

Boosting emotional intelligence in the post-Covid. Flexible approaches in teaching social and emotional skills

Promuovere l'intelligenza emotiva nel post-Covid. Approcci flessibili per insegnare le competenze sociali e emotive

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Abstract

The Covid pandemic has opened new challenges for education, especially for the social and emotional wellbeing of children and adolescents who had to face unprecedented and upsetting changes in their daily lives. The paper explores the possibilities offered by the social-emotional intelligence framework in helping children and youths develop the good emotional literacy needed for facing such a challenging time and growing as wholesome adults. This is done through an in-depth analysis of the concept of replication and generalization and by proposing a perspective working model for embedding social and emotional learning in daily teaching and learning activities.

Keywords: social and emotional learning; emotional intelligence; post-Covid; education; teaching and learning

Sintesi

La pandemia di Covid ha introdotto nuove sfide nel mondo dell'educazione, in modo particolare per quanto riguarda il benessere sociale e emotivo di bambini e adolescenti che hanno dovuto affrontare cambiamenti sconvolgenti senza precedenti nel loro vivere quotidiano. L'articolo esplora le possibilità offerte dal costrutto di educazione socio-emotiva a supporto dello sviluppo in bambini e ragazzi di un'alfabetizzazione emotiva solida, necessaria per affrontare un periodo così sfidante e per la loro crescita futura. Tutto questo è fatto attraverso un'analisi approfondita dei concetti di replicabilità e generalizzazione e attraverso la proposta di un nuovo modello di lavoro per integrare l'educazione socio-emotiva all'interno delle azioni didattiche quotidiane

Parole chiave: educazione socio-emotiva; intelligenza emotiva; post-Covid; educazione; didattica;

¹ L'articolo è il frutto del lavoro congiunto degli autori. Nello specifico è da attribuire ad A. Signorelli il secondo paragrafo, a A. Morganti il terzo, a S. Pascoletti il quarto. L'introduzione e le conclusioni sono il frutto del lavoro dei tre autori.

1. Introduction

The global pandemic of Covid-19 changed all aspects of our lives dramatically; in a short time, people had to readjust their personal, educational, and professional lives to something new, unsettling, and frightful. The turmoil caused by the pandemic in social relations produced a new, indeed unimaginable, scenario (Tintori, Cerbara, & Ciancimino, 2020). With the schools closing for many, long months, children and youths alike had to readjust their inner universe both from a cognitive and a social and emotional level. Having – at least temporarily – lost one crucial environment (the school one), where their identities and roles were clearly defined and shaped through the interactions with peers and teachers, they had to re-shape themselves. The confinement due to the pandemic produced a sort of interpersonal alienation that left a physical and emotional void, especially in the more vulnerable subjects (Montanari, 2021; Vicari & Di Vara, 2021). This void also weakened the students' personal and social resources, exacerbating anxiety, isolation, restlessness, and regression (Montanari, 2021). Therefore, this scenario calls for new approaches to teaching social, emotional, and prosocial skills. Such skills can be easy to embed in the school curricula and are flexible enough to be adjusted and tailored to the emotional and social needs of different students and age groups coming back to school full time in the post-pandemic era.

2. Social-emotional learning and education: which competencies and how to teach them

The idea of Emotional Intelligence is not something entirely new, as we can trace back its roots in the works of Thorndike in the 1920s. Years later, Meyer and Salovey (1990) expanded Thorndike's intuition providing further insight and reaching an early definition of Emotional Intelligence. Considering Meyer and Salovey instances, Goleman (1995) defines Emotional Intelligence as the ability to recognize one's own and others' feelings and emotions, motivate oneself, positively manage one's own emotions, encompassing both the personal and interpersonal contexts. D'Amico (2018) describes these skills as a set of cognitive skills which we use to elaborate emotionally salient information. More recently, Meyer and Caruso have stated that E.I. is an extended intelligence according to MacGraw's model of three-layered intelligence (D'Amico, 2018), besides entirely falling within the most traditional forms of intelligence. However, unlike the others, considered cold, Emotional Intelligence is a hot intelligence because it focuses on those aspects that have emotional value and relevance for the subject (D'Amico, 2018).

Many studies in neurosciences have addressed the relation between emotions, Emotional Intelligence, and education (D'Amico, 2018; Immordino-Yang & Damasio, 2007; Immordino-Yang & Gottlieb, 2017; Morganti, Marsilli, & Signorelli, 2020; Oliviero, 2017). Mainly they analyze and investigate the impact that emotions have on learning and on how those emotions influence the cognitive elements involved and, at the same time, fall within those processes that Immordino-Yang e Damasio (2007) call emotional thought.

It is essential to highlight that such cognitive skills connected with E.I. are not spontaneous, as they do not appear naturally. They need to be educated and strengthened – in some cases, these skills need to be developed from scratch.

Starting in 1994 and based on a growing body of research and studies, the Collaborative for Academic, Social and Emotional Learning (CASEL), one of the major research institutions in E.I. founded in Chicago by Goleman, provided both advancements in

research in this specific field and the definition of five core competencies and their application in education through strategic instructional practices, selected through a rigorous quality system based on collected scientific evidence.

