## TRAINING OF SPECIALIZED TEACHER IN THE PANDEMIC: PERSPECTIVES AND CHANGES

## LA FORMAZIONE DEL DOCENTE SPECIALIZZATO NELLO SCENARIO PANDEMICO: PROSPETTIVE POSSIBILI E CAMBIAMENTI NECESSARI

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#### Abstract<sup>1</sup>

The pandemic has changed practices and organizational structures by imposing distances in educational practices at a global and school level. The traditional binomial composed by learning and teaching has been including the environment, as a third fundamental element (ICF, 2001): "environments, in fact, are learning mediators and can be considered active places intended as permanent systems of collective activity with their own shared and elaborated rules" (Marcarini, 2018). School, as an ideal multifaceted place of inclusion and learning, has to be renewed by combining the needs of safety with the resumption of teaching activities, starting from didactical strategies through digital technological innovation and teacher education and training (Rivoltella, 2021).

L'emergenza pandemica ha modificato prassi e assetti organizzativi del contesto globale e della scuola imponendo relazioni educative a distanza. Il tradizionale binomio apprendimento - insegnamento è diventato un trinomio che include l'ambiente come terzo fondamentale elemento (ICF, 2001); "gli ambienti, infatti, possono essere mediatori di apprendimento e possono essere considerati luoghi attivi intesi come sistemi permanenti di attività collettiva con le proprie regole condivise ed elaborate" (Marcarini, 2018). Coniugare le esigenze della sicurezza con la ripresa delle attività didattiche è possibile rinnovando in chiave evolutiva il concetto di scuola, luogo poliedrico dell'inclusione e dell'apprendimento. Il cambiamento del contesto educativo riparte dalla formazione dei docenti inclusivi e dall'elaborazione di strategie d'azione in connessione con l'innovazione tecnologica digitale (Rivoltella, 2021).

### Keywords:

Inclusion; Care relationship; Digital environment; Distance learning; Training teachers

Inclusione; Relazione di Cura; Ambiente Digitale; Apprendimento a Distanza; Formazione; Docenti

#### The media and education in ministerial documents

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"In a very short time we have experienced the transition from a relatively stable society to a society characterized by multiple changes and discontinuities. This new scenario is ambivalent: for each person, for each community, for each society, both the risks and the opportunities multiply" (National Indications for the Curriculum for kindergarten and for the first cycle of education of 2012, p. 7). This effective snapshot photographs the pervasiveness of technologies in information and communication and their impact on communication codes. Thanks to them, the boundaries between private, work and learning life are increasingly fleeting: in hybrid environments the sudden transition from real to virtual can cause difficulties in self-regulation (Persico, 2018).

This educational action, described in the National Digital School Plan (PNSD, 2015), finds, within the School Plan for Digital Education (PSDD, 2020), the implementation of a dynamic, personalized and inclusive training, aimed at the co-construction of citizenship, achieving the three priorities of Europe 2020, for "smart, sustainable, inclusive growth" (Europe 2020 strategy): technologies are unprecedented opportunities to improve quality, access and equity in education and training.

The PNSD and PSDD guidance identifies innovation strategies for Italian school in the digital age, paying attention to the epistemological and cultural dimension of the educational relationship, since "no educational step can be separated from an intensive teacher-learner interaction and technology cannot avoid this fundamental human relationship" (PNSD, p. 7). The teacher expertise, acquired through training in Media Education, can intentionally link hybrid spaces with learning times, new routines and activities, promoting a renewed idea of school based on human relationship, even in physical distance, and on a coherent educational

environment, through an appropriate pedagogical direction.

### Distance learning and relationships: an exploratory among trainees

The pandemic represented an ambivalent accident for the school world to be observed; evident repercussions on the level of effectiveness and equity of teaching (Rossi, 2021) are due to undeniable criticalities for the most fragile sections of the school population and unavoidable acceleration of the use of digital technologies in teaching practice, measuring different ways of managing time, collegiality, learning environments.

The difficulties as well as the opportunities involved in different ways both students and teachers, revealing the worsening of a social divide based on the different chance of accessing tools and networks, determined by the effective and efficient use of technological devices on a didactic and pedagogical level.

The considerations, proposed and oriented to epistemological elements, deal with the research aspect based on the narrative approach returned by the teachers who specialized in the context of the 5th cycle of the Active Training Internship for the 1<sup>st</sup> and 2<sup>nd</sup> Degree Secondary School of the University of Macerata. This training course was held entirely in distance learning, in an unprecedented and constantly updated way to face brand new challenges. In this context, it was natural to start a research path, interviewing the postgraduates (108 teachers) with a narrative interview, to represent perceptions, experiences and knowledge achieved within the theoretical lessons and indirect internship, also soliciting reflections among peers.

