teacher in fostering collaboration not only enhances students' educational experience but also helps cultivate a stimulating and inclusive learning environment (Farmer., Hamm, Dawes, Barko-Alva, Cross, 2019). Participation and democracy are intrinsically linked, especially considering that current reflections on democracy emphasize how fundamental rights must be effectively enforceable to be genuine. Therefore, participation is essential since a right is only truly recognised when the individual is active and involved (Hoffman-Kipp, 2008). Participation in the school context, especially during individual identity formation, is a foundation of democratic society.

For this reason, several projects have been started nationwide, such as "*Scuola Sconfinata Openlab*" ("*Boundless school openlab*") in Milan and "*Io sono*" ("*I am*") in Rome, aimed at creating environments of reciprocal learning and listening (AAVV, 2023). Additionally, the organization has launched the experimentation of widespread and outdoor education with various Comprehensive Institutes and

public High Schools, supplying support to the educational sector through emotional education pathways and pedagogical training activities for the entire educational community, involving teachers and parents (Ashoka & INDIRE, 2023).

2.4 Data on the Italian school today

This societal need to emphasize the importance of community and collaboration within the Italian school system, aiming to transform it into an environment where individuals learn to manage both technological and human changes, leads us to reflect on the current structure of education in Italy. Analysis of the 2022 and 2023 INVALSI reports highlights an Italian educational system that, instead of reducing disparities, worsens them, thus contradicting Article 34 of the Italian Constitution, which enshrines the right to education for all (AAVV, 2023).

The standardized national exams, administered by INVALSI (National Institute for the Evaluation of the Education and Training System) in primary and secondary schools, are designed to assess Italian students' ability levels in Italian, Mathematics, and English on a macroeconomic scale. The evaluation is crucial, as it guides the Ministry of Education in implementing nationwide improvement strategies. Results are anonymous, enabling schools to compare their performance with institutions in similar socio-economic and geographical areas, using national data as a reference (Seminario, 2020).

In 2022 and 2023, the trends across different school levels have shown either stable or slightly worsening results (Gui, Assirelli, Gerosa, 2023). However, two concerning issues have become more pronounced: the widening gap in learning opportunities between North and South Italy and the increase in school dropout rates. There are strong indications of unequal learning opportunities in Southern Italy, both in terms of the varying ability of schools to mitigate the effects of socio-economic-cultural differences and differences between schools and, especially, between classes.

Italy is currently one of the poorest countries in the European Union and is facing the growing issue of school dropout rates. In 2019, the implicit school dropout rate was 7%, rising to 9.8% in 2021, due to prolonged periods of remote learning. In 2022, a slight reversal of this trend was seen both nationally, dropping to 9.7% (-0.1 percentage points), and regionally. The outcomes of 2023 confirm a more

significant decrease in the implicit school dropout rate, now at 8.7% (-1 percentage point compared to 2022) (INVALSI, 2023). From the INVALSI data of 2022-2023, the importance of preventing social marginalization processes, which are among the consequences of educational failure, has become clear (Batini, 2023).

According to INVALSI reports, in 2023 (INVALSI, 2023), one out of two students do not reach satisfactory levels in the ability to interpret written texts and understand their meanings (Billari, 2023). Moreover, research conducted by the Rocca Foundation (Fondazione Rocca, 2022) reveals another fundamental aspect to consider: while Italian primary schools align with European standards in both mathematics and reading comprehension, performance tends to deteriorate as students' progress through the educational continuum. Specifically, in lower secondary education, Italy ranks among European countries with lower ability levels, both in language and mathematics, with this disadvantage further accentuated during upper secondary education (Billari, 2023).

Hence, the focus should not be solely on those who leave school, but on all components forming the contemporary Italian educational environment. The depicted scenario from these data illustrates the pressing need for a comprehensive and structural educational reform in today's Italian schooling system, particularly in its secondary sector, which still largely adheres to the Gentile Reform of 1923 (Fiorucci, 2020). From a demographic perspective, neglecting investments in education today results in irreparable damages for tomorrow: human capital, as delineated by economists, is pivotal for future economic growth and innovation capacity, yet it is determined today (Billari, 2023).

3 METHODOLOGY

The upcoming chapter will expose the criteria employed for the research methodology, aiming to address the main question: Which strategies and approaches can be adopted to promote innovation in the structuring phase of a secondary school?

3.1 Research design and structure

The methodological cycle is a concept's journey to gain a deep understanding of phenomena accepted within the scientific context. From the first observation, it goes through stages such as hypothesis formulation, data collection and analysis, experimental verification, and scientific validation. The aim is to achieve a more accurate and thorough understanding of natural or social phenomena.

This research project is born out of a specific request from the school management of the Bilingual European School, where the imperative lies in addressing challenging situations and acquiring new knowledge. This research aims to provide practical solutions that meet the needs of the BES, such as opening a new secondary school aligned with the innovative principles and practices of the primary school.

Within the research tradition, two main streams exist: quantitative and qualitative. Quantitative and qualitative research are two distinct approaches employed in scientific inquiry, differing primarily in the types of data collected, analysed, and interpreted, as well as in data collection and analysis methods. Typically, quantitative research methods serve to test a theory's validity (Moilanen et al., 2022) and focus on quantification in data collection and analysis (Bryman, 2016). On the other hand, qualitative research aims to gather information to understand a phenomenon better (Moilanen et al., 2022): research centered on meanings, interpretations, and experiences is known as qualitative research (Bryman, 2016).

While quantitative research focuses on gathering information from various data sources, qualitative research delves into meanings, interpretations, and experiences (Bryman, 2016). Qualitative research aims to deeply explore a

specific topic to develop a more person-centered practice (Thomas & Magilvy, 2011). To address the first problem, both qualitative and quantitative research methods have been considered. This comprehensive approach allows for thoroughly exploring the issue, incorporating diverse perspectives and methodologies to ensure a well-rounded analysis.

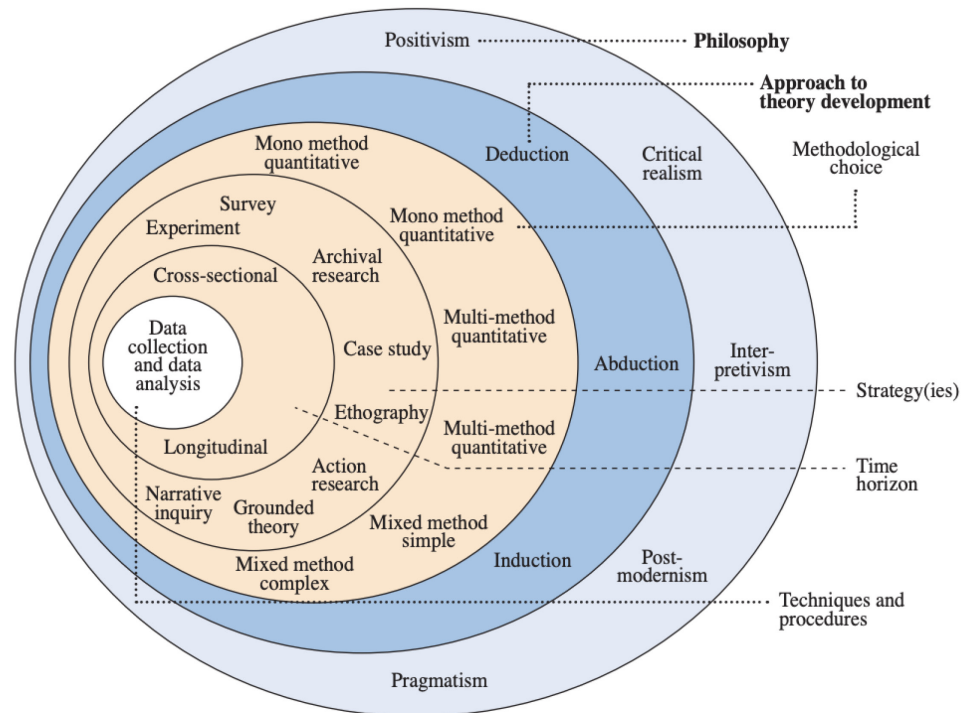


FIGURE 6. Research Onion (Saunders, Thornhill, Lewis, 2019)

3.2 Research philosophy

As part of the master's program at the Tampere University of Applied Sciences, this thesis focuses on finding a practical solution and outcome for a problem. The knowledge generated from this thesis is necessary to enable actions that should be carried out successfully. This approach aligns with the philosophy of pragmatism, where research begins with a problem and can be seen as a "*bridge between paradigm and methodology*" (Cameron, 2011, p.101). Pragmatism or critical realism "assumes the flexibility of the future. The main aim of pragmatism is to approach research from a practical point of view, where knowledge is not fixed but constantly questioned and interpreted (Melnikovas, 2019). For this reason, pragmatism consists of an element of researcher involvement and

subjectivity, specifically when drawing conclusions based on participants' responses and decisions.

In this case, the problem is that BES primary school needs to be aligned with the middle school, both in principles and practices, leading to friction and issues between the two levels of education. BES wants to introduce a new high school, aligned with the philosophy of the primary school, starting from September 2025.

3.3 Approach to theory development

In 'peeling off' the second layer of the research onion, we have to choose the research approach, which is the broader method that will be used during the research process. The second layer has two opposite approaches, one between the inductive, deductive, and abductive approaches.

Choosing the right approach depends on the philosophy and research approach adopted. The deductive approach is akin to prediction, as it relies on logical reasoning that leads to certain conclusions, which are then verified through data collection. Conversely, the inductive and abductive approaches start from observing data to develop a clear theory (Patokorpi & Ahvenainen, 2009). The abductive approach focuses on discovering "weak signals," the first signs of change. This approach is practical when limited information is available and hypotheses must be made (Patokorpi & Ahvenainen, 2009).

The abductive approach was chosen in this research, and the rationale behind this decision will be elaborated upon in the following section.

The abductive approach, or abductive reasoning, is based on interpreting weak signals or incomplete evidence to draw plausible conclusions or hypotheses. In fact, after analysing the BES strategic plan and defining the steps for creating a new secondary school, an obvious problem appeared. There is friction between the two school orders due to the use of innovative practices in the primary school. Since this approach is a process of inference that tries to explain an observed phenomenon logically, even if not completely understood, it was suitable for the BES situation because it created a continuity project between primary and secondary schools.

The abductive approach is often used when knowledge is limited, and conjectures must be made to explain a particular phenomenon or problem: in fact, one of the characteristics of an abductive approach is changing an existing theory. For this reason, the deductive method could not be chosen in this case, as one cannot move towards specific conclusions in this situation; on the other hand, the inductive approach could not be chosen, as it was not possible to conduct specific observations to try to identify patterns or trends that can be generalized. The theoretical framework highlights that the Italian primary school is more prone to innovation, showing data in line with European primary schools and beyond, while on the other hand, the higher one goes with school cycles, the worse the situation gets (Rocca Foundation, 2022). Based on this conceptual framework, focus group interviews and surveys were defined to collect data and examine to what extent the mixed existing theories fit this research's practical problem and solution.

3.4 Research design

In the research process, we will now meet three different layers: the methodological choice, the research strategy, and the time horizon. It is essential to proceed with linearity to define a straightforward research design.

3.4.1 Methodological choice

This layer of the research onion consists of deciding how many types of data (qualitative or quantitative) to use in the research and which method to use to collect them. Three options, single-method, mixed-method, and multi-method, exist in the research onion, which refers to the use or non-use of quantitative and qualitative research methods.

Quantitative research refers to methods involving numbers and mathematical operations; quantitative research tests "*if a theory is valid*" (Moilanen et al., 2022, p.134). On the other hand, qualitative research methods imply the collection of vast descriptive data (Melnikovas, 2019), and "*in the scientific research, qualitative methods have been applied to studying topics that are not well understood for the purpose of understanding them better*" (Moilanen et al., 2022, p.134).

In response to the research needs, a mixed-method approach was employed, using both qualitative methods to capture the meanings conveyed by interviewees' words and quantitative methods such as surveys to gather numerical data on the interest of employees, students, and their families regarding the establishment of a secondary school aligned with the principles of primary education.

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3.4.2 Research strategy

The fourth layer of the research onion is dedicated to the research strategy, outlining how the research will be conducted based on the study's research objectives. Melnikovas defined "*research strategy can be referred to as a general way which helps the researcher to choose main data collection methods or sets of methods to answer the research question and meet the research objectives*" (Melnikovas, 2019, p.39). This strategy also allows the researcher to gain a holistic and in-depth understanding of the research problem to understand and explain it better (Baskarada, 2014).

The strategy chosen for this research is the case study.

The case study strategy is a qualitative research method that focuses on the in-depth analysis of one or more specific cases, such as individuals, groups, organizations, or events. According to Yin (2009), it is the preferred research method when questions about how and why are posed, and the researcher has little control over events, focusing on a contemporary phenomenon within a real-life context.

Within the onion research framework, this method aims to deeply understand the context, dynamics, and processes involved in the specific case, allowing researchers to explore the complexities and nuances of the phenomenon under study. Therefore, when choosing this strategy, it is essential to consider the socio-cultural context. In the case of our research project, this in-depth analysis of a specific case can provide valuable insights and contextual information that contribute to understanding educational phenomena, both in primary and secondary schools and to formulating practical recommendations for educational leadership.

3.4.3 Time horizon

The penultimate layer of the research onion defines the time the research takes place. Saunders et al. (2016) distinguish between a cross-sectional or short-term study, in which data is collected at a specific point in time, and a longitudinal study, in which data is collected repeatedly over an extended period, to compare them. In this case, we are talking about a longitudinal time horizon.

This research project started in October 2023 with the definition of the research and analysis of the problem. Questionnaires were sent to families, students, and teachers in October 2023 and March 2024, and focus groups with teachers took place once a month from October 2023 to March 2024.

3.4.4 Techniques & procedures

A spectrum of stakeholders was involved in gathering various perspectives and conducting an in-depth analysis to obtain an answer to the research question and outline the necessary steps for setting up a new secondary school.