Figure n.1 summarizes the five core competencies proposed by the CASEL framework, which are self-awareness, self-management, social awareness, relationship skills, and responsible decision making²; these competencies are set within a frame that can be defined as “ecological”, as it entails an approach to the development and retention of these competencies that goes beyond the microcosmos represented by the classroom environment and involves a school-wide approach (<https://schoolguide.casel.org>; Morganti, Marsili, & Signorelli, 2019), while, at the same time, extending and expanding beyond the school walls to reach out to communities, families, and caregivers.

The CASEL framework, which is one of the most globally renowned and implemented, shows the competencies merged as follows:

- intrapersonal competencies: self-awareness and self-management;
- interpersonal competencies: social awareness and relationship skills;
- intra and interpersonal competencies: responsible decision making.



Figure 1. The CASEL Framework source: <https://casel.org/sel-framework/>

Such grouping points out the sequential nature of emotional development, which generally goes at the same pace as the cognitive one. It also sheds light on the importance of working first on the elements which are more “personal”, then moving on to those aspects that go from the “I” to “us” and finally reaching the competencies that arise from the union of the intrapersonal and interpersonal competences. These require a higher maturity and a broader capacity of understanding some of the more complex mechanisms underlying the concepts of ethical behavior and responsibility.

² For further information on the five core SEL competencies in the CASEL framework, please check: <https://casel.org/sel-framework/>

Harvard University has launched a very ambitious and foundational project, the Taxonomy Project (<https://easel.gse.harvard.edu/taxonomy-project>), whose main aims are to provide more clarity and precision in social-emotional learning to ease and make the passage from research to implementation of the many SEL curricula and programs more effective. It is possible to access the results of this work on the Explore SEL website (<http://exploresel.gse.harvard.edu>) where it is possible to move around the multifaceted world of social and emotional learning, exploring it through three different lenses:

- comparing the different social and emotional learning domains;
- comparing and connecting the many social and emotional learning frameworks;
- comparing the different SEL competencies to track how the different frameworks address these.

Beyond its apparent importance, such a project sheds light on the need for more accurate and in-depth research in the field of social and emotional learning to gather reliable evidence (therefore closely analyzing what works, in what context(s), and with what kind of population).

The Taxonomy Project and Explore SEL provide a critical, broader view on social and emotional competencies and how they can be embedded, almost “injected,” and taught at all educational levels, thus reaching a wide and differentiated population of children and youths.

The primary approach to teaching and educating social and emotional competencies, as it is possible to infer from the Taxonomy Project’s introduction, entails mainly the use of programs and curricula, which are modular and with specific activities for each competence addressed. The structure of the activities is such that they are adequate to answer better the social and emotional needs of the various age groups.

So, for example, the curricula aimed at primary school children will focus on working on all the five core competencies. At the same time, in the case of adolescents, the programs and framework could focus more on social development, problem-solving, and responsible decision-making activities, as these competencies, require higher cognitive and metacognitive skills.

The effectiveness and impact of such programs have been widely researched and explored over the years.

In a 2014 study, Schonfeld et al. investigated and assessed the impact of a social and emotional learning program on the academic achievement of primary school children through a cluster-randomized design on a sample of 705 students. The data showed that the intervention group had a higher level of proficiency in literacy (reading and writing) and math, suggesting that implementing SEL programs could also help acquire “[...] academic proficiency, especially among youth attending high-risk school settings” (p. 2).

In a more recent study (2020), Cejudo, Losada, and Feltrero experimentally assessed the impact of an SEL video game called “Aislados” on personal wellbeing, mental health, and emotional proficiency on 187 adolescents, always using an intervention and a control group. The results showed significant differences between the intervention and control group, whereas, in the intervention group, the adolescent improved quality of life and mental health.

Crandall Hart et al. (2020) used a “[...] multilevel modeling of follow-up data from a multiyear, multisite cluster-randomized efficacy trial to investigate the impact of a brief universal SEL program on students’ subsequent state test performance.” (p.5)

The effect sizes were positive and coherent with other studies implementing a similar research design, assuaging the concern that “spending too much time” working on social and emotional skills could take time from the school curricula, hindering students’ academic achievement.

However, two things must be considered despite the wealth of studies and evidence on the effects and impact of SEL curricula in education.

The first is the generalization of approaches formulated in a specific educational context (the Northern American one), which questions the program’s feasibility and teachers’ fidelity in delivering its contents. The second is how to maintain (and maybe improve) the effectiveness of SEL interventions while seeking more flexible solutions to their implementation in Italian schools.

3. Conceptual replications: social and emotional learning interventions in the Italian school context

The models discussed so far clearly show how social-emotional learning is supported by scientific evidence that increasingly validated its usefulness for personal and interpersonal wellbeing and for the professional development of people who benefited from it, particularly teachers and students.

Such benefits have mainly been found in specific geographical, cultural, political contexts and on populations primarily located in the United States, more rarely in European Countries.

For this reason, it is necessary to reflect on the concept of replicability of the studies and their effectiveness in contexts that are very different from each other not only from a geographical or cultural perspective but also for the specific features of their educational systems.

If, thanks to research, one educational intervention model is deemed effective in a specific context, can this same model be replicated with the same outcomes in others? It is a complex question that the same concept of replicability of studies can partially answer; no single study can provide absolute truths. Replicability is a vital part of strengthening the scientific credibility of research itself (Francis, 2012; Ioannidis, 2012; Jasny, Chin, Chong, & Vignieri, 2011; Simons, 2014).