The interview is divided into two sections: the first, dedicated to the observation of the school environment contextual to the internship, the second, focused on the training course. The narrative fragments of the trainees outline, from a privileged point of view, the aspects of criticality and stress, but also of innovation and experimentation perceived within the school community (Salis, Rhodes, 2021; Pinnelli, Fiorucci, 2019).

### Care in the distance: escaping and finding

The paradigmatic axis of education is taking care as of being together to promote the fulfilment of the other person (Mortari, 2008).

The educational relationship promotes self-care and reciprocity that seeks new spaces and ways of meeting, discovering the potential of sharing, as can be seen from the testimonies that follow.

Narrative fragment n. 15, 1<sup>st</sup> Degree Secondary School

"For the first time I had the opportunity to really collaborate with my curricular colleagues who have recognized my role and my skills, starting from the digital ones for which I have become a reference. But above all in the common work the different weaknesses and the importance of working together on the class emerged".

In particular, the trainees of the Secondary School have found the limits of the system in approaching new operating methods in the distance and have identified greater criticalities in the involvement and participation of students.

Narrative fragment n. 5, 2<sup>nd</sup> Degree Secondary School

"I have a 14-year-old daughter. She is spending whole days studying in front of a screen. It seems inhumane to me. Students have a high stress load related to the current pandemic situation and distance learning. The SEN students, even more so, found resistance and felt disorientation in the absence of reference figures and subsidies".

The requests for adaptation particularly interested adolescents, already burdened with delicate developmental tasks, and their families who, from the very beginning, had to rethink domestic spaces, the ways of living together and technological equipment to allow distance learning (DL) and support the new emerged needs.

These needs caused fatigue, from an educational point of view, especially in families in economic, social and cultural poverty, where resources and skills have been lacking (Girotti, 2020): the digital divide, relating to the possibility of access network and devices, therefore added social difference (Giannandrea, 2020). The absence of tools and references, together with the restrictions for the pandemic, have affected the interest and motivation of the most vulnerable students.

Narrative fragment n. 17, 2<sup>nd</sup> Degree Secondary School

"Many teacher staff complain about demotivation of the students, teachers continually remind them to turn on the video camera and keep attention to the lesson. Students themselves admit that they have a hard time following the lessons in DL."

The tension and instability has conditioned the cognitive and behavioural effort in facing requests evaluated as exceeding the resources (Isidori & Vaccarelli, 2013).

Narrative fragment n.3, 1<sup>st</sup> Degree Secondary School

"Multiple frailties emerged in long-distance relationship: poverty of context and loneliness. Above all, the need for authentic contact, often lacking even in face-to-face teaching, became explicit. I understood that the educational relationship must be nurtured by welcoming the needs of the person, both in presence and in distance learning."

Spaces for educational care were sought even outside the institutional channels, to offer support to the children in coping with the complexity and to give them the chance to show up and express themselves.

Narrative fragment n.100, 2<sup>nd</sup> Degree Secondary School

"Several students have really known teachers through the DL, wondering if, after the pandemic, will still be possible a relationship based not only on the subjects of study. I interpreted it as a request for help and guidance."

The need to monitor behaviours urgently emerged in DL: not just disruptive behaviours, but also renunciation and withdrawal behaviour as signals of abandonment and demotivation in growth and self-realisation. A coping proposal resides in emotional literacy and expressive opportunities, such as graphic production, narrative, role play, reading, performances (Scataglini, 2009).

The interaction with families was, in part, conveyed through an electronic register for an exchange centred on learning processes, sometimes focused mainly on critical elements.

In a phase in which contact is precluded and the feeling of uncertainty and insecurity is heavy, teachers and educators need tools for care, especially towards the most fragile population.

The relational space of treatment "consists of acts and words" (Mortari, 2006) which have sought new channels to bridge the gap.

Many teachers among the specialised, have been following the Ministry guidance to offer a sense of tranquillity and safety, not upsetting the rhythms of everyday life and promoting creative and innovative answers (Fiorillo, 2020).

The influence of the teacher's attitude on the relational climate of the class, as a complex system, leads to a re-evaluation of the professional role and skills, and to adopt plural strategies based on authentic relationships, oriented to the emotional dimension of experiences (Salis, 2015), and to the need to plan life project considering the person as a whole, in his need for communication, within his social network (Pagliara, 2016).

In a life project that meets the domains of quality of life, the path for change and the professionalization of taking charge includes training aimed at reflecting on the role of attitudes in educational and planning practices (Giaconi, 2015).