1. **Questionnaire to the school community (Appendix 1):** Primary data collection occurred in collaboration with the school manager, a role introduced in July 2023, who works alongside the principal and the board. Faced with a proposal from the Board of Directors, the first aim was to understand the level of interest among families of BAPS and BES in introducing a new high school aligned with the practices and principles of primary education, thus offering a comprehensive path from early childhood education to secondary education. The data collection

happened through a survey, which allowed us to gather a vast amount of information rapidly; however, potential limitations of this research method were considered, such as the possibility of respondents supplying inaccurate answers or the collected data being superficial (Moilanen et al., 2022). The survey was sent in September 2023. Once the survey had been defined and the cover letter written, before being shared with all the families in the school community by the Google Form app, a pilot testing phase was planned with two people, both teachers, and mothers of pupils in the school. According to Cohen et al. (2013), the primary goals of pilot testing are to enhance the questionnaire's reliability, validity, and practicality (Wadood et al., 2021).

2. **Monthly focus group with teachers:** The monthly focus group sessions with teachers (initially open to all school staff) had a dual aim: on the one hand, to recognize, analyze, and reflect on the principles and practices characterizing BES, and on the other, to work on the school's identity, aiming to overcome tensions between the two school levels. Considering the sample of respondents and being aware that this commitment could have generated additional stress, the focus groups were interrupted in November during the meetings between teachers, students, and families and in January during the period of writing evaluation forms. Guiding the discussion with a series of questions and incorporating visual materials such as videos and podcasts aimed to prompt teachers to reflect on:

TABLE 1. Teachers' focus group topics

Objective	Dimensions explored
Vision and mission for a future BES	Why?
Define today as the teacher of tomorrow	Who?
Strengths and weaknesses of PS and MS	What?
Space management and methodological choices	Where?
BES pedagogical frameworks	How?

Not all questions were followed precisely, but it was preferred to follow the discussion generated by the interviewees.

In the information-gathering phase during the focus group, the content that appeared and how this content was shared were noted (Trobia, 2005).

3. **Focus group with families:** Based on results from the survey, which showed considerable interest in the project of a new secondary school (the data will be analysed in the following chapter), it was decided to organize a focus group with families of students from BAPS and BES. This meeting aimed to create a sense of community and to prompt families to question the need to adapt educational pedagogical practices to the contemporary context. Prior to the meeting, families were asked to listen to an episode of a podcast featuring an interview with Professor Francesco Billari (Calabresi, 2023), rector at Bocconi University, in which he lays out the reasons why he believes it is essential to redefine the Italian educational landscape. The goal was to stimulate families to reflect on these issues through open discussion followed by group work to explore the current meaning of Italian secondary schooling and outline its prospects and purpose.

4. **Questionnaire to students (Appendix 2):** Students in the fourth and fifth grades of primary school and all middle school students were selected as the primary observation units for this research. Before administering the questionnaire, they were introduced to the research project, explaining that participation would help define the parameters of a possible new secondary school BES. The decision to involve this specific group of students was motivated by the need to obtain various perspectives about current school practices and expectations for a future BES secondary school. Using students as the observation unit appeared helpful in efficient data collection, allowing a significant set of information to be acquired briefly (Moilanen et al., 2022). The data were collected with an anonymous questionnaire-based methodology was adopted. The questionnaire was distributed through GSuite's Google Forms application, ensuring easy accessibility and allowing students to answer the questions conveniently and securely. The questionnaire was structured with four mandatory

closed questions and two optional open questions, aiming to gather a wide range of opinions and allow students to express themselves freely on the topic under consideration. Before proceeding with the distribution of the questionnaire to all students, a review of its content was requested from two schoolteachers to obtain qualified feedback (Moilanen et al., 2022). This review phase revealed the presence of some typos and the omission of the dual language translation in some questions. In addition, a debate emerged about word choice in the third question, which this revision stimulated. This revision process was crucial to ensure the quality and clarity of the questionnaire before it was distributed to students, thus ensuring the validity and reliability of the data collected.

3.5 Data analysis

Whereas in quantitative research, the research design is rigidly defined before data collection begins, qualitative research appears open-ended and "suitable for capturing the unexpected" (Corbetta, 2014, p.6). Qualitative research focuses on delving into the participants' experiences, opinions, and perspectives, and for this, a non-probabilistic sampling was defined to have information and different perspectives. Indeed, the subjects of this research study were not fragmented into variables but were considered in their interest, as the aim is to understand people and interpret their views (Corbetta, 2014).

The research was evaluated through both perceptual data and objective analytical data. On the one hand, the results of the questionnaires on interest in the opening of a possible high school were analysed, which allowed us to have objective data. However, analysing the information gathered in the focus groups allowed us to have data based on the opinions gathered.

3.5.1 Quantitative Data Analysis

Objective data were obtained by analysing the results of two questionnaires, one for families already part of the school community and the other for students regarding their interest in opening a prospective high school.

An integrated framework for QCA was chosen based on the work of Poldner et al. (2012), which categorized, compared the distinct quality criteria, and integrated them with the construct validity aspects of Messick (1995). These five criteria were considered for the validity of the questionnaires (Krippendorff, 2018): data validity, repeatability, objectivity, consistency and coherence, and context sensitivity.

For the analysis of the quantitative data from the two questionnaires, a statistical analysis approach was adopted to obtain a detailed and rigorous understanding of the results (Gillham, 2007). This methodology allows the data to be examined systematically, identifying significant patterns, relationships, and trends in the collected data (Myers et al., 2013). Statistical analysis also provides a sound basis for interpreting the results and drawing valid and reliable conclusions (Ellis, 2010).

In the educational context, certain variables must be considered when analysing data collected through questionnaires. Studies have found that particularly when gathering opinions from students, variables such as gender, academic attainment, self-efficacy, and student interests significantly influence aspirations, along with other personal factors (Humble, 2020). Additionally, teachers' approaches to students and their manner of encouraging and nurturing their aspirations can also influence their responses to the questionnaires (Khoo & Ainley, 2005).

3.5.2 Qualitative Data Analysis

A narrative analysis approach was chosen to analyze the qualitative data collected through the focus groups with teachers and families in the school community (Onwuegbuzie et al., 2009). Wilkinson defines (Wilkinson, 2004, p. 177) focus group research as "a way of collecting qualitative data that essentially involves involving a small number of people in an informal group discussion(s) 'focused' on a particular topic or set of issues." Social science scholars, particularly those focusing on qualitative research, often use focus groups to obtain data from multiple participants simultaneously (Onwuegbuzie et al., 2009). This method allows for an in-depth exploration of participants' stories, experiences, and perspectives, enabling rich insights into the dynamics and

challenges within the educational environment to be uncovered. Through narrative analysis, the aim was to capture the nuances and complexities of participants' narratives by examining themes, patterns, and relationships inherent in their narratives. By delving into the narratives shared by teachers and families, it sought to holistically understand their experiences and perceptions, which can inform leadership strategies and decision-making processes within the educational setting.

Grounded theory, while a valuable methodology in many research contexts, was deemed inappropriate for our study because of its emphasis on generating theory from data (Heath, 2004). Given the specific purposes of this research in educational leadership, a narrative analysis approach would be better suited to our goal of capturing the lived experiences and perspectives of teachers and families. Unlike grounded theory, which aims to develop abstract theoretical frameworks, narrative analysis allows for a more in-depth exploration of individual and collective narratives, shedding light on diverse voices and lived realities within the school community. According to Glaser (1992), grounded theory exclusively employs an inductive rather than a deductive approach to inquiry. This means that data analysis primarily relies on direct observation of phenomena and the generation of theories from these observations rather than starting from pre-existing hypotheses or existing theories (Khan, 2014).

Embracing a narrative approach (Onwuegbuzie et al., 2009) can uncover the unique stories and meanings inherent in the data, offering valuable insights for improving educational leadership practices and promoting positive changes within the school community.

"To date, no framework has been provided outlining the types of qualitative analysis techniques that focus group researchers have at their disposal" (Onwuegbuzie et al., 2009, page. 5). However, to avoid qualitative survey results based on subjective perceptions and personal impressions rather than complex data, during the analysis phase the data must be synthesized, categorized by groups, or structured in narrative form. These three different data grouping processes are defined by Saunders, Thornhill, and Lewis (Saunders et al., 2019):

- summarizing (condensing) meanings;
- categorizing (grouping) meanings;
- structuring (sorting) meanings using narrative.

In this way, it is sought to ensure that data analysis is rigorous and based on concrete information, minimizing the risk of subjective influences in the conclusions drawn from qualitative research.

A data analysis segment should be reserved for examining the qualitative responses within the questionnaires. At the end of both questionnaires, open-ended questions were included to allow participants to share opinions or provide personal suggestions. Although using digital tools simplifies some aspects related to open-ended questions (Delli Zotti, 2004), analyzing such data always presents challenges (O'Cathain & Thomas, 2004). While some studies suggest neglecting these responses, O'Cathain and Thomas (2004) stress the ethical importance of considering them. However, sometimes, the lack of clarity in such responses may lead researchers not to analyze them (O'Cathain & Thomas, 2004).

For the results to be valid and convincing, the content analysis of these data must be precise and rigorous (O'Cathain & Thomas, 2004). According to O'Cathain and Thomas (2004), the role of open-ended questions and their analysis is crucial. The analysis procedure will include these steps:

1. **Reading a subset of the comments and categorizing emerging themes:** Key themes emerging from participants' comments are identified by reading all responses and utilizing Google Sheets functions.
2. **Creation of analysis categories:** Once the key themes are identified, the responses are organized into analysis categories.
3. **Coding of responses:** Labels or codes are assigned to responses within the identified analysis categories. This helps organize the responses and identify common patterns or trends.
4. **Qualitative data analysis:** Once the responses are coded, a qualitative analysis examines the relationships between the themes and participants' emphases. Emphasis is placed on recurring concepts and conflicting viewpoints that may offer significant insights into participants' perceptions.
5. **Response to key aspects:** Finally, the analysis results will be used to identify key aspects raised by participants. At this stage, consideration should be given to integrating these data into the research design.

3.6 Summary

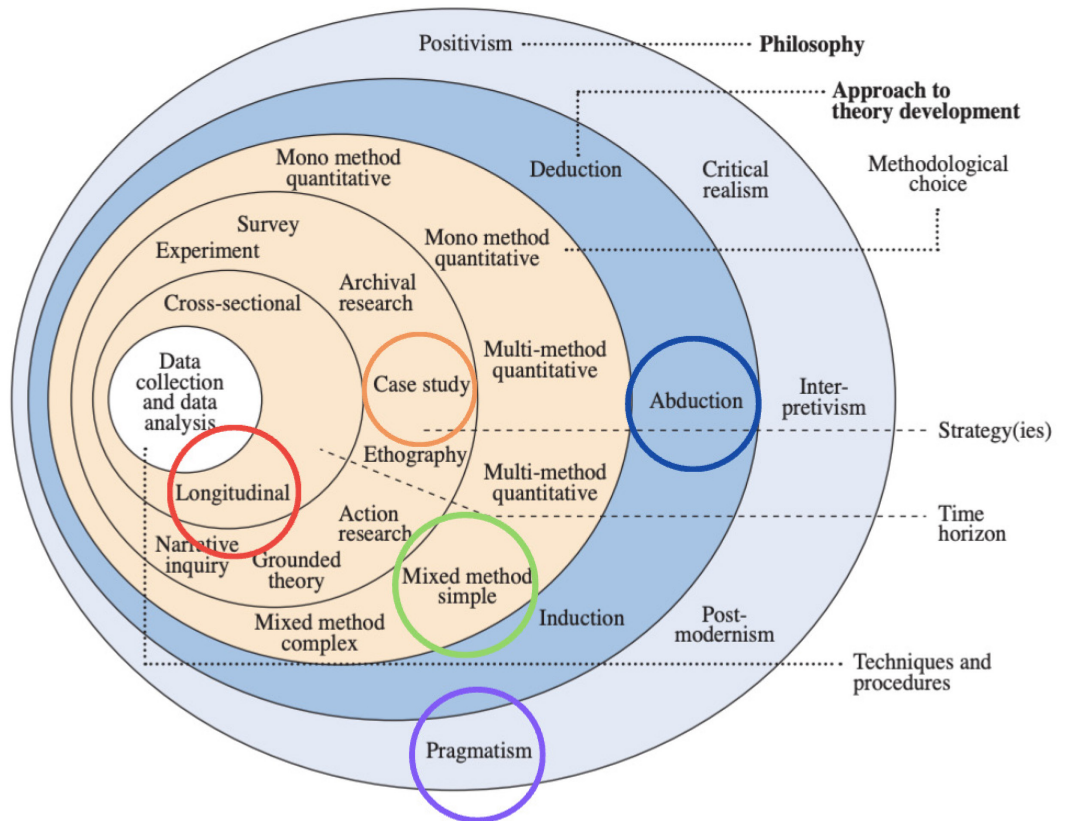


FIGURE 7. Choices Research Onion (Bettini, 2024)

4 RESEARCH RESULTS

The following chapter will present the results of the applied education research conducted in this study. It will encompass the outcomes from the four data collection phases, including questionnaires administered to families and students, focus groups with teachers, and focus groups with families.

4.1 Questionnaire Data Analysis

4.1.1 Questionnaire to School Community

Analysing the data from the first questionnaire is a crucial starting point in gathering the opinions and interests of families already included in our BES school community. The intention is to thoroughly understand the general interest in the proposal to introduce a bilingual STEAM BES high school.

The bilingual questionnaire was distributed to families enrolled in BAPS preschool and BES primary and middle school. Of BES's total families, 233 parents, representing 40.7%, responded. Responses were from parents of students across all classes in both BAPS and BES schools, with a focus on primary and middle school. This inclusive sampling reflects a comprehensive participation of the educational community, offering a holistic understanding of parents' viewpoints on the potential introduction of a new BES high school.

Quale classe frequentano attualmente i vostri figli? What class do your children currently attend?

