

RE-SEMANTICIZATION AND CONCEPTUAL DECONTAMINATION IN AN *ONLIFE*
PEDAGOGICAL SPACE: REPORT OF A RESEARCH CONDUCTED IN THE SPECIALIZATION
COURSE FOR DIDACTIC SUPPORT FOR PUPILS WITH DISABILITIES

RI-SEMANTIZZAZIONE E DECONTAMINAZIONE CONCETTUALE IN UNO SPAZIO
PEDAGOGICO *ONLIFE*: RESOCONTO DI UNA RICERCA CONDOTTA NEL CORSO DI
SPECIALIZZAZIONE PER IL SOSTEGNO DIDATTICO AGLI ALUNNI CON DISABILITÀ

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ABSTRACT

Thanks to the use of new media, more and more *technologies of the self*, an *onlife* perspective of social communication and teaching is foreshadowed, requiring a re-reading of the methods of conceiving, designing and creating integrated learning environments. The contribution analyses the results of a questionnaire administered to the participants in the spec. course for the didactic support regarding the moods evoked by terms from the language of school and everyday life through a hybridisation between the *internal* and *external* world.

Grazie all'utilizzo dei new media, sempre di più *tecnologie del sé*, si prefigura una prospettiva *onlife* della comunicazione sociale e della didattica che richiede una rilettura delle modalità di ideare, progettare e realizzare ambienti di apprendimento integrati. Il contributo analizza gli esiti di un questionario somministrato ai partecipanti al corso di spec. per il sostegno didattico circa gli stati d'animo evocati da termini propri del linguaggio della vita scolastica e della quotidianità, attraverso un lavoro di ibridazione tra mondo *interno* ed *esterno*.

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Introduction

The contribution intends to analyse the pedagogical perspective, the implementation methods and the outcomes of a questionnaire administered to 392 participants in the specialisation course for teaching support to pupils with disabilities at the European University of Rome in the academic year 2021-2022, aimed at teachers and trainee teachers of all levels.

The questionnaire was used as a training and research tool, within the increasingly close and topical link between the two fields.

Before going on to analyse the implementation methods and outcomes, it is necessary to focus on the characteristics of the questionnaire capable of creating a learning environment within the pedagogical perspective defined as New Media Education.

1. An *onlife* pedagogical space

As pointed out in Floridi (2014), information and communication technologies are changing the very nature and meaning of reality, transforming it into an *infosphere*. Depending on the point of view (millennial or digital native), this term can refer either to the entire informational environment made up of the informational entities themselves with their properties, interactions processes, functions and mutual relations, or to *reality itself*, where one interprets it in informational terms.

In the new media landscape – i.e. computer and web-based, interactive, portable, authoritative and digital – reality thus becomes information, and information becomes capable of generating reality. In this perspective, the vocabulary with which we ideate and package information is the very substance through which we give meaning to and understand the reality around us: the practices and processes of semanticisation or re-semanticisation thus become actions capable of *creating* other realities, circumscribing and naming new portions of meaning where previously only a conceptual indistinctness existed.

In the questionnaire – which we are going to illustrate – the graphic accounts of the students' states of mind evoked by terms frequently used in the language of school life and everyday life, triggered the opening up of spaces of possible meaning on aspects of the learning processes – and of the relative environments – of which one is often unaware; and, consequently, enabled a re-mapping of such spaces through the redefinition of the concepts/terms capable of inhabiting them. In this sense,

the immediate and intersubjective semantic tampering can become both the outcome and the pedagogical engine of a pathway of intentional development of awareness regarding the use of language as an "organiser of the affective aspects" of the way of relating to one's own experience and learning (Fregola, 2016a).

