Disalvo, Angelica

# Promoting ecosystemic resilience in school environments. The key-role of teachers

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*Angelica Disalvo*

# Promoting ecosystemic resilience in school environments: the key-role of teachers

**Abstract** ▪ Resilience, pedagogically understood as a complex process of actively adapting to an adverse event and transforming it into a learning opportunity, is a competence, specific to living systems as they are autopoietic, necessary to live in the systemic complexity of today's world. In the promotion of resilience, teachers play a fundamental role: their delicate formative role allows them to 'in-write' traces of resilience within the minds of their students and, at the same time, to promote their processes in the relational school environment. This contribution intends to focus on the role played by teachers in the process of promoting resilience within school environments, with specific reference to the Italian context, understood as a tool to contrast youth discomfort and anti-social phenomena.

**Keywords** ▪ Ecosystemic resilience; School system; Adolescent unease; Teachers training

## 1 A brief introduction

The complexity of today's world poses many challenges for schools. Among the many, that relating to adolescent distress within Italian school environments (Cosma et al., 2023a, 2023b; HBSC, 2022) is particularly urgent. Recent data on the well-being and mental health of young people highlight a distress that, if placed to their perception of relationships within school environments, shows the difficulty in implementing resilient behaviour. This issue needs special attention from education professionals, primarily teachers. The school, understood as a living system of relational order, potentially possesses the autopoietic capacity to transformatively adapt to the perturbations that affect it, hence being resilient. This contribution, then, intends to propose some useful reflections to answer the question: how can teachers promote resilience within school contexts as a means of preventing and combating adolescent discomfort?

## 2 Ecosystemic resilience: a competence of the living

Resilience is a complex process, which takes on different meanings depending on the discipline investigating it, the environment within which it is studied and the object/subject to which it is referred.

Referring to inanimate objects, it is generally defined as the capacity of an object to respond to an external perturbation, not disintegrating and keeping its form unchanged. Conceived in this sense, resilience is a capacity similar to resistance: an object is more resilient the more it can withstand the pressures caused by external perturbation (Laudadio, Mazzocchetti & Fiz Pérez, 2011).

Relating to living systems, resilience can be described as the capacity to cope with changes coming from the external environment, modifying and re-adapting itself plastically according to the perturbations that affect it. In this sense, it is comparable to autopoiesis: the living system continuously generates and re-generates its internal and external constitutive relationships to continue living. As such, it is a quality inherent to the functioning of living systems, human and non-human, which because they are living are autopoietic systems both biologically (Maturana & Varela, 2021) and socially (Luhmann, 1995).

Respecting the human being, with an ecosystem-relational approach (Kumpfer, 2002; Richardson, 2002), resilience can be defined as the complex ability of a subject to cope with adverse events. It results from the interaction between the subject characteristics, the subject's perception of the adverse event and the physical, cultural, social and relational environment in which he or she lives. There are certain factors, labelled protective or risk factors, that play a fundamental role in hindering or promoting resilient responses. These factors take on a specific function depending, on the one hand, on the representation the subject has of them and, on the other, on the function they play concerning his or her ability to be resilient.

In specifically educational terms, resilience can be described as a transformative learning process that takes place from an adverse experience. It is, therefore, the ability to embrace disruption as an unprecedented opportunity for learning and growth. In this sense, Scardicchio (2020) defines resilience as a "metamorphic process" that "does not coincide with the capacity to re-establish the order before disruption but with the paradox of the collateral beauty generated by it" (p. 39).

To be realised, the resilient process requires being open to change and, along with it, to the uncertainties it brings. Such transformation requires a profound awareness of the complexity (Morin, 2000; 2001; 2015) that characterises both human beings and their environments and times. Indeed, being historical inevitably implies exposure to perturbations, change, and the propensity to become (Freire, 2011). Such awareness can lead to understanding reality and acting within it by adopting genuinely transformative and resilient epistemic postures and operational strategies (Scardicchio, 2020).