230 responses

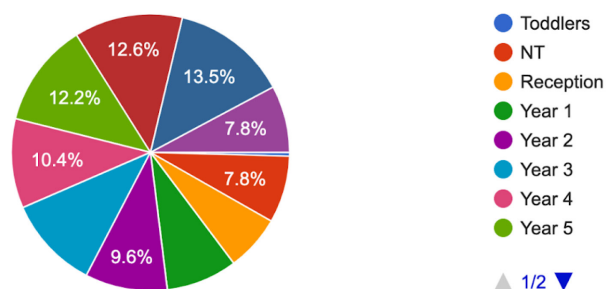


FIGURE 8: Pie chart representing the distribution of children's classes among the questionnaire respondents. Question 7.

The first questionnaire response shows considerable interest (41.1 percent and 23.4 percent) in a four-year secondary school model, as opposed to the traditional Italian five-year model established by the Gentile reform in 1923. This result indicates an openness to an innovative approach in secondary education, suggesting a willingness to explore alternatives to the established system.

Quanto è importante per voi che la durata del liceo sia di 4 anni? How important is it to you that the length of the high school is 4 years?

231 responses

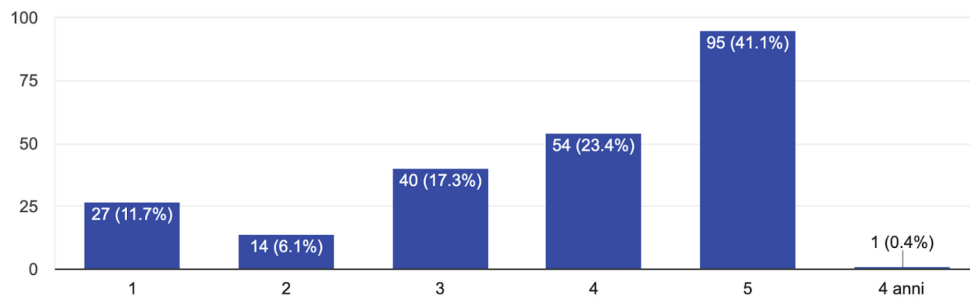


FIGURE 9: Bar graph about interest in years of potential future BES high school. Question 1.

Most parents (59.9 %) preferred a curriculum approach in which 50 percent of teaching takes place in Italian and the remaining 50 percent in English, like what is currently adopted in BES elementary school. This finding is significant: although there is currently an equitable balance of the curriculum between Italian and English in elementary school, there is a shift in the balance during the transition to middle school, with an unbalanced percentage of 70% teaching in Italian and 30% in English.

In planning the future of the high school, it is crucial to maintain a balance, especially given that 35.3% of surveyed families prefer English-language instruction over Italian. This highlights the necessity of adopting a flexible approach to ensure the educational offering aligns with the preferences of our school community. This preference for English should be considered alongside responses to question three, which addresses the importance of obtaining an Italian diploma upon high school completion. Almost half of the parents surveyed emphasized the importance of obtaining the Italian diploma, while 19.2% considered it necessary. This result emphasizes the significant value parents

place on the Italian diploma, even amidst a strong interest in balanced instruction incorporating both Italian and English.

Quanto è importante per voi che al termine degli ultimi due anni di liceo venga conseguito il Diploma di maturità italiana? How important is it to you t...chool the Diploma di maturità italiana is obtained?
229 responses

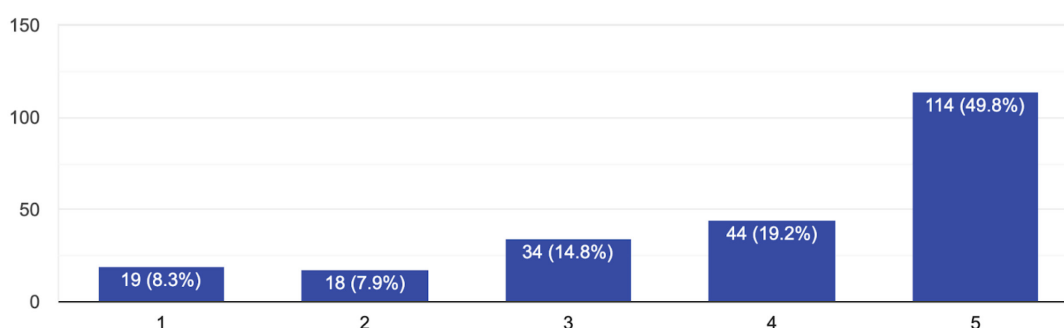


FIGURE 10 5: Bar graph about interest in obtaining an Italian diploma upon completing a prospective BES high school program. Question 3.

On the other hand, a similar but higher level of interest emerges in the fourth question, which concerns the importance of obtaining the IB diploma at the end of compulsory schooling. 53.7% of surveyed families deem obtaining the IB diploma important, followed by 24.2% considering it a significant aspect of the educational journey.

Quanto è importante per voi che al termine degli ultimi due anni di liceo venga conseguito l'IB Diploma Programme? How important is it to yo...://www.ibo.org/programmes/diploma-programme/
231 responses

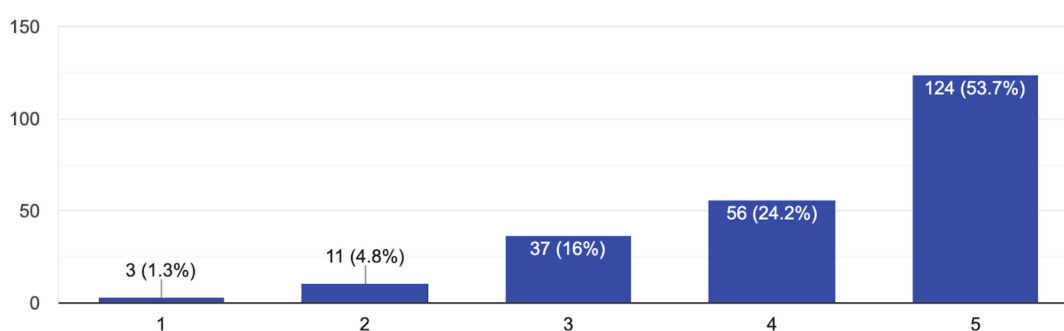


FIGURE 11: Bar graph about interest in obtaining an IB diploma upon completing a prospective BES high school program. Question 4.

The collected data highlight an interesting inclination towards an innovative model of secondary education; however, the significance of obtaining an Italian diploma remains notable. According to the Italian Ministry of Education, both qualifications are equivalent and grant access to Italian and foreign universities.

This framework reflects on the dynamics and challenges educational leaders face within the school. The Italian family, deeply rooted in tradition, sometimes resists change. Therefore, educational leaders must carefully navigate communication and conflict management when introducing new educational practices. Adequate communication and effective conflict resolution will mitigate divergences and tensions between the school and families, promoting collaboration and mutual understanding.

The dichotomy observed in the results of the last two questions also appears in the fifth question: most parents, precisely 220 out of 223, are faced with the choice between opting for the Italian baccalaureate in dual language or the IB diploma. However, a preference emerges, with 51.3% of parents opting for the possibility of a STEAM high school with a dual-language baccalaureate. This data suggests a strong interest in an educational approach that integrates the Italian and international curricula, highlighting the importance families attribute to bilingual and multidisciplinary education in higher education.

In conclusion, the questionnaire analysis shows that most families (67.5%) seriously consider enrolling their children in a future BES high school. However, many families (19%, or 44 out of 223) need help to express a definitive judgment on the possibility of enrolling their children in a potential BES high school.

Qualora venisse aperto il liceo BES, quanto valutereste la possibilità di frequentare il percorso? Should the BES high school be opened, h... evaluate the possibility of attending the school?

231 responses

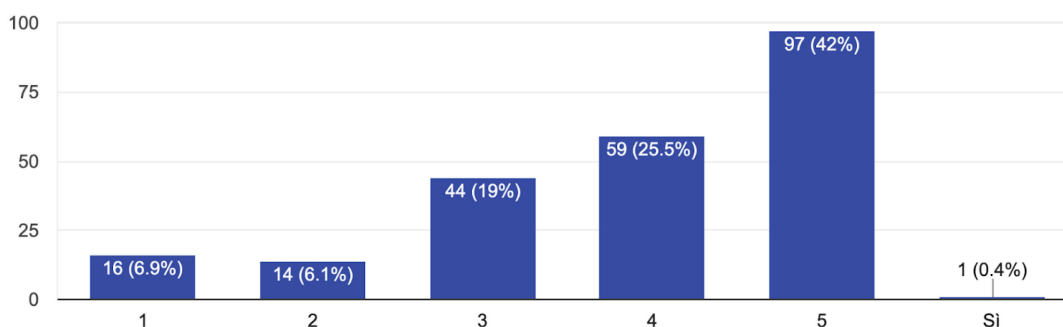


FIGURE 12: Bar graph showing interest in enrolling their children in a BES high school.

Of the respondents, 54 individuals, comprising 23.17% of the sample, provided qualitative responses to the final open-ended question. According to O'Cathain and Thomas (2004), using open-ended questions and subsequent analysis is pivotal in extracting nuanced insights from survey data. Through a systematic qualitative analysis procedure in five steps, five key categories emerged from respondent feedback:

Location Concerns: Due to space constraints and potential disruptions, families express concerns about implementing the high school project within the existing structure. They prefer a new campus with adequate facilities and emphasize maintaining an appealing student environment.

Logistical Considerations: Factors such as school hours and scheduling flexibility are essential. Clarity on the high school's location and potential access to Italian universities with an IB certification is requested.

Curriculum and Language Balance: Respondents advocate for a balanced curriculum integrating STEM and arts/language programs. They desire a stronger emphasis on English language instruction. Concerns arise regarding clarity on the differences between IB and Italian matriculation.

Educational Continuity and Quality: Families value continuity in education within the BES framework and express concerns about teaching staff quality and rising tuition costs. They emphasize inclusivity and support for diverse learning needs.

Parental Engagement and Communication: Families express willingness to participate in decision-making and stress the importance of clear, timely communication from the school administration. They suggest informative sessions about the IB program and school structure.

In conclusion, addressing these diverse concerns and fostering transparent communication channels with families will be pivotal in guiding the future trajectory of the high school project within the BES framework.

The findings indicate the necessity of organizing and facilitating a comprehensive engagement session or workshop with families to actively involve them in shaping the BES high school project (Morgan, 2016). Such an initiative would serve as a valuable platform for families to feel integral to the decision-making process (Nitecki, 2015), potentially vital in garnering widespread support and commitment to establishing an innovative secondary school aligned with the community's needs. Additionally, fostering an open and collaborative dialogue can effectively address any apprehensions or uncertainties among families, thereby enhancing their inclination to consider and opt for the new BES high school as a viable educational option for their children. Notably, the significant expression of interest, evidenced by 88 individuals (37.7%) providing their contact information for further involvement in the design phase of the new BES high school, underscores the palpable enthusiasm and engagement within the community toward this transformative endeavour.

4.1.2 Questionnaire for Students

The student questionnaire elicited voluntary participation from 261 students (95.2% of the students), comprising 113 primary school students (across six classes) and 148 middle school students (across eight classes). It was determined that the same questionnaire should be administered using two distinct documents to facilitate a more efficient data comparison, aligning with research inquiries regarding disparities between primary and secondary BES education in the context of innovative practices. This methodological choice enabled the collection of responses from primary school students separately from those of middle school students. The analysis proceeds by comparing the

answers given by primary and middle school students to both closed and open-ended questions (Appendix 3).

From the data collected and analysed using colours in response to the first question, "*What do you like most about our school? Choose ONLY THREE answers,*" several key points emerge:

Differences in Preferences: There is a noticeable contrast in preferences between primary and middle school students. For instance, nearly half of elementary school students (43.4%) selected "Teachers" as their top choice, while only 19.6% of middle school students did so.

Atmosphere and Hospitality: Both groups appreciate the school's atmosphere and hospitality, although elementary school students slightly edge out middle school students in response rate, with 31.9% compared to 31.1%.

Garden: Interestingly, the garden is the top choice among middle school students, indicating a stronger appreciation for outdoor spaces and socializing than younger students.

Use of iPads: Middle school students overwhelmingly prefer using iPads, with 66.2% selecting it as their top choice, indicating a significant technological preference compared to elementary school peers.

Celebrations of Learning and Group Work: Primary school students lean towards celebrations of learning, particularly sharing with families, while middle school students favour group work. However, group work remains a popular choice across both school levels, reflecting the BES methodological emphasis on collaborative learning (35.4% in primary school and 50.7% in secondary school).

These results underscore the importance of adapting educational and student engagement strategies according to students' ages and educational levels to ensure a satisfying and challenging educational experience.

In response to the survey's second question, "*If you could change something about our school, what would it be? Choose ONLY THREE answers,*" several noteworthy insights emerge, revealing students' least preferred aspects and desired changes. The key findings are as follows:

Uniform: A considerable percentage of students from elementary and middle schools express a desire to change their school uniform, with 66.4% and 70.3%, respectively, selecting this option.

Atmosphere: Middle school students desire to alter the atmosphere, contrasting with only 2.7% of primary school students who would change this aspect.

Teachers: In the middle school context, teachers emerged as a critical aspect for potential change, with 28.4% of students indicating a desire for alterations in this area. Interestingly, primary school students also emphasized the importance of teachers in the previous question, underscoring the significance of teacher roles, especially in shaping an innovative approach for the future high school.

Garden: While the garden remains a crucial element for change, it is more emphasized by elementary school students (14.2%) than middle school students (10.8%), possibly reflecting a preference among younger students for outdoor spaces conducive to play and school activities.

Activities with Specialists: Middle school students exhibit more interest in activities with specialists than their primary school counterparts (14.9% vs. 7.1%). Further exploration is warranted to understand the specific changes middle school students seek in these activities, whether it involves augmentation, reduction, or re-evaluation of management.

Goals and Strengths: A notable finding is that 15% of elementary school students desire to change this activity conducted at various times during the school year, suggesting a need for deeper investigation into the reasons behind this preference through additional research.

These insights shed light on areas of potential improvement within the school environment and highlight the importance of addressing student preferences and needs to enhance overall educational experiences.