But, as reiterated above, all this would not produce educational outcomes if it were not implemented in the infosphere, increasingly perceived as a dimension of the real and the true in the new *onlife* modality, at once *on* and *offline* (Floridi, 2014). In this macro dimension, the questionnaire and the consequent didactic process of tampering with words, circumscribe a *pedagogical space* (Giesecke, 1997) as a space of *onlife* interaction, at the same time at a distance and in presence, group and individual: the localisation of the *group self* is located in the images coming from the virtual space of the *online*, in a manner reminiscent of social media and the typical modes of distance learning; and, at the same time, it generates first *individual* and then collective *offline* repercussions on the individual trainees physically present in the classroom, according to relational dynamics that can be traced back to the phenomena of training in presence, without disregarding the reinterpretation of emerging phenomena relating to relational dynamics that in our research refer to the group *imago* (Berne, 1963) and collective intelligence (Lévy, 1994). A pedagogical space thus defined functions both as *Virtual Learning Environments*, due to its ability to combine subjective declination and the possibility of mediation with one's learning community (Dillenbourg et al., 2002; Pan et al, 2006; Ciasullo, 2020), and also as a *third space* (Potter & McDougall, 2017), understood as a symbolic place located in formal contexts, in which learning and the construction of meaning take place in non-linear ways, marked by peer interaction, cross and transmediality (Cheung, 2010; Rivoltella, 2020). In this way, it aspires to develop a *digital education ecosystem* (European Commission, 2020) and to account for the *complexification* of reality typical of the infosphere, in which "real, imaginary, 'fictional' worlds, and proxemic and emotional distances [merge] together with 'real reality' giving rise to a single and multiple reality" (Parola, 2016, p. 171).

Similarly to what happens in social media, the medial stimulus that triggered the process is self-generated by the trainees themselves, when, by typing their answers on the screen of their mobile device, they establish an *online* digital relationship with the classroom macro-screen, capable of returning the images of their group dimension. Unlike them, however, the group represented virtually *online* had its physical counterpart in the group present *offline* in the classroom, generating a

formative spiral through unmediated dialogic interaction and consequent semantic tampering.

Multiscreen interaction (Pinto, 2005), possible thanks to the new digital media, makes it possible to move from the individual perceptive dimension to relational learning dynamics: individuals, externalising their mental processes on the screen and thus making them group-like, go from being passive spectators to active manipulators and collective builders of cultural contents, which they themselves end up enjoying (Rivoltella, 2006). Such a pedagogical space is thus constituted through the interaction of the different planes of the real and the virtual, the *online* and the *offline*, the individual and the group, intersected through the various screens present, according to a relational scheme such as the one depicted (fig. 1).

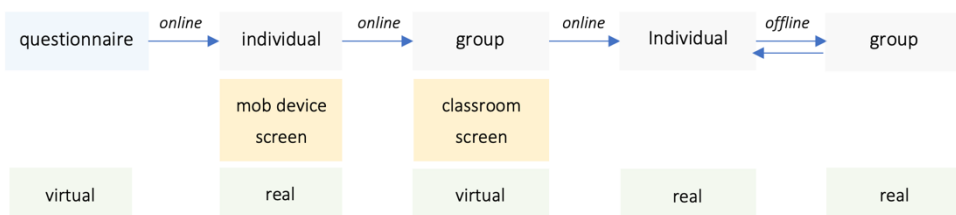


Figure 1 (multiscreen interaction in a possible *onlife* pedagogical space).

Another aspect referable to the formative dimension of the questionnaire in relation to the *onlife* modes of New Media Education is the involvement of the dimension of *reflexivity* in relation to the other.

In a pedagogical perspective, "the human *formation* of man is the care that each man takes with himself to give himself form and to interpret the relationship that expresses the sense and meaning of giving-himself-*form* with the other from himself, starting from the other-from-self, to reach the other-from-self" (Boffo, 2006, p. 9). Self-reflection – the giving-himself-*form* – and the relationship with the other are thus the cornerstones of a formative action, which can find in the multimedia learning environment an ideal place of cognitive immersion, where meta-regulatory processes provide multi-perspective representations of reality (Marzano et al., 2015). Having benefited, in the eternal present typical of the new media, from the *individual* point of view at the same time as the *group* point of view has allowed the *information* datum present on the classroom screen to become a *formative* instance precisely because it is aimed at re-forming and re-defining the terms and concepts correlated to the emotional aspects of learning, acting on the semantic dimension of language, a tool that is both individual (thinking) and relational (communicating).

This is why the pedagogical perspective of New Media Education is often related to citizenship issues: because of its potential in redefining the participation of the subject with respect to himself and in relation to the other (Rivoltella, 2008) and in soliciting the regulatory dimension necessarily implied in such a process (Buckingham, 2019); because of its capacity, moreover, "to bring forward those educational strategies capable of nurturing both critical thinking and the principle of responsibility, that is, those principles that can embrace an expansion of the person's *reflexive* processes" (Perfetti & Ponziano, 2017, p. 77).