The concept of replicability entails assessing the validity of prior research by carrying out a subsequent, similar study; this is a remarkably complex process, for example, in the field of special education. The study by Coyne et al. (2016) states that replicability in this field is extremely rare and concerns only 0.4% of the published documents. Even though some studies could be considered replications, they are not identified as such.

3.1. Direct and conceptual replication

Direct replication implies duplicating the original study in all aspects: participants, implementation, independent and dependent variables, research design, and data analysis (Schmidt, 2009). If for some, such an approach would be impossible to apply to social

sciences, for others, it still would be possible but with many difficulties (Asendorpf et al., 2013; Coyne et al., 2016; Ijzerman, Brandt, & Van Wolfer, 2013; Simonsohn, 2015). Suppose we refer to all contextual and personal variables that populate a school environment, many of which are hardly controllable. In that case, a study approach such as the direct replication is unlikely viable in school contexts that are not standardized nor controllable for their nature.

Of particular interest in school education could be conceptual replication, where one or more aspects vary from the original study (Schmidt, 2009). If, for example, the original research entailed a social-emotional learning intervention with primary school pupils, the conceptual replication can allow the selection of a student population from secondary school and show that the same intervention was ineffective with a different population of students. The intention is not to challenge the original study but to point out how the same intervention is ineffective with older students.

In other words, conceptual replication can be beneficial for those researchers who want to try generalizing the original study; for example, it can help identify for what population, in which context, these studies could be effective (Earp & Trafimow, 2015; Schmidt, 2009).

The analysis of these variables, which are very copious in the school contexts, can surely bring to light critical elements (the need for an extended time, the involvement of other educational figures) and potential (demonstration of effectively reaching the expected outcomes). Both such elements become essential pieces for researchers in the educational field.

3.2. Applying conceptual replication to social-emotional learning interventions

As stated in the previous chapter, CASEL is engaged in selecting and assessing, through specific criteria, social-emotional learning programs that must be well designed and evidence-based, with potential for widespread diffusion in the school of the United States. The 2013 CASEL guide included 16 SEL programs aimed at primary school pupils. These programs vary in the approaches implemented to promote social and emotional skills. However, they all have a documented impact on students' behavior and school achievement (Durlak et al., 2011). These programs used clear lessons to teach students social and emotional skills for the most part.

As described in previous work (Morganti & Signorelli, 2016), thanks to the three-year-long Comenius project (2012-2015) European Assessment Protocol for Children's SEL Skills³, (EAP_SEL) founded by the European Commission within the Lifelong Learning Programme, we were able to promote, in the public primary schools of five countries, Italy, Sweden, Switzerland, Croatian and Slovenia, social and emotional learning interventions through the use of one of the most internationally famous evidence-based program, Promoting Alternative Thinking Strategies (PATHS®).

The research can be described as an authentic conceptual replication even though, in this specific case, it was not initially defined as such.

³ The European Assessment Protocol on Children's SEL (EAP_SEL) funded under the Lifelong Learning Programme has been coordinated by the University of Perugia in collaboration with the University of Udine (Italy), University of Southern Switzerland (Switzerland), Örebro University (Sweden), University of Ljubljana (Slovenia), and University of Zagreb (Croatia). Ref. n. 527206 – LLP -2012 –I.T. www.eap-sel.eu

The PATHS® curriculum is an education program, the outcome of the work of a team of researchers of the Penn State University (Greenberg et al., 2005; Kusché, Greenberg, 1994) which aims are the development of social and emotional competencies, the decrease of aggression and behavioral problems in kindergarten and primary school-aged children. It is a program organized in different kits: kindergarten and primary school (divided by grades; <https://pathsprogram.com/paths-program-pk5>) designed to be implemented at least twice a week for a minimum of 20 to 30 minutes per day (for at least two years). It uses systematic and gradual lessons to foster emotional literacy, self-control, social competencies, positive relationships between peers, and problem-solving abilities.

The research carried out in the European project EAP_SEL has seen for the first time the use, in Italy, of a social-emotional learning program, in this specific case the PATHS® itself, in the public primary schools. The experimentation involved seven schools in the area of Terni (Umbria), divided into comprehensive schools and Direzioni Didattiche⁴, located both in urban and rural areas.

The project's research design was an RCT (Randomized Controlled Trials), with intervention and control groups characterized by specific criteria. Generally, the European partnership followed the shared criteria for data comparison, with particular conditions belonging to the Italian school context. The main criterium was the presence in both groups (intervention and control) of pupils with certified disabilities and learning disorders.

The research outcomes, which saw the involvement of a significant sample of students (N.204) and teachers (45) – both curricular and support – allowed for highlighting several strengths. However, the teachers involved reported issues in implementing a successful and solid program initially designed for the North American school system.

Amongst the more substantial we can find:

1. the cost: The PATHS® program is quite costly, around 600\$ for each class. In other words, such an amount would have to be then multiplied by 5 – one program for each of the primary school grades. Such costs are not sustainable for the Italian school system unless, as in the case of the school involved in EAP_SEL, they are covered by part of the project's budget.
2. hard to contextualize educational activities: the activities presented in the PATHS® program aimed at acquiring social and emotional competencies are generally gauged on the Northern American school system; mainly, they do not foresee any adjustment in the case of children with special educational needs in the classroom.
3. teaching rigidity: the program entails that the teachers, previously trained, would find, within their weekly teaching hours and whatever their subject, at least 20-30 minutes to work on social-emotional competencies accordingly to the order and ways of the program itself. Therefore, only a previously trained teacher can implement the program within a time range exclusively limited to this kind of activity.
4. lack of subject connection; the program has been designed and developed to promote only the five social and emotional learning core competencies without connecting them with specific subject areas.