Analysing the data for the third question, "*What word most represents BES school?*" an exciting picture of primary and middle school students' perceptions emerges (Appendix 5). In the table provided, "*Community*" was the predominant choice for elementary school students, 32.7 percent, and middle school students, 29.7%. This result suggests a strong sense of belonging and cohesion within the BES school environment.

However, the different nuances represented by the other most selected words are evident. While two positively connoted terms emerge for primary school, "*support*" and "*empathy*," reflecting an environment of well-being, in middle school, there are words with negative connotations, such as "*anxiety*" and

"*boredom*," words that any primary school student did not choose. Even considering students' preadolescent and adolescent age, a factor that may influence their choices, these data highlight two distinctly different school environments.

The results of the fourth question on possible attendance at high school BES align with the data from the third question: 54% of elementary school students would attend a BES high school, as opposed to 46.6% of middle school students who would not.

4. Frequenteresti un liceo BES? 4. Would you attend a BES high school?
113 responses

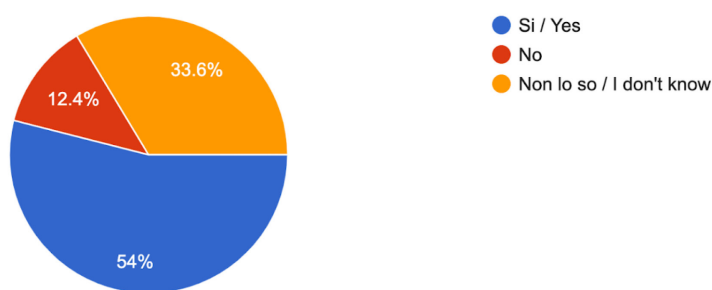


FIGURE 13: Primary school students' answer

4. Frequenteresti un liceo BES? 4. Would you attend a BES high school?
148 responses

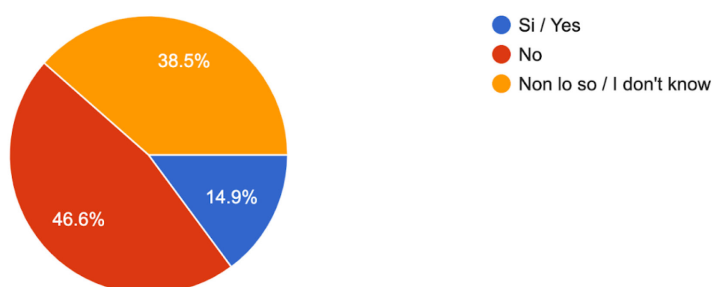


FIGURE 14: Middle school students answer

Next, students had the opportunity to give reasons for this response. 84 out of 113 elementary school pupils, or 74.3%, and 71 out of 148 middle school pupils, or 47.9%, chose to respond. The responses were in different languages (Italian,

English, and Chinese), and their structured analysis revealed some categories that emerged:

Attachment to the community: Some students express a strong emotional attachment to the BES school community, highlighting a desire to remain in a familiar and welcoming environment.

Appreciation of pedagogical approach: Many students appreciate BES's pedagogical approach, which highlights teachers' care and attention to promoting learning and the school's inclusive environment.

Reluctance to change: Some students show reluctance to change, expressing a willingness to remain in BES to continue benefiting from the family environment and establishing relationships with teachers and classmates.

Uncertainty about choice: Some students express uncertainty about choosing BES high school, showing a willingness to explore other educational options or discuss the issue with parents.

The desire for change: A minority of students, while showing some attachment to BES, express a desire to change environments or consider other educational opportunities to diversify their experiences.

Concern about the future: Some students express concern about the future and their ability to adapt to a new educational environment, highlighting the need for appropriate support and guidance in decision-making.

Most responses reflect a positive connection with the school community and an appreciation of BES's inclusive environment and educational practices. This result indicates that the primary school can create a welcoming and nurturing environment for students who feel supported and motivated in their learning journey.

Different are the data that emerge from the responses of middle school students. Through careful qualitative analysis, the following categories of responses have been identified:

Desire for change: Many students want to change their environment and seek new experiences outside the BES. This desire for novelty and to explore new schools is a recurring theme. Some students prefer to explore other options to avoid becoming too attached to a familiar environment.

Personal preferences and aspirations: Some students prefer to pursue a different path, such as a scientific high school or an Italian or foreign high school, which they believe is more suitable for their interests and future aspirations.

Criticism of the BES: Some responses highlight criticisms of the school, such as teaching methods or a perception of a toxic or elitist atmosphere. Some students believe that there are better schools or that BES does not offer adequate opportunities for their development. This data never emerges from the responses provided by primary school students.

The primary data point to the widespread desire among students to change their environment and seek new experiences outside of the BES. This desire is evident in many students' responses, who are willing to explore other schools, make new friends, and face new challenges. This trend indicates a need for novelty and personal growth that leads students to consider alternatives to continuing their studies at the BES.

In response to the fifth question regarding what students would like to see in a BES secondary school (Appendix 6), most primary and middle school students wanted to add a cafeteria (currently unavailable). Equally notable is the prevalence of the second most frequent response, which pertains to the possibility of having a counselling service within the school premises.

It is noteworthy to observe the distribution of data between the two schools: while responses from the middle school predominantly focus on selecting a cafeteria and including a counselling service, responses from the primary school exhibit a more diversified spread. Notably, 12.4% of primary school students desire to incorporate inquiry units and 3-ways conferences (comprising students, teachers, and families) into their prospective high school experience, features emblematic of the distinctive pedagogical approach at the BES primary school.

The analysis of responses to the sixth and final questionnaire question reveals a palpable desire for improvement and adaptation to students' needs, with specific suggestions to make the school more welcoming and inclusive, thus addressing students' needs. The responses to the open-ended questionnaire question offer a wide range of suggestions and comments covering various aspects of school life. However, there is a recurrence of themes already addressed in the closed

responses, such as uniforms, teaching methodologies, and the school environment. Some suggestions concern aspects that should have been considered, such as the request for more space for sports activities, the introduction of new afternoon clubs, and the revision of the school schedule. Furthermore, socio-relational aspects emerge, highlighting critical issues such as anxiety, study overload, and competition, particularly perceived by middle school students.

Regarding the research objectives, it was decided to analyse further by focusing on pedagogical and methodological choices for a future high school. This analysis highlights several key points:

Individual Expression and Freedom: Students desire to express their individuality and enjoy greater freedom regarding uniforms, schedules, and activities. Therefore, it is suggested that pedagogical approaches be adopted that value and respect diversity and students' autonomy.

Student Engagement: Responses indicate significant student interest in the learning process and school organization. Therefore, a participatory pedagogical approach is suggested to encourage greater student engagement in their educational journey and school decisions.

Technological Innovation: Some responses suggest integrating modern technologies, such as iPads and access to digital tools for learning. This approach could facilitate more interactive and personalized learning, allowing students to access various resources. This aspect is essential in defining a high school based on the inquiry-based learning approach already in place at BES.

Inclusion and Diversity: Both analyses underline the importance of promoting an inclusive and respectful school environment. Suggestions have been made to improve student coexistence, ensure fair treatment, and promote mutual respect. A pedagogical approach focused on inclusion could help create a more positive and collaborative school climate.

In conclusion, a potential future BES high school should adopt a pedagogical approach that values students' expression, encourages active involvement in the educational process, integrates modern technologies, and promotes an inclusive and respectful school environment.

4.2 Focus Group Data Analysis

Before analysing the data obtained from the focus groups, it is essential to note that focus groups, unlike interview and participant observation techniques, allow the researcher to observe a substantial volume of interactions on a specific topic within a limited timeframe (Morgan, 1997). Both focus groups, with teachers and with families, enabled the observation of multiple interactions on predefined themes.

4.2.1 Focus group with teachers

During the four 45-minute sessions with the teachers, an average of eight teachers voluntarily participated. Regrettably, the fifth session about the "Pedagogical Framework" had to be rescheduled after submitting this document, owing to rising school obligations. Across these sessions, facilitated by using pre-prepared materials such as slide presentations or paper-based activities (see Appendix 3), the teachers engaged readily and actively in discussions about the topic provided by the researcher (Morgan, 1997).

The four focus group sessions were analysed using the qualitative analysis framework outlined by Saunders, Thornhill, and Lewis (2019), which includes summarizing, categorizing, and structuring meanings using narrative.

FIRST FOCUS GROUP - Vision and mission for a future BES high school

Summary of Meanings

During the initial focus group, incorporated in the "GOING TO THE FUTURE" working party, participants, including teachers and coordinators, convened to discuss and shape the school's future in anticipation of the opening of the high school in September 2025. The objective was to share ideas and visions regarding the school's mission and vision. Despite the first intention to structure the meeting as a workshop, due to limited participation, an open discussion was chosen. The two moderators led the discussion, addressing several topics, including re-articulating the school's mission to reflect current and future needs.

Categorization of Meanings

During the discussion, the need to redefine the school's mission to adapt to the current context and expansion prospects appeared. The importance of building a

clear and specific mission to ensure a solid foundation for employees, students, and families was emphasized. Keywords, including skills and concepts, were identified, and a consensus was reached on the importance of balancing them. The importance of alignment among school orders and the need for standard rules to promote order and clarity within the school were reiterated.

Structuring Meanings Using Narrative

Participants agreed that dialogue and continuous engagement are essential for the school's future. They emphasized the need for more moments of educational, instructional, and professional dialogue to foster a dynamic and dialogue-oriented school environment. Communicative clarity and alignment among school orders were critical elements for the school's success in pursuing its mission and vision.

Conclusion

The focus group analysis highlights participants' willingness to redefine the school's mission to adapt to the current and future context. Dialogue and continuous engagement are essential to creating a school environment aligned and oriented toward student success.

SECOND FOCUS GROUP - Define today as teacher of tomorrow

Summary of Meanings

During the second meeting, participants gathered to discuss the desired type of teacher for the BES group's future high school. Following a brief recap of the previous meeting, the two moderators led the discussion by introducing Calabresi's podcast (Calabresi, 2023) with an interview with the Rector Francesco Billari from Bocconi University in Milan, which raised topics concerning youth education, change, and Italian education.

Categorization of Meanings

Throughout the discussion, participants constructively examined and discussed insights from the podcast, focusing on concepts such as the need for change in Italian education, the role of teachers in promoting change, and the necessity of adequate training and fair compensation for school staff. The importance of involving teachers in the educational change process and recognizing their crucial role in shaping the future of education was emphasized.

Structuring Meanings Using Narrative

The discussion centered on the need for meaningful change in Italian education, with particular attention to the role of teachers in driving this change. It was

underscored that the Italian school system must adapt to youth's current and future needs by providing adequate training, fair compensation, and a satisfactory working environment for teaching staff. Furthermore, the necessity of a shared vision among the various levels of the BES schools was discussed to ensure an effective transition to high school.

Conclusion

The analysis of the second focus group highlights the importance of involving teachers in the educational change process and recognizing their crucial role in shaping the future of education. Emphasis is placed on the need for a shared vision among the various levels of BES schools to ensure an effective transition to high school and a student-success-oriented school environment.

THIRD FOCUS GROUP - Strengths and weaknesses of PS and MS

Summary of Meanings

During the third focus group, participants split into two tables to discuss the strengths and weaknesses of BES's primary and middle schools considering a potential future high school opening. After a brief recap of the previous meeting, the discussion centered on issues such as the lack of guidelines, weak leadership, the need for a clear vision and mission, and specific challenges faced by both school levels.

Categorization of Meanings

Throughout the discussion, common strengths between primary and middle schools emerged, such as bilingualism, parity recognized by the Ministry of Education, and a sense of community. Shared weaknesses were also highlighted, including the absence of internal guidelines, weak coordination leadership, and fragmented faculty structures. The need for better structuring of school guidelines, redefinition of leadership roles, and creating a more aligned and cohesive school environment was highlighted, considering the differences and specific needs of both school levels.

Structuring Meanings Using Narrative

The discussion highlighted various challenges and opportunities to enhance BES's primary and middle schools in anticipation of a future high school. The importance of effective leadership, clear guidelines, and a more structured and cohesive school environment to promote student success and faculty well-being was emphasized. Despite the identified challenges, participants demonstrated

determination and passion in contributing to the ongoing improvement of the BES community, showing a solid commitment to education and the school's future.

Conclusion

The analysis of the third focus group underscores the need to proactively address challenges and capitalize on opportunities to enhance BES's primary and middle schools. Emphasis is placed on the importance of effective leadership, clear guidelines, and a more structured and aligned school environment to ensure student success and the continuous growth of the BES community.

FORTH FOCUS GROUP - Space management and methodological choices

Summary of Meanings

During the fourth focus group, participants discussed the methodologies used in the school. Despite the planned division into working tables, the discussion began at once with lively and active engagement, addressing themes aimed at improving methodology, teaching practices, and the school's image. Key themes highlighted include:

- the need for a cohesive methodological approach between the middle and primary schools,
- the creation of subject-specific classrooms,
- the importance of clear and concise guidelines,
- the necessity of decisive leadership in the middle school, and
- the significance of observation moments among teachers from both school levels.

Categorization of Meanings

Throughout the discussion, various areas of intervention emerged to enhance methodological coherence and the school's direction. These include harmonizing the methodological approach across different school levels, reorganizing spaces, defining clear guidelines, setting up more direct leadership in the middle school, and promoting teacher collaboration and observation moments.

Structuring Meanings Using Narrative

The discussion highlights the importance of concerted action to ensure the school progresses clearly and cohesively. It emphasizes the need for more direct leadership in middle school and clear guidelines for the school's future development. Despite the identified challenges, participants are motivated and

eager to contribute to the ongoing improvement of the BES community, demonstrating a shared commitment to education and student well-being.

Conclusion

The analysis of the fourth focus group underscores the importance of a coherent and coordinated approach to ensure the success and future development of the school. The need for more direct leadership in the middle school, clear guidelines, and collaboration and observation moments among teachers is highlighted to foster greater methodological and instructional coherence within the BES community.