2. *Onlife* Learning Environments and Quality of Education

From the previous paragraph, it is possible to infer that the pedagogical perspective of New Media Education has already opened up renewed and new *perspectives* with respect to the repertoires of relational and professional competences and the organisational sensitivity to be referred to educational roles. Moreover, continuous innovations, not only technological, have directly and indirectly involved the formal and informal places of education and the contexts in which *onlife* everyday life takes place (Floridi, 2020). As long as innovations have occurred in a basically predictable manner, the time required to implement changes has remained in keeping with the time required to learn new knowledge, skills and the development of integrated competences capable of accommodating and assimilating innovations in everyday working and social life (Rullani, 2004). The division of activities into predefined phases, structured tasks to be performed with durable tools, techniques and technologies and the absence of disruptions, except in extraordinary circumstances, facilitated the stabilisation of professional skills.

With the development of the Knowledge Society, innovations have been taking place in many areas and sectors, and as the speed of transformations accelerates, gradually reducing the predictability of time, the systems of knowledge, competences and skills that are widespread and established in the tradition come into crisis (Nonaka & Takeuchi, 1995; Morin, 2014). Schmid (2008) already describes how people have been forced to revisit the value of their own experience, the appropriateness of professional actions and, to some extent, the cultural beliefs prevalent in the world of the professions, including the educational and helping professions. With his research, he proposes a renewed view of the role construct that can no longer be described by means of organisational scripts to be acted out in the scenes of everyday life, which is, increasingly less, ascribable to predefined patterns of action, given the frequent changeability of reference contexts.

Continuous innovation, therefore, determines the emergence of new configurations and ways of performing activities to be referred to social and work roles, in a context that changes in a way that is not always predictable. In this regard, the scholar introduces, with his research in the field (Schmid, 1992), the distinction between *carrying out a role* and *inhabiting a role*; our research refers to his *role* construct because it makes explicit and describes how in environments referable to linear systems the focus is on *doing* and *knowing how to do* as structured and defined on the basis of certainties that allow one to develop mastery and mastery in the management of situations (Katz & Kahn, 1988). In environments ascribable to complex systems (Emery, 1974, Morin, 2001; Von Bertalanffy, 1971), *inhabiting a role* may require a personal and professional self-expression guided not only by one's own abilities and skills, but also by a feeling of adequacy to be in the situations that arise in the organisational context and in the uncertainty that characterises the environmental conditions.

Inhabiting a role implies inhabiting three worlds, interpersonal, organisational and professional, and learning to manage their interdependencies. This may entail stresses and burdens that are out of proportion to the time available and the time needed to learn and integrate established and emerging repertoires of skills in the *onlife*. The evidence of Floridi's (2020) contributions have directed the methodological perspectives of our research towards an epistemological re-examination of the meanings of the three worlds in close contact with the person inhabiting the role and the environments in which educational action takes place: the macro-social, the macro-organisational of the school, the micro-social of the classroom (fig. 2).

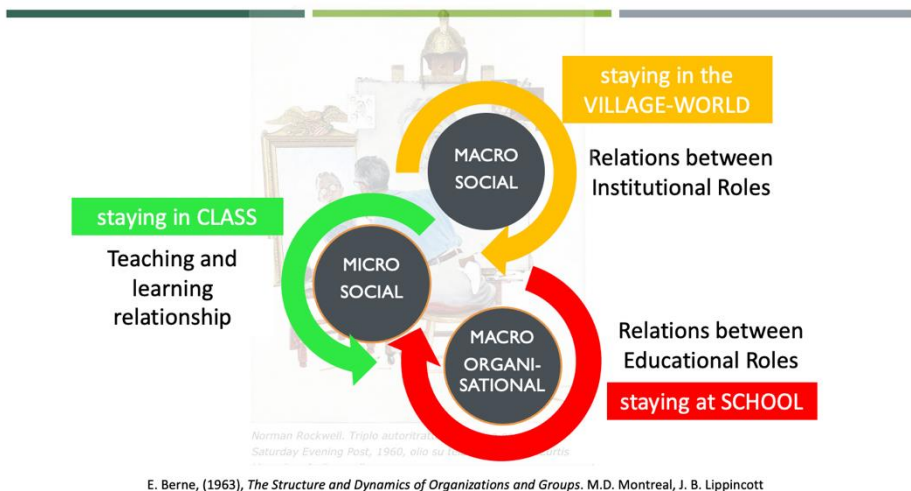


Figure 2 (Technological innovation has networked places that require modes of communication and collaboration between roles that only partially remain, keeping the prerogatives of the analogue and digital worlds distinct).