As a guarantor of respect for the right to education, the teacher acts as a mediator and container of experiences within the emergency phase, a content negotiator through the new tools and a professional in helping families (Stramaglia, 2020).

At the same time, the reflective teacher wonders about his students and their processes of learning, maturation and growth, in taking overall responsibility for their development.

### **Distance teaching: limits and opportunities**

The perceptions collected ascribe the lack in students' motivation and relationship to a mainly frontal and transmissive teaching approach, dysfunctional especially for the weakest students as the ones with special educational needs.

## Narrative fragment 12, 2<sup>nd</sup> Degree Secondary School

"Teachers must continually readjust teaching, because DL and in-presence learning are two very different situations needing different answers."

Despite the indications contained in the guidelines and the virtuous experiences, even if shared, a redesign of teaching to improve learning outcomes and face new learning challenges is yet to come (Giannandrea, 2020).

## Narrative fragment 17, 2<sup>nd</sup> Degree Secondary School

"The technological issues made some teachers unmotivated even before starting the lesson. The use of old teaching methods and the lack of attention to the cooperative aspect have made it very difficult for teachers to effectively manage the lessons and involve the class group with the DL, many times implying the exclusion of students with disabilities. On the other hand, the

most effective experiences of student involvement and inclusion have been found in cooperative and collaborative teacher staff."

The introduction of new technologies represents an opportunity for conceptual revision to promote engaging and inclusive teaching that takes into account the potential of tools together with the educational needs of students (Pagliara, 2015).

The co-construction of learning fully involves the values of collaboration, solidarity and equity at the basis of the inclusive paradigm (Pace, 2021).

Narrative fragment 7, 1<sup>st</sup> Degree Secondary School

"In this particular year teachers have done everything possible to make the children regain enthusiasm and motivation, through structured activities and jobs, in DL and in-presence learning. Many teachers have tried to keep a direct line with students through the use of the telephone: the group chats kept the daily communications, and held the class together."

Teachers bring new skills and opportunities into play. With DL emerged valid alternatives of methodological approach and learning organisation: recording the lessons, for example, offered the chance to rehear them personalizing working times. The possibility of using diagrams, maps and summaries provided an orientation guide for approaching contents (Fiorillo, 2020).

Facilitating methodologies represent tools for autonomy and effective ways of coping with stress as long as they are structured and coordinated, intentional and self-regulated with clear and adequate learning objectives (Isidori & Vaccarelli, 2013).

In the awareness that the future lies in hybrid learning environments, there is the urge of training on the opportunities of digital teaching, with spaces for exchange between teachers, to form learning and reflection communities in an inclusive perspective (Pace, 2021).

## Technology and education: paradigms and perspectives in training

In the changed conditions of learning, the so-called "bottom-up activists" teachers, managers, schools, universities have identified solutions among the technical opportunities available, looked for new devices, in learning by doing, helping to transform the dominant model of education (Landri, Grimaldi, Taglietti, 2020).

In this perspective, the emergency experience of DL has put digital community

at the centre, re-activating a cultural action, as hoped for by PNSD, with "a renewed idea of school, understood as an open space for learning and not only a physical place, and as a platform that enables students to develop life skills" (PNSD, p. 8).

In the perspective of recovery, through the implementation of digital teaching complementary to in-presence teaching, training teachers must change through an action of contamination and connection.

Contamination as a promotion of a positive intermingling of principles and values, action strategies and practices aimed at changing educational context.

The teacher role has to be deconstructed, analysed and rethought in a new inclusive perspective, which broadens the perspectives in sharing strategies, reducing distinctions (curricular/support) and widening connections, towards a new concept of inclusive teacher, which responds to the educational task of teaching everyone by recognizing and valuing the differences and respecting the uniqueness of each one.

As Morin states, it is essential to train minds so that they have a general aptitude for posing and dealing with problems according to organizing principles capable of connecting knowledge and giving them meaning (Morin, 2000).

In training specialized teachers it is appropriate to recompose the fragmentation of knowledge by identifying new syntheses, between humanistic and technological culture, overcoming the

dualisms of typicality-difference, virtuality-reality in the perspective of a school that is increasingly mindful of complexity, in both poly and inter-disciplinary dimension, within which Coding and Computational Thinking represent interesting opportunities for inclusive teaching (Giaconi & Del Bianco, 2018).

Coding, in computer science, indicates the analysis of a problem, its decomposition, the identification of solution procedures, the representation in algorithms, and the procedures for verifying the results. This methodology, referring to teacher training, aims at asking and identifying, simplifying and solving problems in an appropriate and economical way, creating systematic procedures that contrast with the logic of linear randomness typical of analogical mental processes.