The four focus group analyses revealed several key insights about strategies for enhancing secondary education within the BES context by integrating and adapting principles and successful practices from BES primary education.

Firstly, the focus groups emphasized redefining the school's mission and vision to align with current and future contexts, ensuring a clear direction and fostering an environment conducive to student success. This result underscores the necessity of ongoing dialogue and engagement among stakeholders to effectively shape the school's future.

Secondly, there is a consensus on the pivotal role of teachers in driving educational change and shaping the future of education. Participants stressed the need for adequate training, fair compensation, a supportive working environment for teachers, and a shared vision across different school levels to facilitate a smooth transition and ensure student-centered learning environments. Thirdly, discussions highlighted strengths and weaknesses within primary and middle schools, underscoring the importance of addressing challenges and capitalizing on opportunities to enhance coherence and alignment across the educational continuum. Effective leadership, clear guidelines, and faculty collaboration were crucial factors in promoting student success and continuous improvement.

Lastly, the focus groups delved into methodological aspects, emphasizing the need for a cohesive approach to teaching practices, spatial organization, and leadership. There was a consensus on the importance of clear guidelines, strong leadership, and collaborative practices among teachers to foster methodological coherence and instructional effectiveness.

In conclusion, the analyses of the focus groups underscore the significance of strategic planning, effective leadership, and collaborative efforts in enhancing secondary education within the BES context.

4.2.2 Focus group with families

Approximately fifty people, mainly females but representing all three school levels (BAPS, PS, and MS), voluntarily participated in the open focus group targeted at the school community. The focus group lasted for 75 minutes and was structured into four parts:

1. Introduction and project explanation;
2. Use Project Zero Harvard's "Think, pair, share" thinking routine to open the discussion on the interview with University Bocconi's rector, Francesco Billari, in Calabresi's podcast (Calabresi, 2023).
3. The group work session is titled "What school today is for tomorrow's society? What will the student of tomorrow look like?"
4. Collective sharing of the elaborated ideas (see Appendix 4) and conclusions.

As with the analysis of focus groups with teachers, the qualitative analysis framework outlined by Saunders, Thornhill, and Lewis (2019) included synthesizing, categorizing, and structuring meanings through narrative.

Summary of Meanings

At the outset of the focus group, participants engaged in a "THINK, PAIR, SHARE" session to discuss the role of schools in fostering critical thinking, interpersonal relationships, and preparedness for the future. During group discussions and collective moments, the significance of schools as sites for intellectual and emotional growth, community building, and life preparation was underscored. Participants expressed the need for schools to equip students to be active and critical participants in society and to navigate the modern world's technological and social challenges. Participants emphasized the recognition of teachers' work.

Categorization of Meanings

Through collective and group discussions, various themes emerged about the role of schools in preparing students for the future. These include promoting critical thinking, the importance of interpersonal relationships, life preparation, and providing emotional support to students facing the challenges of modern society. Additionally, the importance of collaboration between schools and families and the redefinition of educational offerings were emphasized.

Structuring Meanings Using Narratives

During the focus group, participants outlined a detailed framework of schools' crucial role in shaping students for the future. They highlighted the necessity for schools to be not only places of academic learning but also personal growth and preparation for the challenges of the modern world. Notably, they emphasized promoting personal awareness, critical thinking, and interpersonal relationships, as well as providing emotional support to students facing the challenges of modern society. Furthermore, they emphasized that collaboration between schools and families is essential to ensuring students' success and, most importantly, their psychophysical well-being in an ever-changing world.

Conclusion

The detailed analysis of the fifth focus group underscores the fundamental importance of schools in providing students with the skills, resources, and support necessary to tackle the challenges of the modern world. Participants outlined a nuanced vision of the school's role as a site for intellectual and emotional growth, life preparation, and emotional support for students. Collaboration between schools and families was crucial in ensuring students' success in the rapidly evolving social and technological landscape.

4.3 Results compared to the conceptual framework

The results from the questionnaires and the different focus groups only partially match the conceptual framework inspired by the theories. This paragraph compares the conceptual framework developed in Chapter 2 with the results described in paragraphs 4.1 and 4.2.

Considering the results from the analysis of focus groups and questionnaires, a significant discrepancy within the BES school environment becomes apparent in a local context where the frequent use of the word "innovation" does not always

correspond to practices consistent with the principles of educational innovation. The discontinuity between the two levels of BES schools requires careful resolution, especially considering the perspective of planning for establishing a new BES high school. Continuity is limited to defining instrumental goals at the end and beginning of the cycle or meeting to exchange information. This approach reflects an idea of cumulative learning, with the previous school level simply preparing for the next one (Chipa et al., 2021). Data about middle school suggest a pedagogical paradigm in which the child is perceived as "non-competent," with learning progress starting from weaknesses rather than strengths. If addressed, this vision could maintain the coherence and effectiveness of the education offered by the BES, with the possibility of no longer being recognized as a school belonging to the Italian Educational Avant-gardes.

5 PLAN FOR ENHANCING AN INNOVATIVE SECONDARY SCHOOL

The combination of theory, focus group, and survey results provides clear recommendations for a plan to design an innovative secondary school in accordance with primary school principles and practices.

5.1 Review of Theoretical Frameworks

Within the theoretical framework delineated in Chapter 2, the concept of the school as a learning community has been extensively discussed, providing a foundational understanding for designing an innovative secondary school within the BES context. This perspective extends the notion of learning beyond students to encompass all educational community members, aligning with the principles advocated in the Manifesto of the Avanguardie Educative Movement, particularly within horizons 4 and 6.

Horizon 4 of the Manifesto emphasizes the necessity to "reorganize the time of schooling," advocating for restructuring traditional timeframes to facilitate more meaningful and compelling learning experiences. This aspect involves revamping lesson schedules and creating opportunities for student engagement in extracurricular activities, research projects, and community collaborations, consistent with the practices outlined by the IB in the MYP.

Similarly, horizon 6 of the Manifesto underscores the importance of "investing in human capital" and "rethinking relationships" within the educational community. This aspect entails prioritizing continuous training and professional development for both teaching and non-teaching staff to enhance skills and resources within the school. Additionally, it highlights the significance of fostering collaborative and supportive relationships among all stakeholders, including families.

Moreover, the same 2023 report on pedagogical innovation (Kukulska-Hulme et al., 2023) highlights how current methodologies, such as those emphasizing AI tools and multimodal pedagogy, align with the expressed needs of students,

families, and teachers, further reinforcing the relevance of incorporating innovative approaches within the educational context.

5.2 Objectives of the plan

Considering the need to address discontinuity between school levels and the plan to open a high school by September 2025, the enhancement plan aims to solidify BES's identity and provide clear direction for teaching methods. As the 2030 Agenda deadline approaches, the vital role of teachers in achieving SDG 4 — equitable, inclusive, quality education — becomes increasingly evident. Therefore, our plan emphasizes the pivotal role of teachers in shaping students' skills and knowledge to contribute to sustainable development goals.

Clear Methodological Direction: The first step will be to establish clear and coherent methodological guidelines to encourage the adoption of innovative teaching practices, in line with the recommendations of the 2023 reports, "Strade d'innovazione - percorrendo la trasformazione dell'educazione in Italia" (Ashoka & INDIRE, 2023) and "Innovating Pedagogy 2023" (Kukulska-Hulme et al., 2023). The selection and implementation of methodologies and technologies in education must be grounded in pedagogical reflection, carefully considering the requirements of students, educational goals, and the specific context in which teaching and learning occur (Ashoka & INDIRE, 2023).

Teachers will receive support and training to adhere to these guidelines fully. This plan includes observing and evaluating their performance, facilitated through peer observation and oversight by the educational leadership group. A mentoring program will also be established among teachers across different grade levels to enhance professional development and collaboration further.

A clearly defined methodology to support continuity between school levels could enable the middle school to join the national Vanguard Education network, mirroring the status already achieved by the BES primary school.

Consolidation of School Identity: Actively involving teachers, students, and families in defining and implementing the school's mission and vision through the promotion of training workshops. This plan entails establishing clear communication channels and organizing regular events and meetings to foster open and constructive dialogue within the school community. This approach aims

to create an educational environment that promotes the development of critical, relational, and digital skills among students and families.

Given the context outlined, the implementation of teacher training will have a direct impact on the school's economic resources. It is crucial to understand that investing in teacher training requires financial resources, which could affect the overall budget of the educational institution. Therefore, it is crucial to carefully assess the financial implications of such initiatives, including through a SWOT (Strengths, Weaknesses, Opportunities, Threats) perspective, and plan accordingly to ensure effective use of available resources.

5.3 Monitoring and Assessment

It is essential to continually evaluate the effectiveness of the implemented strategies and make necessary changes and improvements based on feedback from all parts of the school community. Such evaluation should occur vertically and horizontally, ensuring the improvement plan remains aligned with the BES school's evolving needs. All these efforts must be achieved using the key performance indicators (KPIs) outlined in the strategic plan.

As stated in the report by Ashoka and INDIRE on national innovation (Ashoka & INDIRE, 2023), focusing once again on evaluation, this time even beyond the context of digitalization, innovators consider it a key element to leverage for activating systemic actions. Therefore, comprehensive evaluation, including external perspectives, is crucial to inform strategic actions and ensure continuous improvement in educational practices at BES school.

6 DISCUSSIONS

6.1 Limitations of the research

In considering the limitations of this research, it is essential to reflect on the challenges inherent in ensuring the validity and reliability of the findings. While we took steps to enhance the validity of the questionnaires, such as considering criteria like data validity, repeatability, objectivity, consistency, coherence, and context-sensitivity (Messick, 1995), there may still be limitations in how accurately these data reflect the proper attitudes and perspectives of the participants.

Similarly, qualitative research, by its nature, involves subjectivity and interpretation, which may affect the reliability of the findings. Despite efforts to enhance reliability, such as using an integrated framework for Qualitative Comparative Analysis (QCA) based on established criteria, including those outlined by Poldner et al. (2012) and Messick (1995), there may still be limitations in the reliability of the qualitative data collected. Furthermore, it is essential to acknowledge the scope and ambition of this study. While it seeks to provide insight into BES school's educational and community landscape in preparation for opening a new high school, it is fundamental to recognize that it may only comprehensively capture some aspects of the context. This research does not aim to be exhaustive, recognizing the inherent challenges in fully characterizing BES school's complex educational and community dynamics.

In summary, although possible problems related to reliability and validity have been considered and efforts have been made to acknowledge the scope and ambition of the study, it is crucial to recognize that the research findings may still have limitations. It is essential to approach these findings with a critical lens, understanding the complexities and nuances of the educational and community context of the BES school.

6.2 Practical and ethical issues

Strict ethical considerations were taken before the questionnaire administration and focus group activities (Brittain, 2020). With teachers, students, and their

families, a clear and comprehensive introduction to the purpose of the data collection was provided, explaining the purpose of the research project and the importance of their voluntary participation. It was emphasized that participation was completely voluntary and that participants could withdraw at any time without suffering negative consequences.

In addition, the confidentiality and anonymity of responses, especially for students, were repeatedly guaranteed, assuring that no personal information would be disclosed (Breen, 2006). To this end, it was reiterated several times, especially with younger students, to avoid including one's name in open-ended responses. The research was conducted using fundamental ethical principles, protecting the welfare and rights of the students involved.

The inclusion of these ethical considerations not only demonstrates a commitment to the research's fairness and integrity but also helps establish trust and cooperation among the participating students.

6.3 Suggestions for future research

This research project identified several areas that require further investigation. The focus groups were organized voluntarily after teaching staff working hours. Introducing similar activities could make the secondary school environment more innovative and consolidate the three pillars of educational innovation (measurability, intentionality, and addition). They are assessing the impact of BES secondary education improvement strategies on the well-being and interconnectedness of the local community, and investigating the practices that make the primary school an innovative educational environment could provide additional helpful information. This suggestion could include an assessment of parental involvement, relationships with community organizations, and long-term effects on the entire community. The implementation and evaluation of the plan should actively involve all stakeholders.

7 CONCLUSIONS

This thesis answered the central question: *Which strategies and approaches can be adopted to promote innovation in the structuring phase of a secondary school?* Qualitative and quantitative studies were conducted to answer the main research question. First, the conclusions on the sub-questions will be given to give a framework for the main question.

A. What does educational innovation mean today?

Integrating the principles outlined in the national report "Strade d'innovazione. Percorrendo la trasformazione dell'educazione in Italia" (Ashoka & INDIRE, 2023) and the international report "Innovating Pedagogy 2023" (Kukulka-Hulme et al., 2023), educational innovation today focuses on the acquisition and implementation of practices and methodologies that promote change at the systemic level. The goal is to prepare students for the challenges of an increasingly complex and interconnected world, starting with their specific needs and expectations. This work must enable students to become self-aware and know how to discriminate between what one wants to be and what one does not want to be and what one wants and does not want.

Therefore, an innovative project in the school sector must educate rather than instruct. As stated by the philosopher Mancuso (2022), the meaning of the word "educate" differs from the meaning of the word instruct: instruct comes from the Latin "*instruere*" (*in* and *struere*), meaning "to prepare for, equip" and has the same etymological root as the word "industry." Hence, a robust correlation exists between the economic apparatus of industry and instruction. Instructing "young people by making them tools according to its structure" (Mancuso, 2022, p.78). Educate, on the other hand, comes from the Latin verb "*educere*", which before educate means "to lead out." It becomes evident that instructing is inherently simpler than educating, as teaching often involves delivering information to fill empty boxes while educating recognizes that individuals in the educational process possess potentials that require cultivation and actualization. "The difference then is remarkable: by receiving instruction, one becomes an

instrument; by receiving education, one becomes oneself" (Mancuso, 2022, p.79).

B. How can BES secondary education be made innovative?

The educational leadership group will have to start this process of innovation from the teaching team. The characteristics, inclinations, and skills that make a teacher a promoter of innovation will have to be discussed and defined. Structured and methodological work will have to be conducted, in which they will be explicitly asked to rethink the way of doing school.