The theme of hybridisation between analogue and digital, explored in the first paragraph, which brought us to the current stage of elaborating an *onlife pedagogical space*, has been revisited as an evolutionary orientation rather than an end (Csikszentmihályi, 2021). In this regard, the global experience of the pandemic has revealed significant comparisons between what represents *constraints* and what represents *possibilities*, both *offline* and *online*, in the sense that Ceruti (2009) proposes. Inhabiting the roles by improvising the involuntary experimentation of immersion in the *onlife* allowed, in that period, to make visible places, spaces, tools and devices that were already widespread but little frequented (Buonafede, 2020), and to make explicit the attention to the theme of care (Boffo, 2006; Mortari, 2015), of the responsibility of protection and *emotional safety* (Cantoni Mamiani, 2021).

2.1 *Forma mentis* and *mindset*

To capture the reactions and share the meanings attributed to the term *onlife*, considering it more than an immature neologism – as it was defined in a group work carried out by the students of the course – two terms were chosen: *forma mentis* and *mindset*. The first was associated with a conception that guides the gaze according to forms closer to the analogue world. The second, unfamiliar to most, stimulated spontaneous exploration in Google to discover that *mindset* is a term

developed by Dweck (2017), precisely to emphasise the aspects of flexibility and pliability that are necessary for the *forma mentis* to adequately inhabit, conceive, design and realise both the configurations of learning environments that arise in situations of predictability and those that arise in situations of uncertainty. It has been agreed to adhere to a negotiation of meanings on the use of these two terms, arriving at considering *mindset* as a state of the *forma mentis* that best represents the way of describing, interpreting, acting and reacting in *onlife* didactic communication.

In previous research (Fregola, 2016b), aimed at devising, designing, implementing and co-inhabiting real and virtual everyday learning environments, Transactional Analysis of the educational field (Berne, 1971; Newton & Barrow, 2015; Montuschi, 1993) has been posited as one of the reference theories. Indeed, it allows thoughts, behaviours and feelings, which are organised into observable patterns of action, to be traced back to internal phenomena that can facilitate or hinder learning. Applied to didactics, Transactional Analysis can broaden the options of pedagogical actions functional to the development of the person and his or her competences, influencing affective, metacognitive, cognitive and relational variables that can be traced back to the quality of education (Drego, 1983; Montuschi, 1993; Trincherio, 2022).

Our research hypothesis is based on the continuous interaction between tradition, experience and innovation that encourages the revisiting of identity construction – explored in more detail in section 4 – and the sense of belonging to communities and digital citizenship (Morin, 2014). The questionnaire we administered in the *onlife* version refers to the following questions:

1. by inhabiting educational roles, where one's gaze is set on continuous innovation, can one recognise emotional, affective and socio-relational processes that, combined with cognitive and meta-cognitive ones, stimulate and give structure to the development of knowledge, understanding and awareness that complexity is a state of the world system and not just a set of its widespread chaotic dysfunctions?
2. is it possible to change the sign of states of mind that are triggered by certain terms that initiate processes of devaluation of oneself, of the role one inhabits, of the school context one works in?

3. Experimentation

The main aims pursued with the experimentation are as follows:

- to develop a process of reflection on the relationship with one's own learning by stimulating the recognition of the meanings attributed to the terms *linearity*, *complexity*, *uncertainty* and the recognition of the unconscious correspondence of the repertoires of moods evoked by the three terms
- to stimulate comparison between the *subjective recognition* of the meanings widespread in the everyday use of the three terms and meanings they have in the reference disciplines
- to develop *awareness* of learning processes and connections between one's own knowledge and the moods that are aroused when the three words are read, pronounced or heard;
- initiate a process of understanding and re-semanticisation to support the revision of the *mindset* appropriate to inhabit educational roles in the *onlife* pedagogical space.