⁴ In the Italian school system, a Direzione Didattica is a set of different schools in the same area, including only kindergarten and primary school.

5. the original language: the program's original version is, obviously, in English, and the lost in translation phenomenon generated a loss in language – conceptual nuances which are almost impossible to reproduce.
6. “forgotten” SEN: the program does not provide any adjustment nor suggestion to cater for children with special educational needs; therefore, the program's accessibility, in case there are children with SEN in the classroom, is left to the teacher's goodwill – a teacher that can or cannot be adequately trained in social-emotional learning. The teachers involved in the project's experience in the Italian classes attended by children with disabilities or other SEN highlighted how difficult it was to make the content accessible to all;
7. the “time” variable: the time for working on the activities indicated in the program is quite limited (between 20 and 30 minutes). Teachers reported difficulties following such organization and expressed their need to have more time to allow all pupils involved to express themselves without being interrupted or without having children not participate in the discussions due to the lack of enough time. A further element that the teachers much thought about has been the duration of the program implementation, too short to detect changes in behavior, notwithstanding the two straight years of implementation.

Such elements reported by the same teachers and by the research group (Morganti & Signorelli, 2016) show the difficulties faced in carrying out direct replications, even when implementing evidence-based programs known for their positive impact on students' behaviors, relationships, and achievements (Durlak et al., 2011; Taylor et al., 2017). On the other hand, it is possible to infer how conceptual replications can help highlight the limits of feasibility and sustainability connected to the contextual variables.

Morganti & Cottini (2015) investigated the connection between evidence-based educational approaches and their implementation in real school contexts. Their work led to the drafting of an evidence-based working model able to consider and impact both the research and the educational implementation levels by analyzing closely connected principles.

Applying the principles of this model to the experience with the PATHS© program, we are able today to provide a more detailed and articulated explanation to the research carried out and to the issues listed above.

3.3. Evidence-based model for educational research

The evidence-based model here referenced is made of three fundamental principles: efficacy research: i.e., establishing through research which are the best methodologies to find significant outcomes (“What works?”); effectiveness research: the effect produced by such interventions, about the results, experimentally detected, of the use of a particular procedure in the real world, in the daily classroom work (“When does it work?”); implementation: the ways of applying the chosen intervention, understood both as controlling the variables during the educational activities, to foster its success, as systematic monitoring of the intervention's evolution (“What can we do to make it work? Is it working?”)

In the first part of this chapter, we illustrated the extensive amount of research on the efficacy of social and emotional interventions in primary school (Durlak et al., 2011; Taylor et al., 2017; Weare & Nind, 2011). The studies collected by the cited works – mostly meta-

analyses – focus mainly on the first element of the model introduced by Cottini and Morganti.

The same PATHS© program has been soundly validated at the efficacy research level (CASEL, 2013). However, it is not easy to apply it, mainly if this means generalizing it in a very peculiar environment like the school, which, as previously stated, changes from Country to Country. It is here, at this point, that assessing the intervention (effectiveness) becomes relevant.

Assessing the intervention means trying to identify, always through research, the primary conditions that would allow successful actions (pupils and teachers' characteristics, environment's organization, resources available, social aspects) within a specific context. Such research must then be closely connected to the educational practice (implementation), to, on the one hand, support and steer it and, on the other, influence its evolution. Therefore, such applied research is seen as a chosen work modality able to consider and monitor a whole series of variables that would be difficult to manage and control in schools and that contemplates the principles of effectiveness and implementation of the described model.

The EAP_SEL project has been an important starting point to check the feasibility and replicability of social and emotional interventions in the Italian school system. As it often happens in research, whichever its nature and whatever field of interest, there are many difficulties and criticalities which become the starting points for new research hypotheses and new questions to answer. Such happened in the European project Evidence-based education: European strategic model for School Inclusion⁵(EBE-EUSMOSI), carried between 2014 and 2017 together with other 4 European Countries: Spain, Croatia, Slovenia, and the Netherlands. If in EAP_SEL, research verified the effectiveness of social and emotional learning interventions in Italian primary schools, in EBE-EUSMOSI, the research hypothesis has been to verify if social and emotional learning interventions could impact inclusive education if they could improve and boost it.

In other words, the research carried out in EBE-EUSMOSI identified the dependent variable of a randomized control trial experimental design in the inclusive processes.

What connection between social and emotional learning and school inclusion?