Internal work within the BES school environment may be complemented by involvement and collaboration with other schools through the participation of nationwide projects. Careful attention will have to be paid, however, to the possible frictions that may emerge from this work: the middle school culture currently suffers from confrontation with primary school teachers, and careful change management strategies will therefore have to be applied so that secondary school teachers do not feel attacked but stimulated and valued.

C. How can BES secondary education be improved by integrating and adapting practical principles and practices from primary school?

The role of observation and mentoring could be developed significantly to improve BES secondary education through the integration and adaptation of effective principles and practices from primary school and thus create a smooth and continuous schooling path for students.

Creation of a mentoring program: A mentoring program should be developed and carefully structured, within which experienced elementary school teachers of BES serve as mentors for secondary school colleagues. Through regular meetings at the beginning, middle, and end of the school year, these mentors could provide professional support by defining strengths and goals together, sharing experiences, and supporting secondary school teachers in developing innovative pedagogical practices modelled after those in primary school.

Implementation of an observation program: A structured observation program should be introduced for middle school teachers and teachers who may one day teach high school, enabling them to observe and learn from the effective

pedagogical practices used in BES primary school classrooms. The educational leadership team should structure a peer observation program among teachers from various grades; in this way, teachers could learn by observing both the use of innovative and inclusive teaching techniques and the management and organization of spaces. This process must be transparent and foster collaboration to generate valuable and continuous insights through ongoing comparisons. Regular supervision of the educational leadership team through group and individual meetings and observations will be essential.

In implementing this plan, educational leaders must pay close attention to the stress and work overload teachers are constantly subjected to. This discussion could open a new communication channel with the administration regarding teachers' work schedules and compensation. By Italian Law No. 107 of July 13, 2015, Article 1, paragraph 7, there is an emphasis on strengthening schools as dynamic communities, receptive to their surroundings, and adept at fostering more robust connections with families, local communities, third-sector organizations, and businesses. This legislation proposes various measures, such as extending school hours into the afternoon and expanding overall school time, to cultivate increased inclusivity and participation within the school environment.

D. What criteria can be used to identify innovative educational practices effectively?

Establishing clear and consistent criteria is crucial to effectively identifying innovative educational practices. One of the most effective approaches is establishing an internal working group within BES, composed of members who deeply understand the goals and principles of the Educational Avant-garde Manifesto. This committee should be tasked with mapping activities, practices, projects, and individuals contributing to innovation within the educational context of BES, using as a reference the three critical pillars outlined in the report by Ashoka and INDIRE: intentionality in making a social impact, measurability of such social impact, and additionality, meaning the ability to introduce something new and valuable to society. To further strengthen this process, the group could engage national and international experts in educational innovation, including INDIRE, the National Institute for Documentation, Innovation, and Educational Research, to provide support and specialized guidance. This collaborative and

criteria-based approach will ensure effective and accurate identification of innovative educational practices, essential for promoting continuous improvement and excellence in the education sector. This documentation process will be central to the change project to make the action systemic.

E. How can the friction between the two levels of schooling be overcome to ensure a smoother educational journey at BES?

To overcome the friction between the two levels of education and ensure a smoother educational pathway at BES, the discontinuity between school levels will have to be addressed, especially in anticipation of the opening of a high school by September 2025. It is imperative to acknowledge that before establishing a high school, there is a crucial need to enhance the overall educational environment to avoid potential economic investment pitfalls. The identity of BES will have to be strengthened, and clear directions for teaching methods will need to be provided.

Key strategies within the plan will include the active involvement of teachers, students, and families in defining and implementing the school's mission and vision through the promotion of training workshops.

Team-building activities, which have been eliminated for the past few years, will need to be reintroduced to create a compact and robust community that is open to supporting and learning from each other. These activities will allow opportunities for collaboration and knowledge sharing among teachers from different school levels to promote continuity and consistency in curriculum delivery.

Providing continuous professional development opportunities, along with additional support, will result in improved professional skills and personal growth. These are the skills that educators aspire to develop in an innovative school environment.

In conclusion, the findings from this study, including insights gleaned from literature review, questionnaires to families and students, and focus group discussions with primary and middle school teachers and families, have underscored the existing discontinuity between the two school levels at BES. Consequently, a comprehensive plan has been devised to propagate innovation

within BES secondary education, and a demand for innovation has been echoed by all stakeholders involved in the research. The involvement of students through questionnaires and focus groups with families has unveiled fresh perspectives, emphasizing the paramount importance of student well-being in their growth journey. Thus, the school must not merely be seen as a place of academic pursuit but as an "educating village" that nurtures students' curiosity toward themselves, others, and the environment. This mindset should first be embraced by teachers, who, transcending static approaches, pessimism, and tradition, must lead the way in embracing continuous learning. To support the growth of future change-makers, teachers, guided by solid and well-organized educational leadership, must collaborate to initiate educational innovation processes and be the primary agents of change and well-being.

REFERENCES

Alejandro, P., & David, I. (2018). Educational Research and Innovation Teachers as Designers of Learning Environments the Importance of Innovative Pedagogies: The Importance of Innovative Pedagogies. OECD Publishing.

Anichini, A., Bartolini, R., Greco, S., Nardi, A., Pestellini, F. et al. (a cura di), "Avanguardie educative". Linee guida per l'implementazione dell'Idea "Prestito professionale. Continuità educativa, potenziamento del curriculum, valorizzazione degli insegnamenti", versione 1.0 [2023], INDIRE, Firenze, 2023.

Ashoka & INDIRE. (2023). Strade d'innovazione. Percorrendo la trasformazione dell'educazione in Italia. <https://www.mappaturainnovazione.it/wp-content/uploads/2023/12/Strade-dInnovazione.-Ashoka-Italia.pdf>

AAVV (2023) 'Fare Scuola Sconfinata Appunti per una rivoluzione educativa', *Passi*, Fondazione Giangiacomo Feltrinelli

Baskarada, S. (2014). Qualitative case study guidelines. *Baškarada, S. (2014). Qualitative case studies guidelines. The Qualitative Report, 19(40), 1-25.*

Batini, F. (2023). Un panorama lunare: la dispersione scolastica. *RicercaAzione, 15(1), 19-31.*

Biesta, G.: What really matters in education (2015) YouTube. Available at: <https://www.youtube.com/watch?v=CLcphZTGejc> (Accessed: July 24, 2023).

Billari, F.C. (2023) *Domani è oggi: Costruire il futuro con le lenti della Demografia*. Milano: EGEA.

Breen, R. L. (2006). A practical guide to focus-group research. *Journal of geography in higher education, 30(3), 463-475.*

Brittain, S., Ibbett, H., de Lange, E., Dorward, L., Hoyte, S., Marino, A., ... & Lewis, J. (2020). Ethical considerations when conservation research involves people. *Conservation Biology, 34(4), 925-933.*

Brittain, B., & Zelleke, J. (2021). Student agency. *Teaching and Learning in International Schools: Lessons from Primary Practice*, 7.

Bryman, A. (2016). *Social research methods*. UK: Oxford University Press.

Brown, A.L. (1994), "The Advancement of Learning", *Educational Researcher*, Vol. 23, No.8, pp. 4-12.

Calabresi, M. (2023). Fermiamoci e pensiamo in grande (n. 30) [Episodio di podcast audio]. In *Altre/Storie*. Chora Media. <https://open.spotify.com/episode/1J6nujwCLCfEgGADDLZw7H?si=MYKm6JzSFqvMy6QWWfMnA>

Calderini, M., (2020). La forza trasformativa intenzionale, misurabile, addizionale, 11° edizione del Salone della CSR e dell'Innovazione Sociale. <https://www.csreinnovazionesociale.it/evento/mario-calderini-la-forza-trasformativa-intenzionale-misurabile-addizionale/>

Cameron, E. and Green, M. (2020) *Making sense of change management: A complete guide to the models, tools and techniques of organizational change*. London: Kogan Page.

Cameron, R. (2011). Mixed methods research: The five Ps framework. *Electronic journal of business research methods*, 9(2), pp96-108.

Character Education Partnership. (2010). *Developing and Assessing School Culture: A New Level of Accountability for Schools*. Suzanne and Richard Pieper Family Foundation – A 501 c3 Organization. https://srpieperfamilyfoundation.com/wp-content/uploads/2018/09/White-Paper_Developing-and-Assessing-School-Culture_April1-2010.pdf

Chipa, S., Giunti, C., Lotti, P., Orlandini, L., Tortoli, L. et al. (2021) (a cura di), "Avanguardie educative". Linee guida per l'implementazione dell'idea "Dentro/fuori la scuola - Service Learning", versione 3.0 [2021], Indire, Firenze.

Cohen, L., Manion, L., & Morrison, K. (2013). *Research Methods in Education* (6th ed.). London: Taylor & Francis or Routledge's

Corbetta, P. (2014). Metodologia e tecniche della ricerca sociale (pp. 283-316). Bologna: il Mulino.

Cornacchia, M., & Marescotti, E. (2023). Valore della scuola, comunità educante e sostenibilità: l'eredità del Rapporto Faure cinquant'anni dopo. *RICERCHE PEDAGOGICHE*, 56(227), 27-50.

Dale, J., Hyslop-Margison, E. J. (2010). Paulo Freire: Teaching for Freedom and Transformation: The Philosophical Influences on the Work of Paulo Freire. Germania: Springer Netherlands.

Delli Zotti, G. (2004). Introduzione alla ricerca sociale: problemi e qualche soluzione. Italy: FrancoAngeli.

Dewey, J. (2013). Democracy and Education. United Kingdom: Read Books Limited.

Ellis, P. D. (2010). The essential guide to effect sizes: Statistical power, meta-analysis, and the interpretation of research results. Cambridge university press.

Farmer, T. W., Hamm, J. V., Dawes, M., Barko-Alva, K., & Cross, J. R. (2019). Promoting inclusive communities in diverse classrooms: Teacher attunement and social dynamics management. *Educational Psychologist*, 54(4), 286-305.

Fiorucci, M. (2020). La formazione interculturale degli insegnanti. *Baldacci M., a cura di, Idee per la formazione degli insegnanti. Milano: FrancoAngeli.*

Fondazione Rocca (2022), in collaboration with TreeLLLe, Scuola, i numeri da cambiare. L'Italia nel confronto internazionale, available <https://numeridacambiare.it/scuola-i-numeri-da-cambiare/>

Genzano, Garramone, Lipari (2017). La comunità di pratica dell'associazione italiana mediatori familiari. Narrazioni, pratiche riflessive, produzione di conoscenza

Gillham, B. (2007). *Developing a questionnaire* (Second edition.). Continuum.

Giroux, Henry (2019) "All education is a struggle over what kind of future you want for young people". YouTube. Retrieved January 20, 2024, from <https://www.youtube.com/watch?v=LCMXKt5vRQk>

Glaser, B. G. (1992). *Emergence vs forcing: Basics of grounded theory analysis*. Sociology Press.

Globeducate (2022) About Us. Available at: <https://www.globeducate.com/about-globeducate> (Accessed: 16 May 2023).

Gui, M., Assirelli, G., & Gerosa, T. (2023). *La competenza digitale degli studenti della scuola secondaria: I risultati della prima indagine in Italia con test di performance standardizzato*. Edizioni Centro Studi Erickson.

INDIRE (2018) *Indire - Avanguardie Educative, Innovazione INDIRE Avanguardie Educative*. Available at: <https://innovazione.indire.it/avanguardieeducative/> (Accessed: 01 February 2024).

INVALSI (2023) Rilevazione nazionale degli apprendimenti 2023 - 2023. Sintesi primi risultati prove INVALSI 2023.

İslamoğlu, Ö. (2018). Interaction between educational approach and space: The case of Montessori. *Eurasia Journal of Mathematics Science and Technology Education*, 14(1).

Harari, Y.N. (2022) *Future of Jobs and Education* by Yuval Noah Harari (Historian's Perspective). Available at: <https://www.youtube.com/watch?v=XaiWLPXYjsE> (Accessed: January 26, 2024).

Harris, A., Jones, M., & Huffman, J. B. (Eds.). (2017). *Teachers leading educational reform: The power of professional learning communities*. Routledge.

Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: a comparison of Glaser and Strauss. *International journal of nursing studies*, 41(2), 141-150.

Hoffman-Kipp, P. (2008). Actualizing democracy: The praxis of teacher identity construction. *Teacher Education Quarterly*, 35(3), 151-164.

Hofstede, G., Hofstede, G. J., Minkov, M. (2010). *Cultures and Organizations: Software of the Mind*, Third Edition. Spain: McGraw Hill LLC.

Humble, S. (2020). *Quantitative Analysis of Questionnaires: Techniques to Explore Structures and Relationships*. United Kingdom: Taylor & Francis.

Khan, S. N. (2014). Qualitative research method: Grounded theory. *International journal of business and management*, 9(11), 224-233.

Khoo, S. T., & Ainley, J. (2005). Attitudes, intentions and participation. Available at:

https://research.acer.edu.au/cgi/viewcontent.cgi?article=1044&context=lsay_research

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.

Kukulska-Hulme, A., Bossu, C., Charitonos, K., Coughlan, T., Deacon, A., Deane, N., Ferguson, R., Herodotou, C., Huang, C-W., Mayisela, T., Rets, I., Sargent, J., Scanlon, E., Small, J., Walji, S., Weller, M., & Whitelock, D. (2023). *Innovating Pedagogy 2023: Open University Innovation Report 11*. Milton Keynes: The Open University.

Lorenzoni, F. (2023). *Educare controvento: La responsabilità di chi insegna nel contrastare ogni discriminazione*. Italy: Sellerio Editore.

Mancuso, V. (2022). *La mente innamorata*. Garzanti.

Mariani, U. (2001). *Educazione alla salute nella scuola. Costruzione del benessere e prevenzione del disagio* (Vol. 36). Edizioni Erickson.

McLaren, Peter, and Peter Leonard. *Paulo Freire: a Critical Encounter*. London; Routledge (1993). Web.

Thesecondprinciple.com. Available at:
<https://thesecondprinciple.com/instructional-design/types-of-curriculum/>
(Accessed: August 3, 2023).