3.1 The questionnaire: tampering words and moods

The students filled in a questionnaire prepared on Microsoft Forms, opened for access with a QR-code and projected by means of a slide in the lecture hall during one of the plenary lessons of the Special Pedagogy course for the integrated management of the class group in the support course curriculum. Each meeting ended with the assignment of a title to the lesson by the students and the recognition of the level of agreement on the final outcome.

The most relevant function of the questionnaire is to focus attention on the terms *linearity*, *complexity* and *uncertainty*. They were chosen because the distance of the meanings attributed to them seem to lead to widespread misconceptions, which may limit a reworking of the *mindset* to support the management of teaching-learning processes in *onlife* everyday life.

The questionnaire is structured in two sections for each of the three words: the first asks you to recall three moods and write them down in the order in which they occurred; the second proposes a list of moods to choose from, focusing on the stimulus provided by reading them and not on their possible relationship with the three words.

The group experience, which took place with the request to express moods related to the three terms *linearity*, *complexity* and *uncertainty*, made manifest a significant phenomenon that characterises learning. In particular, the processing of the answers to the questionnaire made it possible to describe the differences between the moods that the three terms trigger. The check list of moods guided and stimulated reflections which, predominantly, were organised around the meaning intended and diffused in everyday life by the three terms. The group experience, which took place with the request to express moods related to the three terms *linearity*, *complexity* and *uncertainty*, made manifest a significant phenomenon that characterises learning. In particular, the processing of the answers to the questionnaire made it possible to describe the differences between the moods that the three terms trigger. The check list of moods guided and stimulated reflections which, predominantly, were organised around the meaning intended and diffused in everyday life by the three terms.

When the completion of the questionnaire came to an end, the focus shifted to a discussion that drew attention to the problem-solving skills assimilated and the awareness that, at times, the critical sense is activated by drawing on interpretative schemes learnt in the analogical world.

The meaning of the term *uncertainty* was subsequently shared, emphasising, in particular, a probable connection with the unpredictability of certain situations and their evolution, which increasingly characterise the *onlife* world. Situations that highlight a partial or total lack of data, information, knowledge, skills and resources necessary to competently and sustainably manage the various learning environments. Returning to the questionnaire's prompt, it was possible to stimulate self-reflection on how the questions triggered the initiation of thoughts and states of mind attributable to the didactic actions being mastered and to continuous creative self-regulation through trial and error.

The widespread meaning of the term *uncertainty* was explored and distinguished from the meanings of the term *insecurity*, which activates an evocative function of moods referable to mainly emotional, affective and relational internal processes linked to the sense of adequacy or inadequacy perceived in managing one's role in unfamiliar or emerging situations. The completion of the questionnaire and the *onlife* didactic phases that preceded and followed it made it possible to experiment how cognitive and emotional functions can support innovative learning that reorient the relationship one has with one's own learning thanks to empowerment processes aimed at reinforcing one's sense of identity and self-efficacy (Fregola, 2020). The methodological perspective can be traced back to exploration,

observation and experimentation aimed at the study and search for connections between knowledge, understanding and awareness, which, in the perspective of Berne's theory of Transactional Analysis, can be traced back to the construct of the ego-state: "it can be described phenomenologically as a compact system of feelings referring to a given subject, operationally by a set of compact patterns of behaviour, and pragmatically as a system of feelings motivating the corresponding pattern of behaviour" (Berne, 1971, p. 9).

The possible glimpse through a *mindset to be reworked* in the perspective of an *onlife* world, has led to an awareness and understanding that not having certain knowledge can be considered as a transitory state that does not prejudice the revisiting of pedagogical and didactic competences but can guide a re-evaluation and possible integration by reworking the differences between linear and complex systems (Tab. 1).

Table 1 (comparison of the characteristics of linear systems and complex systems).