## 3 Ecosystemic resilience about the school system

Ecosystemic resilience in pedagogical terms is, therefore, primarily an epistemological and intrinsically relational issue. How human systems and subjects attribute

meaning and, therefore, understand reality (Frankl, 2018; Freire, 2011), its functioning and its criticalities, determines the possibility of implementing operational strategies useful for grasping, in the nefariousness of the unexpected, new and unprecedented possibilities for development (Cyrulnik, 2009). Conversely, epistemologies that are incapable of grasping the opportunities concealed behind such features of reality lead human systems and subjects to adopt emergency strategies of signification and coping with critical issues (Fabbri, 2019). These are oriented exclusively towards responding to the state of alarm and stemming the negative scope of the difficulty and, in so doing, lead to the use of tools that are not always effective in handling the problem in a transformative and resilient manner.

The school system, as a living system of a relational order (i.e. formed by the relationships between all the actors acting within it) can be conceived as an autopoietic system, thus potentially resilient. The school is in fact a systemic entity at all levels: institutional, educational, and relational. Animating each of its levels are people, and enabling them are the relationships between them. Therefore, it possesses, potentially, the capacity to self-organise, actively readjusting to the perturbations it encounters (Ainscow, 2015).

The characteristics of the school system are of crucial importance in providing the necessary support to those it cares for: the students. However, it is here that its greatest criticalities emerge.

In principle, the autopoietic specificity of the school system should enable it to adapt in a transformative manner to the perturbations it undergoes, both from outside and from within. In this way, the school should be able to preserve the characteristics necessary to guarantee the performance of its specific tasks (educating the younger generations; providing the metacognitive tools necessary to live autonomously and responsibly; teaching how to be active citizens and think critically) while actively and transformatively adapting to the changes that affect it. This, however, sometimes proves unattainable. Several factors intervene in the process of adaptation to perturbations and undermine the solidity of intrasystem and intersystem relations, significantly compromising the autopoietic character of the relations of the whole system and between its parts.

## 4 The mental well-being of adolescents

This is particularly evident within adolescent school systems: adolescent boys and girls, in experiencing the catastrophic changes and emotional turmoil typical of their age, often do not find the necessary support within school environments to be able to do so in a way that is functional to cope with difficulties due to their developmental tasks.

On closer inspection, recent studies point to a deterioration in the state of well-being and mental health of adolescents. Specifically, the four-year international Health

Behaviour in School-aged Children survey conducted between 2021 and 2022 by the WHO with subjects aged between 11 and 15 years (Cosma et al., 2023a; 2023b) showed a worsening in their state of well-being and mental health compared to the previous survey (Inchley et al., 2020). The most negative data in many of the areas investigated were recorded for 15-year-old female adolescents in Italy.

Of the data collected, in addition to those relating to health-related behaviours (sedentariness, use of alcohol and smoking, nutrition, etc.), those relating to relationships within the school system are particularly significant. The survey, in fact, highlights that, as age increases, the positive perception of relationships within the school system decreases, both with teachers and with classmates (HBSC, 2022). Specifically, out of the total of 15-year-olds interviewed of both sexes, 61.8% stated that they felt accepted by teachers, 35.4% perceived teachers as interested and 36.3% felt very trusting of teachers. Concerning classmates, however, 66.6% of all 15-year-olds stated that they felt accepted for who they are and 58% perceived their classmates as kind and helpful.

Relationships within adolescent school contexts in Italy, therefore, do not seem to be in the best of health (HBSC, 2022). Yet, the relationships boys and girls have within the school system are of crucial importance for them to complete their developmental tasks.

Adolescence is an age characterised by numerous changes. On a physical, mental and relational level, during the developmental age, adolescents experience a series of radical transformations that lead them to live with a sense of constant uncertainty (Mancaniello, 2018; Siegel, 2014). In this period of life, significant others outside the family nucleus play a fundamental role: they constitute the relational anchors through which one can re-construct one's own identity, which, tested by the numerous changes, needs constant confrontation and negotiation with the other to be redefined (Lopez, 2018).

In the absence of solid relational ties, the uncertainty caused by developmental changes adds to the restlessness and instability characterising contemporary experience, in which the continuous epochal changes and the loss of traditional relational values leave one experiencing a constant and widespread sense of bewilderment. Thus, giving meaning to events is increasingly difficult, at all ages of life. And, in particular, during adolescence (Annacontini & Vaccarelli, 2022; Mancaniello, 2020).