It is not easy to answer, especially when facing the challenges of clearly defining school inclusion. Two Swedish researchers, Göransson e Nilholm (2014), tried to explore and systematize the many definitions of such a complex and articulated concept. Their work is a compelling attempt at producing a synthesis, where they have located four primary levels of such definition, listed in ascending order:

- placement: inclusion as placing students with SEN (wherein the definition of SEN we also find disabilities) in mainstream classrooms. Such definition recalls the Italian period of “school assimilation” in the 1970s;
- specified individualized definition: steering the inclusion process towards meeting students with SEN's social and academic needs. Such definition embraces that historically defined legislative timeframe that we identify as the school model of integration;

⁵ The project European Strategic Model for School Inclusion EBE-EUSMOSI – 2014-1-IT02-KA201-003578 funded by European Program Erasmus Plus website: <http://www.inclusive-education.net/>

- general individualized definition: inclusion aims to meet the social and academic needs of all students. This definition is the closest to the current vision of the inclusive school, for each and all;
- community: at this last level, inclusion recalls the objective of the Salamanca Statement (Unesco, 1994), namely fighting every form of discrimination and promoting the creation of inclusive communities. Today, the authors argue, we must tend to the highest level of such definitions, where the concept of community entails principles of equity, caring, justice, and valuing diversity, all concepts of a social and emotional kind.

Learning happens in educational communities where students interact with their teachers, collaborate with different peers, and bring the values and teachings of their families. The development of effectual communication skills, learning, and interacting with others and their differences entail social and emotional education.

Social and emotional learning can be the key to teaching them respect diversities, understanding other people's perspectives, empathy, and leadership skills through daily school activities and experiences.

Intending to create such an educational environment, the project EBE-EUSMOSI planned to implement an educational program aimed at primary school children aged between 8 and 10 years, focused on social, emotional, and prosocial education. The specific features and the mutual interaction of these frameworks were the starting point for impacting the quality of the inclusive processes of the schools and the classes. Prosocial education has its roots in positive psychology that defines prosociality as an essential value for human relationships and as a method for its implementation in different fields of human activities, including educational ones.

Prosocial behaviors are all those that seek to encourage and support other people while respecting their set of values, enable the achievement of positive social aims, boost the chances for solidarity and unity, protect the identity, independence, and initiative of the people or groups involved.

All of this is done without looking for or expecting, in return, any verbally explicit or material reward (Roche et al., 1991).

In more recent works (Morganti & Roche, 2017; Mar Badia et al., 2020), we explained the main features of the inclusive PROSEL (Prosociality & Social and Emotional Learning) curriculum, which intersects social and emotional learning (Morganti & Bocci, 2017) and applied prosociality (Roche et al., 1991).

Different from the experience with the PATHS © program, the PROSEL curriculum was developed with the explicit intention of improving the level of inclusion in the primary school classes involved in the research.

The PROSEL curriculum is divided into 30 working sessions with the following objectives:

- building a classroom climate where students are the real protagonists of the learning process, and their voices are heard daily, listening to their take on what has been done during the school day;
- helping students manage and regulate their emotions, particularly unpleasant ones;
- improving the prosocial quality of behaviors and decreasing conflicts in classes and school;
- promoting strategies for problem-solving responsibly and consciously;

- improving the number of prosocial actions in the classroom, in school, and at home;
- promoting behavioral metacognition on the consequence impacting those at the receiving end and the perpetrators;
- stimulating in teachers a heightened commitment to becoming models or significant adults for their students, especially for what concerns emotions and prosocial actions.

The program's essential and innovative element is connecting the activities and the developmental objectives foreseen for that age to the school curriculum. Each program's activity, connected to one or more subjects, is also a chance to learn, convey and experiment with social, prosocial, and emotional skills beyond subject learning.

The PROSEL curriculum has been implemented in Italy in 24 primary school classes of 4th and 5th grade (14 intervention and ten control) with the involvement of 434 pupils. The classes have been selected following these criteria:

- presence of pupils with certified disability (Law 104/1992);
- presence of pupils with certified learning disorders (dyslexia, dysgraphia, dysortography, dyscalculia);
- presence of pupils with other special educational needs (ADHD, behavioral disorders, emotional problems);
- presence of migrant/refugee pupils.

At least 2 of the four criteria had to be answered and at least one between c) and d).

As for the implementation of the PATHS program, in this case as well, for the PROSEL program, teachers have been specifically trained on the topics of prosociality, social and emotional learning, and continuous monitoring of the classes was carried out by the research team.

The quantitative and qualitative outcomes of the experimentation have been analyzed and described in other works (Badia et al., 2020; Morganti, 2019). However, we can briefly point out that PROSEL curriculum improved the inclusive processes carried out by the schools and classes involved in the project, particularly in the teaching-learning practices.

The answer to the research question "can social and emotional learning interventions impact on inclusive education process?" is without doubt positive.

In this paper, we report the qualitative outcomes collected through the continuous presence in the project of an external expert.⁶ called to assess the annual implementation experience of the PROSEL program both in the Italian context we have described and in the Spanish one.

Following are four assessment criteria for the quality of the implemented protocol and the results collected at the end of the research:

1. acceptability: 9 teachers out of 10 agreed or strongly agreed with the following statement "PROSEL is an appropriate program to cater to the needs of children with SEN." Answers were more conflicting concerning the statement that PROSEL

⁶ The external auditor for the PROSEL program was prof. Giacomo Vivanti Assistant Professor, AJ Drexel Autism Institute, Drexel University, 3020 Market St, Philadelphia, PA 19104, USA. The results come from the data collected in an internal project document.

had incited interest in families and teachers not directly involved in the program, with six positive answers and three negatives. The analysis of the audio and video recorded interviews of teachers involved in the program highlights that the teaching-learning practices introduced by PROSEL were consistent with the relevant pedagogy and deemed as gratifying, pleasant, and valuable pursuing the pedagogical and instructional objectives perceived as relevant;

2. fidelity: All teachers but one stated substantial fidelity to the program. However, all teachers introduce some adjustments to the protocol;
3. adaptability and integration: The majority of teachers stated that the implementation of the program required structural changes in the physical environment (60% of interviewees) and changes in the daily routine (90%);
4. sustainability: in most cases, teachers had to add working hours to the one proposed by the program, and all interviewees except one stated that participation in the program entailed some working hours at home. This extra time varied from less than 2 to more than 10 hours per month. Most teachers (80%) stated that their school provided them with the necessary freedom and flexibility to rearrange their daily working program.