Melnikovas, A. (2019). Towards an Explicit Research Methodology: Adapting Research Onion Model for Futures Studies.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American psychologist*, 50(9), 741.

Moilanen, T., Ojasalo, K., Ritalahti, J., & Ojasalo, K. (2022). *Methods for development work: new kinds of competencies in business operations* ([updated edition]). BoD - Books on Demand.

Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). SAGE.

Morgan, N. S. (2016). *Engaging Families in Schools: Practical strategies to improve parental involvement*. Routledge.

Montessori, M. (1970). *Educazione e pace*.

Myers, J. L., Well, A. D., & Lorch Jr, R. F. (2013). *Research design and statistical analysis*. Routledge.

Nitecki, E. (2015). Integrated School-Family Partnerships in Preschool: Building Quality Involvement through Multidimensional Relationships. *School Community Journal*, 25(2), 195-219.

O'Cathain, A., & Thomas, K. J. (2004). "Any other comments?" Open questions on questionnaires - a bane or a bonus to research? *BMC Medical Research Methodology*, 4(1), 25–25. <https://doi.org/10.1186/1471-2288-4-25>

OECD. (2013). *Innovative learning environments, educational research and innovation*. Paris: OECD Publishing.

Olds, A., Hopkins, S., Lisciandro, J., Jones, A., Subramaniam, J., Westacott, M., Larsen, A., Sturniolo-Baker, R., & Scobie, H. (2023). Stop the clocks: Enabling practitioners and precarity in pandemic time(s). *Access: Critical Explorations of Equity in Higher Education*, 11(1), 12–27. Retrieved from <https://novaajs.newcastle.edu.au/ceehe/index.php/iswp/article/view/193>

Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A Qualitative Framework for Collecting and Analyzing Data in Focus Group Research. *International Journal of Qualitative Methods*, 8(3), 1-21. <https://doi.org/10.1177/160940690900800301>

Owen Wilson, L. (2022) Types of curricula, Thesecondprinciple.com. Available at: <https://thesecondprinciple.com/instructional-design/types-of-curriculum/> (Accessed: January 27, 2024).

Patokorpi, E., & Ahvenainen, M. (2009). Developing an abduction-based method for futures research. *Futures*, 41(3), 126-139.

Pastena, N. (2020). Innovazione in Educazione: prospettive epistemologiche e dinamiche professionalizzanti. *Formazione & insegnamento*, 18(1 Tome I), 166-177.

Priyambodo, P., & Hasanah, E. (2021). Strategic planning in increasing quality of education. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 6(1), 109-126.

Poldner, E., Simons, P. R. J., Wijngaards, G., & van der Schaaf, M. F. (2012). Quantitative content analysis procedures to analyse students' reflective essays: A methodological review of psychometric and edumetric aspects. *Educational Research Review*, 7(1), 19–37. <https://doi.org/10.1016/j.edurev.2011.11.002>

Ricci, R. (2021). Gli apprendimenti ai tempi della pandemia. *RicercAzione*, 13(2), 29-55.

Rose, T. (2012) Todd Rose: Variability Matters Retrieved May 6, 2023, from <https://www.youtube.com/watch?v=8WCInVjCEVM>.

Saunders, M. N. K., Thornhill, A., Lewis, P. (2019). *Research Methods for Business Students*, Pearson Education. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/tampere/detail.action?docID=5774> 742.

Seminario, I. I. I. (2020). I DATI INVALSI: UNO STRUMENTO DI RIFLESSIONE E DI CRESCITA PER I DOCENTI ITALIANI.

Sirignano, F. M. (2020). *Pedagogia della decrescita: L'educazione sfida la globalizzazione*. Italy: Franco Angeli Edizioni.

Smith, J. (2012). *Culture as competitive advantage: Joanne Smith at tedxsanluisobispo*. YouTube. <https://www.youtube.com/watch?v=kPqwPTGC8V4> (Accessed: January 12, 2024)

Thomas, M. and Magilvy, J. K. (2011). *Qualitative Rigor or Research Validity in Qualitative Research*. *Journal for Specialists in Pediatric Nursing*, 16(2), 151–155. <https://doi.org/10.1111/j.1744-6155.2011.00283.x>

Trobia, A. (2005). *La ricerca sociale quali-quantitativa* (Vol. 513). FrancoAngeli.

UNESCO. (2022). *Reimagining our futures together: A new social contract for education*. UN.

Van den Broek, G. (2012), “Innovative Research-Based Approaches to Learning and Teaching”, OECD Education Working Papers, No. 79, OECD Publishing. <http://dx.doi.org/10.1787/5k97f6x1kn0w-en>

Vygotsky, L.S. (1978/1935), *Mind in Society: The Development of Higher Psychological Processes*, [Cole M., V. John-Steiner, S. Scribner and E. Souberman (eds.)], Harvard University Press, Cambridge, MA, (original works published 1930–1935).

Wilkinson S. (2004). Focus group research. In Silverman D. (Ed.), *Qualitative research: Theory, method, and practice* (pp. 177–199). Thousand Oaks, CA: Sage.

What is an IB education? - exchange.transcendeducation.org (no date). Available at: https://exchange.transcendeducation.org/wp-content/uploads/2022/09/What-is-an-IB-Education_.pdf (Accessed: August 3, 2023).

Wadood, F., Akbar, F., & Ullah, I. (2021). The importance and essential steps of pilot testing in management studies: A quantitative survey results. *Journal of Contemporary Issues in Business and Government Vol, 27*(5).

Yin, R. K. (2009). *Case study research: Design and methods* (4 ed.). Los Angeles, CA: Sage.

Young, F., Cleveland, B., & Imms, W. (2020). The affordances of innovative learning environments for deep learning: Educators' and architects' perceptions. *The Australian Educational Researcher, 47*(4), 693-720.

BES Internal Documents

BES STAFF HANDBOOK 2022-2023 (Updated June 2022)

PTOF - Bilingual European School

BES Academic Integrity (Updated March 2022)

BES Inclusion Policy (Drafted March 2022)

BES Math Scope and Sequence (Updated May2021)

BES PSPE (Personal, Social, and Physical Education) Scope and Sequence (Updated April 2021)

Grade 1/ Grade 5 Curriculum Maps 2023/2024

Indicazioni nazionali per il curricolo della scuola dell'infanzia e del primo ciclo d'istruzione 2012

Transition Guide for the Primary Years Programme, June 2018

APPENDICES

Appendix 1. Families High School Questionnaire

1. Quanto è importante per voi che la durata del liceo sia di **4 anni**? /How important is it to you that the length of the high school is **4 years**?

1 2 3 4 5

Per nulla / Not at all Molto / Extremely

2. Qual è la vostra preferenza per il bilanciamento tra **lingua italiana e lingua inglese** nel programma di studi? / *What is your preference for balancing **Italian and English language** in the curriculum?*

- 50% italiano - 50% inglese / 50% Italian - 50% English*
- Maggiore enfasi sull'inglese rispetto all'italiano / Greater emphasis on English than on Italian*
- Maggiore enfasi sull'italiano rispetto all'inglese / Greater emphasis on Italian than on English*

3. Quanto è importante per voi che **al termine degli ultimi due anni** di liceo venga conseguito il **Diploma di maturità italiana**? / *How important is it to you that **at the end of the last two years** of high school the **Diploma di maturità italiana** is obtained?*

Opzione 1: Maturità italiana

YEAR 9	YEAR 10	YEAR 11	YEAR 12
LICEO STEAM (MIUR + IGCSE)	LICEO STEAM (MIUR + IGCSE)	LICEO STEAM (MIUR)	LICEO STEAM (MIUR: CONSEGUIMENTO MATURITÀ ITALIANA)
50% ENG - 50% ITA	50% ENG - 50% ITA	50% ENG - 50% ITA	50% ENG - 50% ITA

1 2 3 4 5

Per nulla / Not at all Molto / Extremely

4. Quanto è importante per voi che **al termine degli ultimi due anni** di liceo venga conseguito l'**IB Diploma Programme**? / *How important is it to you that at the end of the last two years of high school the IB Diploma Programme is obtained?* Maggiori informazioni / *Read more:* <https://www.ibo.org/programmes/diploma-programme/>

Opzione 2: IB Diploma Programme

YEAR 9	YEAR 10	YEAR 11	YEAR 12
LICEO STEAM (MIUR + IGCSE)	LICEO STEAM (MIUR + IGCSE)	IB DIPLOMA PROGRAMME	IB DIPLOMA PROGRAMME
50% ENG - 50% ITA	50% ENG - 50% ITA	80% ENG - 20% ITA	80% ENG - 20% ITA

1 2 3 4 5

Per nulla / Not at all Molto / Extremely

5. Se doveste scegliere tra **Diploma di maturità italiana** con **percorso bilingue STEAM BES** o **IB Diploma Programme** quale titolo scegliereste a conclusione del percorso liceale BES? / *If you had to choose between Diploma di maturità italiana with BES bilingual approach and IB Diploma Programme which title, would you choose at the conclusion of the BES high school?*
- Maturità italiana con percorso bilingue BES / Maturità italiana with BES bilingual approach*
 - IB Diploma Programme*
 - Other*
6. Qualora venisse aperto il liceo BES, **quanto valutereste la possibilità di frequentare il percorso?** / *Should the BES high school be opened, how much would you evaluate the possibility of attending the school?*

1 2 3 4 5

Per nulla / Not at all Molto / Extremely

7. Quale **classe** frequentano **attualmente** i vostri figli? / *What **class** do your children **currently** attend?*
- Toddlers*
 - Nursery – Transition*
 - Reception*
 - Year 1*
 - Year 2*
 - Year 3*
 - Year 4*
 - Year 5*
 - Year 6*
 - Year 7*
 - Year 8*
8. Altri suggerimenti, commenti o feedback / *Other suggestions, comments or feedback*
9. Se siete disponibili ad essere contattati per discutere ulteriormente l'implementazione del liceo, vi preghiamo di condividere il vostro nome e cognome e indirizzo email. (Queste informazioni rimarranno confidenziali).
/ If you are available to be contacted to further discuss high school implementation, please share your full name and email address. (This information will remain confidential.)

Appendix 2. Students Questionnaire

1. Che cosa ti piace di più della nostra scuola? Scegli SOLO TRE risposte /
What do you like most about our school? Choose ONLY THREE answers*

- L'atmosfera e l'accoglienza / The atmosphere and welcome
- Il co-teaching
- Il giardino / The garden
- Le unità d'indagine / Units of inquiry
- Le/ Gli insegnanti / Teachers
- Le attività con gli/le specialisti/e / Activities with specialists
- L'uniforme / The uniform
- Le learning celebrations/ Exhibitions / Museum of learnings /Community projects
- L'uso degli iPad / The use of iPads
- Il lavoro a gruppi / Group work
- The actions
- 10 learner profiles
- Definire i punti di forza e gli obiettivi / Define goals and strengths

2. Se potessi cambiare qualcosa della nostra scuola, cosa sarebbe? Scegli
SOLO TRE risposte. / *If you could change something about our school,*
*what would it be? Choose **ONLY THREE** answers. **

- L'atmosfera e l'accoglienza / The atmosphere and welcome
- Il co-teaching
- Il giardino / The garden
- Le unità d'indagine / Units of inquiry
- Le/ Gli insegnanti / Teachers
- Le attività con gli/le specialisti/e / Activities with specialists
- L'uniforme / The uniform
- Le learning celebrations/ Exhibitions / Museum of learnings /Community projects
- L'uso degli iPad / The use of iPads
- Il lavoro a gruppi / Group work
- The actions
- 10 learner profiles
- Definire i punti di forza e gli obiettivi / Define goals and strengths

3. Fra queste parole, quale rappresenta di più la nostra scuola? / *Which of these words most represents our school?* *

- empatia / Emphathy
- sicurezza / Safeguarding
- Curiosità / Curiosity
- Entusiasmo / Enthusiasm
- Noia / Boredom
- Ansia / Anxiety
- Supporto / Support
- Esplorazione / Exploration
- Voglia di scoprire / Desire to discover
- Preoccupazione / Concern
- Novità / News
- Comunità / Community

4. Frequenteresti un liceo BES? / *Would you attend a BES high school?* *

- Sì / Yes
- No
- Non lo so / I don't know

4A. Se hai piacere, scrivi perché: / *If you like, write why:*

5. Puoi scegliere una sola cosa che non c'è oggi: cosa vorresti avere in una scuola secondaria BES? / *You can choose one thing that is not there today: what would you like to have in a BES secondary school?*

- *Le unità d'indagine / The units of inquiry*
- *Le ore di coteaching / Coteaching time*
- *Il bar / A bar*
- *I colloqui condotti da alunni e alunne / The interviews conducted by students*
- *Le attività di scrittura di spontanea / Spontaneous writing activities*
- *Le thinking routines*
- *Uno sportello di ascolto con la/lo psicologo / A listening desk with the psychologist(s)*

6. Se hai qualche altro suggerimento da fornirci o vuoi lasciarci qualche commento, scrivilo qui: / *If you have any other suggestions or would like to leave us any comments, please post them here:*

Appendix 3. Table of response percentages to the first question of the student questionnaire

ANSWERS	PRIMARY SCHOOL	MIDDLE SCHOOL
L'atmosfera e l'accoglienza / The atmosphere and welcome	31.9%	31.1%
Il co-teaching	18.6%	5.4%
Il giardino / The garden	31.9%	50.7%
Le unità d'indagine / Units of inquiry	4.4%	0.7%
Le/ Gli insegnanti / Teachers	43.4%	19.6%
Le attività con gli/le specialisti/e / Activities with specialists	27.4%	18.2%
L'uniforme / The uniform	6.2%	2%
Le learning celebrations/ Exhibitions / Museum of learnings /Community projects	35.4%	22.3%
L'uso degli iPad / The use of iPads	31.9%	66.2%
Il lavoro a gruppi / Group work	35.4%	50.7%
The actions	18.6%	8.8%
10 learner profiles	7.1%	2%
Definire i punti di forza e gli obiettivi / Define goals and strengths	8%	8.1%