Linearity	Complexity
Sequentiality, regularity and recognisable allocation of responsibilities	High, often variable number of elements Non-linear and discontinuous interactions between elements
Recognition of boundaries and responsibilities between roles	Delayed effects of actions and the various effects often have different speeds
Activities and procedures to be performed necessarily in sequence with specific, known rules and through expert and often recurring behaviour	They have a network or lattice structure, often not very explicit
Solution orientation of problem situations	• Volatility • Uncertainty • Chaos • Ambiguity 
Predefined and identifiable references and high predictability	
Expectations often congruent in relations between Roles	
BINARY LOGIC	FUZZY LOGIC

3.2 The results

The graphs are presented with their essential comments (fig. 3, 4, 5).



Figure 3 (the comparison of the relative moods evoked by the terms *linearity* and *complexity*, indicated as conscious by the technique of word tampering as they can be detected by the request for self-reflection).

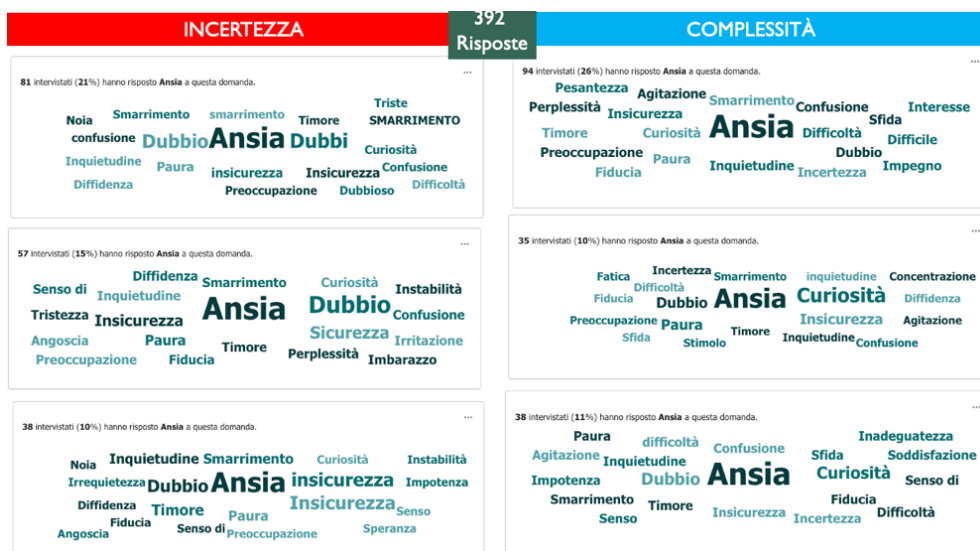


Figure 4 (the comparison of the relative states of mind evoked by the terms *uncertainty* and *complexity*, indicated as conscious by the technique of word tampering as they can be detected by the request for self-reflection).

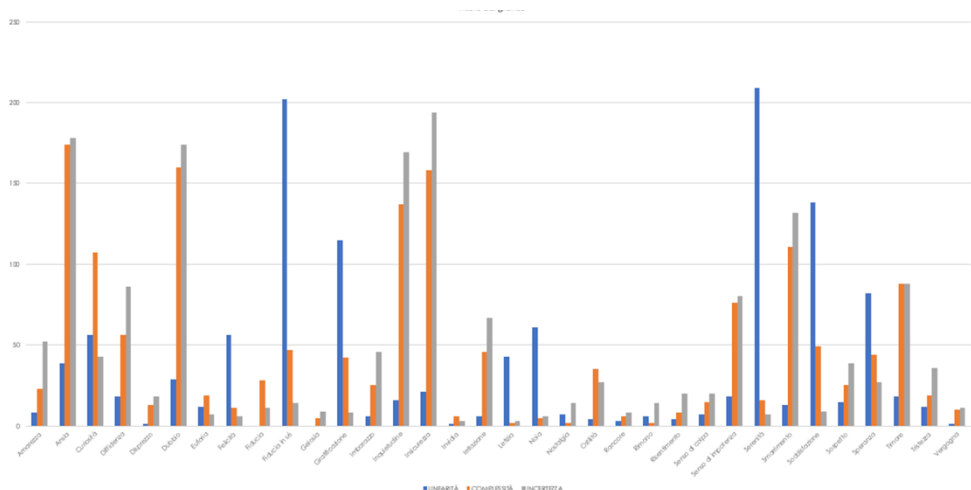


Figure 5 (the comparison of the states of mind evoked by the terms *linearity*, *complexity* and *uncertainty*, indicated as in-conscious by the technique of word tampering as and detectable by the request for metacognitive self-reflection).