The outcomes collected by the research and the qualitative assessment promoted by the external evaluator on PROSEL program show two main criticalities for this working protocol: the scarce involvement of families and the necessary adjustment of activities in terms of physical space of daily work in class from teachers. The proposed activities, often, have been modified by teachers during implementation. In such a sense, it could be helpful to organize focus groups at the beginning to understand, together with the teachers involved, how to structure activities to make them more fitting to the context, its times, and its spaces, in addition to the needs of pupils.

At the end of these two international research experiences, with such ample samples involved (teachers and students) and so complex for the different European school systems engaged, we can trace a new instructional social-emotional model for the Italian school system.

Such a model is, on the one hand, respectful of the school and curriculum organization and, on the other, introduces an innovative and systematic way of building and supporting both the personal and interpersonal competencies of all students, and creating an educational context based on the principles of equity, inclusion and social justice which are the foundations of all societies.

4. Embedding SEL in daily teaching practices: a possible working model

Besides the experimental contexts mentioned in the previous section, today's SEL educational implementations are recurring and show the existence of higher awareness and attention to such cross-cutting competencies, now more than ever necessary – especially in this still unsettling pandemic scenario.

In the last years, we have seen a growth in projects aimed at developing SEL literacy in connection with different curricular subjects and educational materials. Some educational SEL projects' activities are structured and well-designed. In contrast, others merely make use of “emojis”, at the end of the project's experience, to record the popularity of the activity or the emotions that were elicited.

If, on the one hand, the awareness of the need for working on emotional and social skills is a good sign, on the other, the existence of well-designed SEL projects and educational interventions is still scarce.

This, in turn, is resulting in a weakening of the effectiveness of the implemented SEL actions, as often the structure of these actions is such that children do not experience SEL daily at school but only on some rare occasions.

The generalization and maintenance of learning happen thanks to long processes of reiteration and gradual content delivery in different contexts and situations.

At the same time, working on recalling and remembering lessons, notions, patterns helps improve students' causal relation skills. Teachers must constantly monitor such activities to detect and point out errors and to encourage reflection (formative assessment) by providing alternative models and, when possible, activating peer resources.

It is quite a considerable commitment for teachers engaged in helping their students reach the main curricular objectives, for example, in primary school.

However, when addressing those learning objectives deemed of "secondary importance," this commitment sometimes is not as strong and effective.

Providing a systematic and adequate answer to the educational needs of affective and social dimensions is a collective commitment that must be carried out equal to the one dedicated to the main learning objectives.

Therefore, it is necessary to find a solid and credible route regarding teachers' essential resources and time to make sure that all learning objectives are addressed equally.

One of the most realistic routes, in this sense, is represented by a teaching approach that would integrate SEL objectives with those of the subjects in the curriculum. It means recognizing in the materials used during lessons (sciences, history, literature, math, arts) all the possible connections to "embed," "inject," and improve the episodes of social and emotional thinking, helping emotional self-regulation. This principle recalls one of the three macro – opportunities highlighted in the outcome of the 2016 World Economic Forum (WEF) report, namely the invitation to technologies producers to "embed SEL into foundational ed-tech products." This invitation has been further expanded to the idea of the authorship of teachers, where they become creators but also enablers and facilitators (Morganti, Pascoletti, & Signorelli, 2016).

The SEL model we wish to introduce, as a research team, entails opportunely modifying the lessons' materials using connections and keywords that will start a double learning process: on the one hand, children are still learning the subject, on the other, running parallel to the main learning activities, they are engaging with social and emotional learning.

Such non – invasive "injecting" of SEL should never burden the task with excessive requests – but should easily mix without distorting the main activity, which acts as a contextual background.

"How must have felt the main character?"; "...how would you react to such words?" are some examples of questions and suggestions that can both stimulate the child and at the same time do not require a long time to complete the task, following the logic of "short but frequent."

For more effective implementation, we have identified five ways/suggestions intending to align SEL experiences with the curricular setting:

- episodic - emotional analysis question: to be used when the context is suitable for assessing the identification/understanding of emotions and the motivations behind them (if the chosen material does not present such situations, they must be created from scratch);
- short story/ tale/ episode: act in on the contextual background (history, sciences, literature), the teacher creates a connection with an experience close to the children's lives, helping them understand the episode thanks to the fact that the children would easily recognize themselves in the situation presented;
At the end of this phase, the teacher recalls an experience closer to the child's life to help them understand the episode with a higher level of engagement, recognizing themselves in it. The teacher should then elicit comments about the situation ("what do you do when you are angry, when you are scared, when you feel sad, when you feel happy") or can ask the children to complete the task, for example, by imagining a possible ending;
- metacognitive reflection: such approach entails the modification of the contextual background to encourage the student to think about the causes of a reaction, explain them or think about strategies for solving a problem, therefore eliciting opinions on the many ways used to solve a situation of conflict or emotional distress;
- social problem-solving: it is one of the most complex tasks in the development of emotional literacy. The student, presented with a problematic or distressful situation, is encouraged to show, or choose problem-solving procedures to think about and analyze the context, act on different behaviors, mediate, de-escalate the crisis, and so on;
- prosocial stimulation: according to the age and number of students involved, the teacher can present activities that entail reciprocal help for reaching a goal, even not a shared one, through a task (initially an easy one), or to provide support without expecting anything back.