A pedagogical reading of the above-mentioned data leads one to consider that, probably, the phenomena with which uneasiness manifests itself in adolescence result from fragile capacity to conceive criticality as events characterising the complex and systemic nature of reality and life itself. This, together with the perception of the lack of supportive relationships and solid points of reference, induces adolescents, in particular, to perceive as the only elaborable strategies those of withdrawal into oneself, closure towards others and the set of behaviours that

can be associated with a precarious state of mental health. Social withdrawal, aggressive behaviour, and self-harm, among others, can be considered as attempts to respond to the experienced criticality, i. e., unsuccessful attempts at resilience that, in reality, express the difficulties of finding alternative coping strategies to the dis-adaptive ones attributable to the distress (Chello, 2022).

## 5 The role of teachers

The evident manifestation of multiple forms of discomfort by students leads to the hypothesis that they need, first and foremost, metacognitive tools capable of supporting them and enabling them to cope with life's critical issues. These tools would enable them to be able to stem and manage the strong repercussions that difficult events can have on their well-being and mental health.

This raises the question of the role played by schools in shaping such epistemologies. In particular, the role played by teachers.

The relationship with teachers, who play the role of the main significant adults after parents and caregivers, is fundamental to them. The idea that teachers have of reality and its functioning, as well as of their educational role and the students themselves, has repercussions on their teaching styles and the way they relate to students (Freire, 2014; Recalcati, 2014). In this way, how teachers give meaning to events and their criticalities strongly affects how students construct their self-image, conceive their possibility to act, and learn to give meaning to reality and its criticalities. Boys and girls, through the attitudes they adopt and the discourses formulated by their teachers, learn to give meaning to reality (Bandura, 2016; Malaguti, 2005; Lopez, 2015). They draw from this to develop their operational strategies, make decisions, explain failures and deal with unforeseen events. Several studies (e. g. Hochanadel & Finamore, 2015) have highlighted the importance of teaching how to think using a growth mindset (Dweck, 2017) and to develop coping strategies that enable students to deal with the unfamiliar, the unexpected and related difficulties.

This makes it possible to highlight the role played by the latter in the formation of students' reality signification strategies. Indeed, if teachers possess resilient reality-signifying strategies, i. e. capable of grasping the criticality of new learning possibilities, they are likely to be able to promote their development in their students as well.

## 6 Teachers as resilience mentors

Thus, the question of teacher training arises. In fact, Italian teachers are often wearied by bureaucratic tasks that, in order to be fulfilled, lead to the debasement of their primarily and eminently educational role.

In the presence of the more or less explicit difficulties and manifestations of students' discomfort, teachers need, first and foremost, metacognitive tools useful

for understanding them, in order to promote active and transformative, hence resilient, strategies for signifying and coping with critical issues. Beyond didactic tasks, teachers are called upon to commit themselves to providing students with alternative reading hypotheses of reality to the negative ones that contemporary culture continues to propagate.

Despite the numerous criticalities experienced in all the spheres that characterise it, the school institution remains for the students the anchor to cling to hope – in the active and planning terms of pedagogically understood hope (Freire, 2014; Scardicchio, 2020) – in the regeneration of today's social fabric and in the care of the relationships that animate it. Although it too has suffered – and is still suffering – the repercussions of contemporary changes and, historically, has always struggled to keep up with them, it remains the main environment in which it is possible to intercept youthful malaise. Indeed, due to its specific characteristics, it is precisely within its spaces and through the relationships that animate them that the symptoms of youth discomfort manifest themselves.

To the eyes of attentive and emotionally competent teachers (Dato, 2017), the signals that boys and girls, in multiple and different ways – sometimes almost imperceptible – send as a more or less explicit request for help do not escape them. It is these who, daily, within the school environment, are in charge of intercepting, managing and countering the ills manifested by boys and girls and of training their minds to adopt the necessary tools to do so autonomously. This makes them, together with their parents, their primary *mentors of resilience* for students (Cyrulnik & Malaguti, 2005).

It is therefore necessary to support teaching practice with training interventions aimed at the exercise of resilient thinking/acting, starting from the emancipation of the educational value of their presence within the lives of students and their families.

In this way, the school system can constitute itself as an organism of regeneration of the entire social fabric within which it operates.

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## Author

Disalvo, Angelica, Dr.
ORCID 0000-0002-8190-4233
Università di Foggia, Italia
*Working focus:* Pedagogy of complexity, Ecosystemic resilience,
School system, Adolescence, Teacher training.
angelica.disalvo@unifg.it