Computational Thinking represents a competence that crosses all disciplines, contributing to digital skills of Media Education, "the field of communication and education sciences that develops reflection and intervention on the media conceived as an integral resource for education" (Rivoltella, 2001, p. 247).

Media Education is an integral resource, intended as education to and with the media, but also for and through the media (Rivoltella, 2001, p. 248).

Media Education identifies training courses on the functioning of information and communication technologies (hereinafter ICT), on the limits and risks that their use entails.

The expression "digital native" (Prensky, 2001) identifies people who grew up with digital technologies, manipulating and interacting as a natural element.

The pervasiveness of technologies affects the world of digital and non-digital natives: devices have simultaneously brought improvements and new risks in our lives. For this reason, school needs to activate significant synergies with families and other institutions, to increase the sense of cooperation, acceptance, diversity, legality and solidarity.

The training of specialized teachers must be adapted in an inclusive perspective, reviewed in the light of educational opportunities offered by technologies, to educate students in an informed and correct use of tools.

In this sense, the expression "education with the media" outlines a paradigm shift in the teacher's training following two fundamental axioms: critical spirit and responsibility.

The two mentioned concepts respond to the actions underlying the "onlife", the use and the production (Floridi, 2017), in which "new alphabets" are functional to the new technological languages which must be read, be produced, or rather used to produce messages (Rivoltella, 2020).

Digital skills are among the key competences for the development of human and social capital for lifelong learning, the personal fulfilment and growth of individuals, active citizenship and the inclusion of the most vulnerable people.

User-friendly interfaces and devices prove useful in training and learning paths for people with difficulties, providing compensatory systems as well as assistive and socialization opportunities. "Education for and through the media", therefore, indicates ICT as a means to enhance inclusive teaching action, through the competent mediation of the teacher (Borrino et al., 2009, Holone et al., 2012).

Technologies improve inclusive education practices with emotionally engaging methods: teachers address digital media experimenting different virtual environments and contact tools, discovering new forms of self-expression, improving one's sociability, breaking down barriers with the "normalization" of daily life (D'Ambrosi, 2018).

In a digital society, teacher training adopts and promotes a post constructivist lesson model: the teacher thus becomes a didactic designer, mastering technologies as natural tools for increasing the effectiveness of learning and organizing "educational spaces", both physical and virtual, actively orienting the student towards his educational success.

An effective training for the specialized teacher could have:

- proximity (initial digital literacy accomplishing the role of the digital animator and the team innovation);

- sharing (learning / teaching digitally, exchange of experiences during the daily teaching activity);

- open, accessible, accomplishing the participants' educational needs (networks and hubs at national and international level for collecting best practices);

- exploration: experiences of job shadowing abroad for digital teams, training for European planning, for collaborative online projects (e.g. eTwinning, Erasmus program);

- workshop (learning by doing, on-the-job training, mentoring).

The different training strategies contribute to a functional and inclusive use of technologies, to build a renewed, integrated and inclusive didactic practice, which guides towards the choice of paths and tools in a personalization based on the student's personal needs (Giaconi, 2018).

Didactic mediation underlies the transposition of knowledge as well as the relationship between teaching and learning, between teacher and student (Damiano, 2013).

"Mediatization is a higher level of the same process, conception and planning, compared to use and monitoring" (Damiano, 2013, p. 161) and "the teacher's function itself becomes a component of the device: itself a device" (Damiano, 2013, p. 283).

The inclusive teacher supports the design and evaluation processes with modelling in every phase of the work, with coaching while the students work and with the scaffolding of post-action reflection.

The educational relationship in the virtual environment guides the student in implementing learning processes within devices.

Technological tools, besides offering the possibility of success in the cognitive field, become an interesting frontier of experimentation in the socio-relational sector; their flexibility offers specific usability in cooperative teaching, feeding inclusive procedures (Del Bianco, 2018).

These reflections also refer to teachers training experience in remote modalities.

Distance learning experiences can enlarged and replace cognitive processes: multisensory, multidimensional and multilevel strategies, can include the use of mediators and facilitators (Damiano, 2013), cooperation and the narrative approach, tools for relationship despite the lack of proximity.

Alternative training strategies, engaging and captivating, accomplish the inclusive dimension of the school, a framework within which all conditions can be valued, respected and provided (Dovigo, 2007).

The union of personalities and skills strengthens motivation and creativity, allowing teachers to activate a community of shared practices in a continuous reflection on their actions, allowing "human capital", the cultural background related to specific training and to its mastery, to become "social capital" in the relationship, multiplying knowledge and skills.

The relationship, reinvented in digital forms, remains the winning strategy to create synergy between emotion and memory, reflection and motivation, innovation.

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