We must also remember that recalling and contextualizing emotions allow the child to name the perceived or experienced psychic and affective state correctly.

Therefore, every narrative or dialogical moment becomes essential for expanding the repertoire of emotional words, thanks to a gradual increase in the frequency of exposition to an emotional lexicon adequate to the child's age.

As suggested by the UDL guidelines, the use of technologies helps carry out and accelerate the actions of introduction and connection to SEL, thanks to the many hypermedia functions. The structure of some web pages, the discussion areas in some online programs, and other tools for opening comment windows and audio – notes are just examples of solutions that can be useful. The benefit of the digital is not merely related to the speed of production and multimedia. It opens a multifunctional dimension that eases the autonomous use of learning materials with the help – whenever it is not possible to rely on peers – of alternative solutions such as simulation, quite a crucial aspect when thinking about using distance digital learning and accessibility.

Lastly, the collection and logical organization of the modifications, adjustments, and connections applied to the learning materials, allowed the research team to boost and improve the structure of the planned online support service dedicated to teachers. Furthermore, this allowed adding ideas and good practices to promote the self-production

of enhanced learning materials which become more and more SEL “embedded” and “embedding.”

These resources will feed the implemented strategies aimed at achieving the inclusive and welcoming social-emotional climate desirable in each classroom.

5. Conclusions

The challenges that education systems are facing and will have to address in the post – Covid era are many; from new, blended ways of delivering lessons to providing more robust developmental support to children and youths that are picking up the pieces of their emotional and relational world and are still trying to make sense of what the pandemic caused to them, their families, and social environments.

What is clear is that educating such skills needs flexibility and the willingness to integrate the framework of social and emotional intelligence within the different subjects and school curricula.

Teachers should avoid seeing social and emotional intelligence as something “other,” something that does not have a right to citizenship within what is taught in schools at all educational levels.

There is also a need for new research and studies to provide sound evidence about the proposed model that sees the embedding and “injecting” of social and emotional activities within the daily teaching-learning actions.

The model should be seen as an effective and long-lasting way of supporting children and youths in developing a coherent emotional literacy, helping them understand and navigate the complexities of such uncertain times in the short term, and making them grow as well-rounded, welcoming, and socially intelligent adults in the foreseeable future.

References

- Asendorpf, J. B., Conner, M., De Fruyt, F., De Houwer, J., Denissen, J. J., Fiedler, K., & Wicherts, J. M. (2013). Recommendations for increasing replicability in psychology. *European Journal of Personality, 27*, 108–119.
- Badia, M., Escotorín, P., Morganti, A., & Roche, R. (2020). Educational intervention for an inclusive culture in primary school: The qualitative dimension of PRO-SEL programme. In J. Głodkowska (Ed.) *Inclusive Education - Unity in Diversity*. *Wydawnictwo Akademii Pedagogiki Specjalnej* (pp.187-199). Warszawa (PL).
- Cejudo, J., Losada, L., & Feltrero, R. (2020) Promoting social and emotional learning and subjective wellbeing: Impact of the “Aislados” intervention program in adolescents. *International Journal of Environmental Research and Public Health, 17*(609), 2–13.
- Collaborative for Social and Emotional Learning. (2013). *2013 CASEL guide: Effective social and emotional learning programs – Preschool and elementary school edition*. Chicago, IL: Author.