Appendix 4. Table of response percentages to the second question of the student questionnaire

ANSWERS	PRIMARY SCHOOL	MIDDLE SCHOOL
L'atmosfera e l'accoglienza / The atmosphere and welcome	2.7%	23.6%
Il co-teaching	10.6%	14.9%
Il giardino / The garden	14.2 %	10.8%
Le unità d'indagine/ Units of inquiry	9.7%	22.3%
Le/ Gli insegnanti / Teachers	4.4%	28.4%
Le attività con gli/le specialisti/e / Activities with specialists	7.1%	14.9%
L'uniforme / The uniform	66.4%	70.3%
Le learning celebrations/ Exhibitions / Museum of learnings /Community projects	4.4%	14.9%
L'uso degli iPad / The use of iPads	8.8%	8.1%
Il lavoro a gruppi / Group work	7.1%	8.1%
The actions	2.7%	12.2%
10 learner profiles	11.5%	18.9%
Definire i punti di forza e gli obiettivi / Define goals and strengths	15%	13.5%

Appendix 5. Table of response percentages to the third question of the student questionnaire

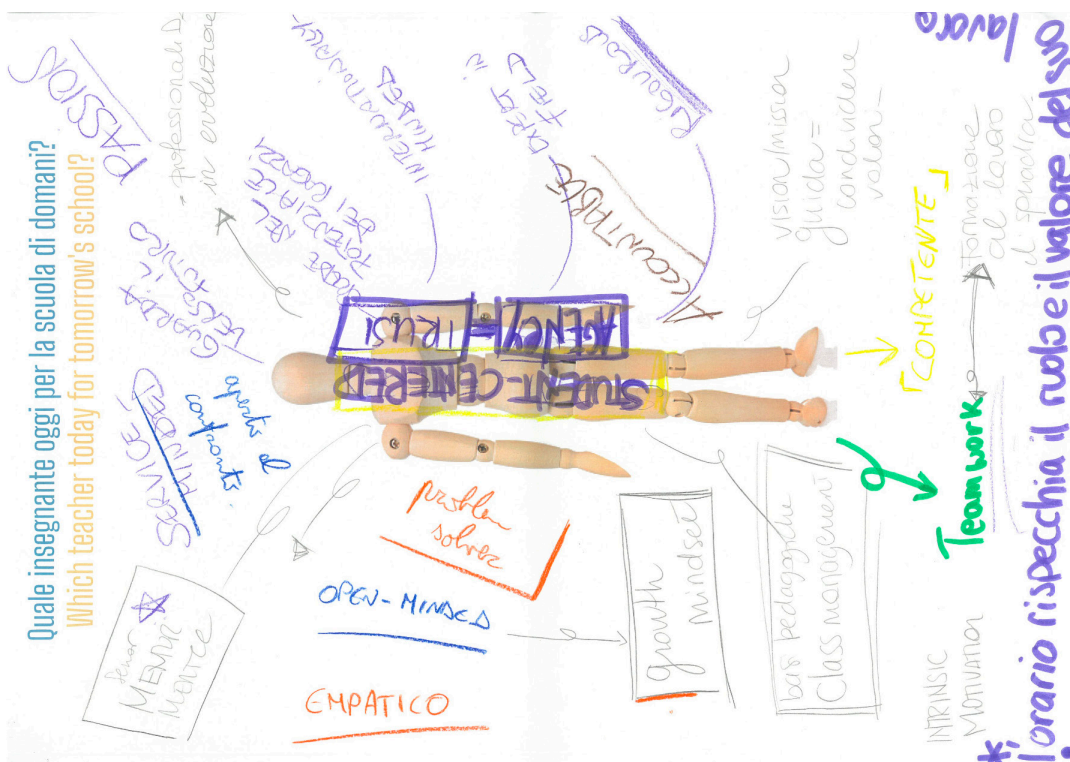
TABLE:

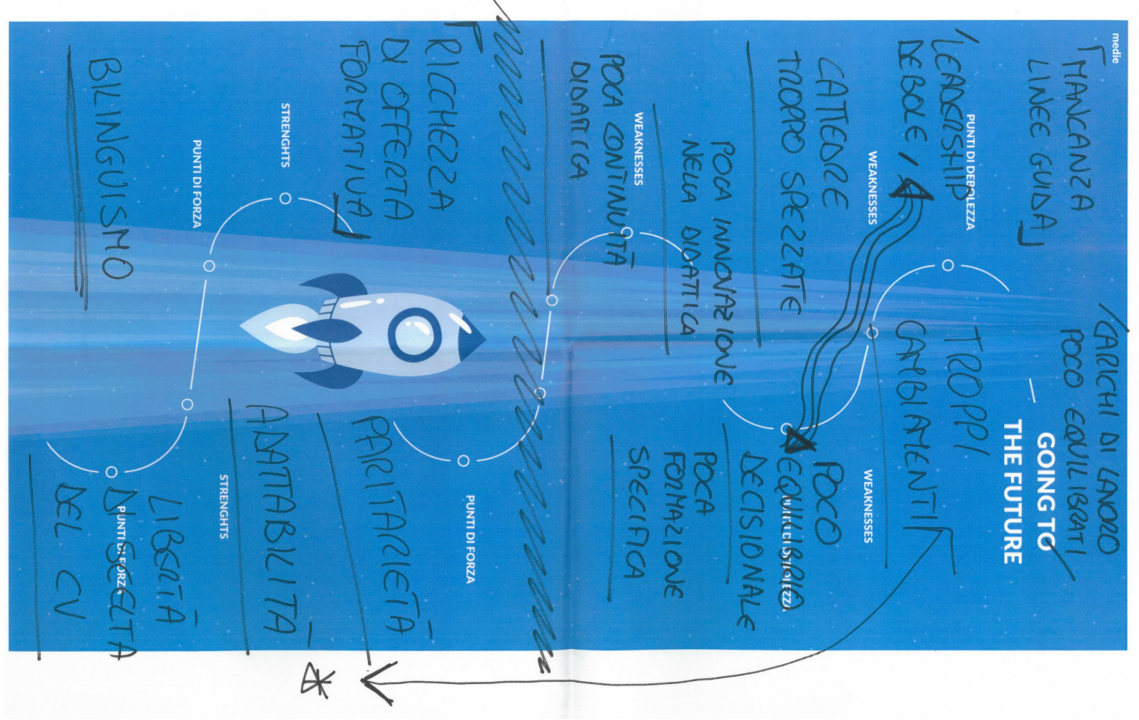
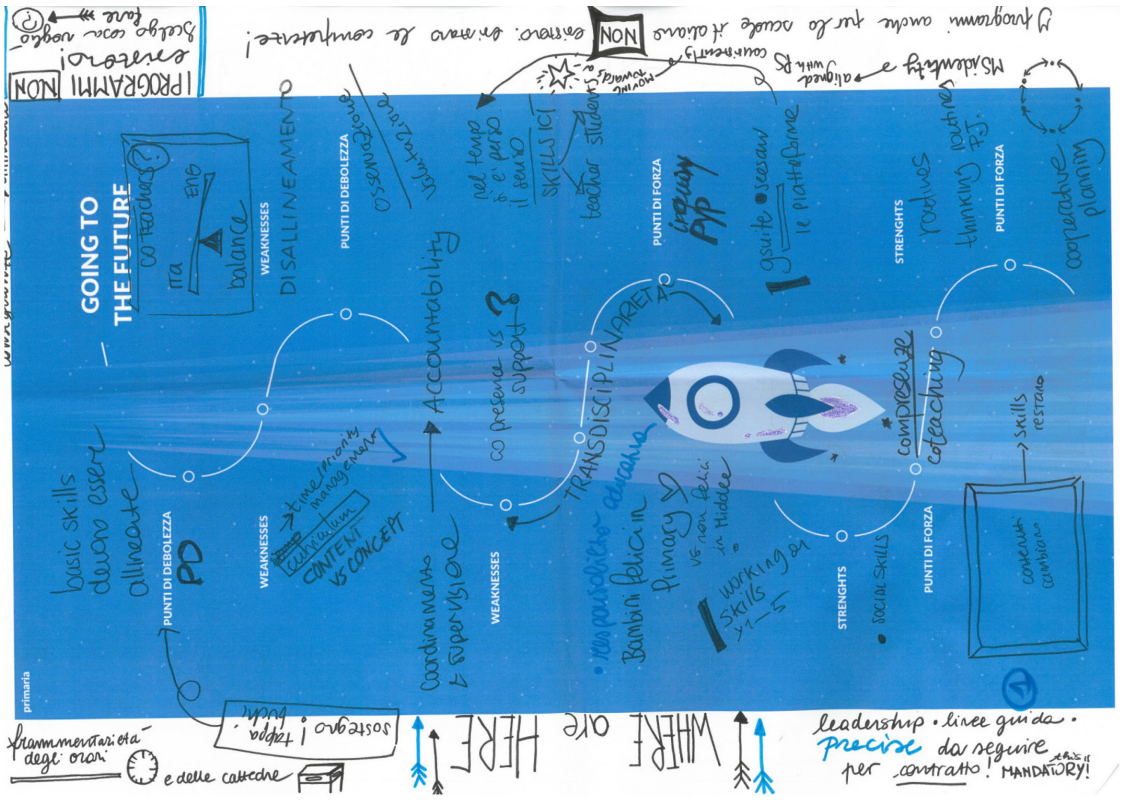
ANSWERS	PRIMARY SCHOOL	MIDDLE SCHOOL
Empatia / Empathy	12.4%	3.4%
Sicurezza / Safeguarding	5.3%	8.1%
Curiosità / Curiosity	5.3%	10.1%
Entusiasmo / Enthusiasm	6.2%	2%
Noia / Boredom	/	9.5%
Ansia / Anxiety	/	13.5%
Supporto / Support	20.4%	4.7%
Esplorazione / Exploration	4.4%	6.1%
Voglia di scoprire / Desire to discover	11.5%	6.1%
Preoccupazione / Concern	0.9%	2%
Novità / News	0.9% %	4.7%
Comunità / Community	32.7%	29.7%

Appendix 6. Table of response percentages to the fifth question of the student questionnaire

ANSWERS	PRIMARY SCHOOL	MIDDLE SCHOOL
Le unità d'indagine / The units of inquiry	12.4%	0.7%
Le ore di coteaching / Coteaching time	9.7%	1.4%
Il bar / A bar	40.7%	81.1%
I colloqui condotti da alunni e alunne / The interviews conducted by students	12.4%	2%
Le attività di scrittura di spontanea / Spontaneous writing activities	10.6%	3.4%
Le thinking routines	3.5%	1.4%
Uno sportello di ascolto con la/lo psicologo / A listening desk with the psychologist(s)	17.7%	10.1%

Appendix 7. Posters from the focus group with teachers





Appendix 8. Posters from the focus group with families

Quale scuola oggi per la società del domani?
 What school today for tomorrow's society?

Quale sarà lo studente o la studentessa di domani?
 What will the student or student of tomorrow look like?

SPORTIVA

ORGANIZZATA

AZIONE NON SOLO PAROLE!

APERTA DENTRO FUORI

INTERAZIONALE

ALTERNATIVA

TECNOLOGICA

LUGO DI OPPORTUNITA

PERSONALE RESPONSABILE

SOSTENIBILE

VARIETA' LUOGHI DI INSEGNAMENTO

IMMOBILIA

MULTICULTURALE

CONTENUTI

Inclusiva

Accogliente

Stimolante

ASSORDANTE

ARTISTICA

LUGO di bellezza

* FOTOGRAFISTA

* INCAUSIVO

* CURIOSO

* CORAGGIOSO

* ONESTO

* ATTIVO

* CONSCIENTE (DAVE CONSCIENCE DA DUE VIENTE E IL PASSATO)

Bianca

Marta

Milly

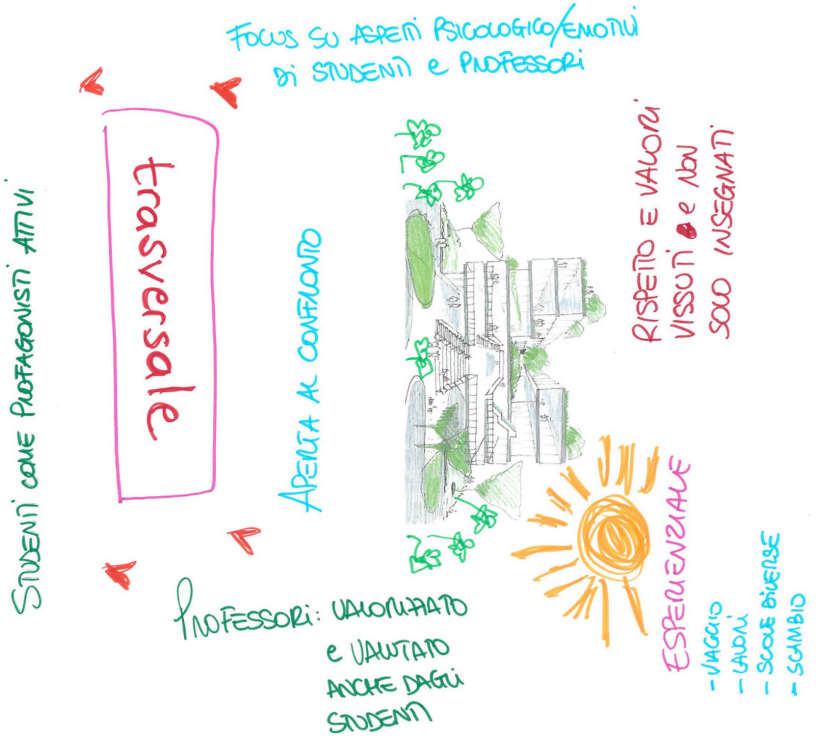
Cathy

Daria

Daria

Daria

Quale scuola oggi per la società del domani?
 What school today for tomorrow's society?



Come sarà lo studente o la studentessa di domani?
 What will the student or student of tomorrow look like?