- Cottini, L., & Morganti, A. (2015). *Evidence-based education e Pedagogia speciale. Principi e modelli per l'inclusione*. Studi Superiori, Roma: Carocci.
- Coyne, M. D., Cook, B. G., & Therrien, W. J. (2016). Recommendations for Replication Research in Special Education: A Framework of Systematic, Conceptual Replications. *Remedial and Special Education, 5*, 1–10.
- Crandall Hart, S., DiPerna, J.C., Lei, P.W., & Cheng, W. (2020) Nothing lost, something gained? Impact of a universal social-emotional learning program on future state test performance. *Educational researcher, 49 (1)*, 5–19. [10.3102/0013189X19898721](https://doi.org/10.3102/0013189X19898721) (ver. 15.12.2021).
- D'Amico, A. (2018) *L'intelligenza emotiva e metaemotiva*, Bologna: Il Mulino
- Durlak, J. A., Weissberg, R. P., Dymnicki, A., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405–432.
- Earp, B. D., & Trafimow, D. (2015). Replication, falsification, and the crisis of confidence in social psychology. *Frontiers in Psychology, 6*, Article 621.
- Francis, G. (2012). The psychology of replication and replication in psychology. *Perspectives on Psychological Science, 7*, 585–594.
- Greenberg, M. T., Domitrovich, C. E., Graczyk, P. A., & Zins, J. E. (2005). *The study of implementation in school-based preventive interventions: Theory, research, and practice* (Vol. 3). Rockville, MD: Center for Mental Health Services, Substance Abuse, and Mental Health Services Administration.
- Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings? A critical analysis of research on inclusive education. *European Journal of Special Needs Education, 29(3)*, 265–280.
- Goleman, D. (1996). *Intelligenza emotiva*, Milano: bur.
- Ioannidis, J. P. A. (2012). Why science is not necessarily self-correcting. *Perspectives on Psychological Science, 7*, 645–654.
- Ijzerman, H., Brandt, M. J., & Van Wolferen, J. (2013). Rejoice! In replication. *European Journal of Personality, 127*, 128–129.
- Immordino – Yang, M.H., Damasio, A.R. (2007) We Feel, Therefore We Learn: The Relevance of Affective and Social Neuroscience to Education. *Mind Brain and Education, 1(1)*, 3.
- Immordino – Yang, M.H., Gottlieb, R. (2017) Embodied Brains, Social Minds, Cultural Meaning: Integrating Neuroscientific and Educational Research on Social-Affective Development. *American Educational Research Journal, 54(1)*, 344–367.
- Kusché, C. A., & Greenberg, M. T. (1994). *The PATHS curriculum*. Seattle, WA: Developmental Research and Programs.
- Jasny, B. R., Chin, G., Chong, L., & Vignieri, S. (2011). Again, and again, and again. *Science, 334*, 1225.
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence, *intelligence, 17(4)*, 433–442.

- Montanari, M. (2021) La scuola ai tempi del Coronavirus: esperienze, narrazioni, emozioni, riflessioni. *Journal of Health Care Education in Practice*, 99–104.
- Morganti, A. (Ed.). (2019). Un modello strategico europeo per l'inclusione a scuola. Evidenze che guidano e ispirano. Numero monografico. *L'Integrazione Scolastica e Sociale*, 17(2), 118–120.
- Morganti, A., & Bocci F. (Eds.). (2017). *Guida: Didattica Inclusiva per la Scuola Primaria. Educazione socio-emotiva e Apprendimento cooperativo per costruire competenze inclusive attraverso i "compiti di realtà*. Firenze: Giunti EDU.
- Morganti, A., Marsili, F., & Signorelli, A. (2019) Supportare l'educazione socio-emotiva attraverso un modello schoolwide: i risvolti sulla qualità dei processi inclusivi. *L'Integrazione Scolastica e Sociale*, 18(2), 139–147.
- Morganti, A., Pascoletti, S., & Signorelli, A., (2016). For an inclusive education: the innovative challenge of technologies for social-emotional learning. *Form@re, Open Journal per la Formazione in Rete*, 16(3), 52–66. <https://doi.org/10.13128/formare-19159> (ver. 15.12.2021).
- Morganti, A., & Signorelli, A. (2016). Insegnanti alle prese con programmi educativi evidence-based: l'esperienza italiana del Promoting Alternative Thinking Strategies (PATHS®). *Italian Journal of Special Education for Inclusion*, 4, 123–138.
- Morganti, A., & Roche, R. (2017). Prosocialità ed emozioni: un'alleanza per l'inclusione a scuola. *Psicologia e Scuola*, 50, 30–37.
- Oliviero, A. (2017). *Il cervello che impara. Neuropedagogia dall'infanzia alla vecchiaia*. Firenze: Giunti.
- Roche, R., Salfi, D., & Barbara, G. (1991). La prosocialità: una proposta curricolare. L'espressione delle proprie emozioni e l'apprendimento dai modelli prosociali. *Psicologia e scuola*, 55, 50–56.
- Schmidt, S. (2009). Shall we really do it again? The powerful concept of replication is neglected in the social sciences. *Review of General Psychology*, 13, 90–100.
- Schonfeld, D. J., Adams, R. E., Fredstrom, B. K., Weissberg, R. P., Gilman, R., Voyce, C., Tomlin, R., & Speese-Linehan, D. (2014). Cluster-Randomized Trial Demonstrating Impact on Academic Achievement of Elementary Social-Emotional Learning. *School Psychology Quarterly*. <http://dx.doi.org/10.1037/spq0000099> (ver. 15.12.2021).
- Simons, D. J. (2014). The value of direct replication. *Perspectives on Psychological Science*, 9, 76–80.
- Simonsohn, U. (2015). Small telescopes: Detectability and the evaluation of replication results. *Psychological Science*, 26, 559–569.
- Taylor, R., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development*, 88, 1156–1171.
- Tintori, A., Cerbara L., & Ciancimino, G. (2020) Geografia delle emozioni primarie e degli atteggiamenti durante il distanziamento sociale ai tempi del covid-19 in Italia. In *Plurilinguismo e migrazioni* (pp. 77-97). Roma: CNR Edizioni

- Vicari, S., & Di Vara, S. (Eds.). (2021). *Bambini, adolescenti e Covid-19. L'impatto della pandemia dal punto di vista emotivo, psicologico e scolastico*. Trento: Erickson.
- Unesco. (1994). *The Salamanca Declaration and framework for action*. Paris: Unesco.
- Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: what does the evidence say? *Health promotion international*, 26(suppl_1), i29–i69.
- World Economic Forum (2016) *New Vision for Education: Fostering Social and Emotional Learning through Technology*. Geneva: WEF.