The results of the questionnaire basically confirmed the hypothesis that one's answers can be related to the moods that are unconsciously activated when uttering or hearing terms that pass through the filters of perception. The discussion of the graphs processed in real time made it possible to ascertain that, in order:

- *linearity* is associated, in particular, with self-confidence, gratification, serenity, satisfaction, hope and, to a lesser extent, boredom;
- *complexity* is associated, in particular, with anxiety, curiosity, doubt, insecurity, disquiet, bewilderment, fear, a sense of powerlessness, mistrust, hostility and, to a lesser extent (10%), self-confidence and gratification;
- *uncertainty* shows a similar trend to that of complexity, with a higher percentage of 20% relating to anxiety, curiosity, doubt, insecurity, disquiet, bewilderment, fear, sense of powerlessness, mistrust, hostility and also self-confidence, and a lower percentage of 25% relating to gratification and curiosity.

With the development of awareness and the understanding of these differences, the relevance of the questions, arguments and, above all, the quality of the reports of the observations carried out during the placement changed. It was possible to detect a significant shift from mood-driven criticism to generative criticism and self-criticism: that is, an initiation of self-regulatory processes that can be considered indicators of a change in *mindset*. Finally, a consideration shared by the trainees

concerns the awareness that not having skills in transformative situations represents a state of complexity and uncertainty. This can initiate an increase in motivation in considering the learning process and the intentionality to express the best of oneself personally, professionally and socially as connected; in educational and social roles, this awareness can come precisely from knowing how to be and knowing how to become (Fregola, 2007) and finds significant evidence "in the research being developed in affective neuroscience in education precisely in the relationships between emotion and cognition" (Immordino-Yang, 2017, p. 38).

These changes, found in the trainees' attitude towards the complexity of learning, as well as the motivational drive shown by the same towards a job aimed not only at *knowing how to do* but also at *knowing how to be*, can be further explained if considered from the point of view of the identity dynamics triggered by the questionnaire and the repercussions on the values and self-reflection aspect that they entail.

4. Identity construction

Within the new reality of the infosphere, information and communication technologies become central tools in the process of defining reality and personal identities, true *technologies of the self*. Within what can be defined as a hyper-awareness of self, three different declinations of identity are created in the infosphere: the *social self*, i.e. who people think we are; the *conception of self*, which corresponds to who we think we are; and, finally, *personal identity*, which intercepts the perspective of who we are (Floridi, 2014). From this perspective, social media, as a media subset aimed essentially at a collective dimension, open up a virtual space in which the individual sculpts his or her *social self* by choosing the people whose thoughts and interactions contribute to defining its boundaries; this declination of the self then leads, indirectly, to determining one's *self-concept* and, in this way, one's *personal identity*. The question of identity thus becomes a question of *onlife* experience, beyond the distinction between on and offline environments as well as between the personal and the collective.

In viewing the results of the questionnaire within moments of filling it out, the trainees witnessed the creation of their *group/social selves* in real time, in ways at once similar and different to those experienced daily through social media. Using what Floridi (2014) calls the *digital gaze*, the self observes "the observation of itself" posed by other selves in the infosphere (among whom it is sometimes included as the main observer), and uses this representation to construct a *virtual identity*

through which it aspires to eventually grasp its own *personal identity*, in a mechanism of *hypermediation* (Bolter & Grusin, 2002) and potentially recursive feedback tending towards an *on-offline (onlife)* equilibrium (fig. 6).

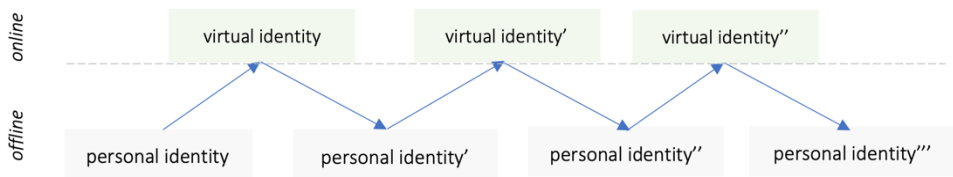


Figure 6 (dynamics of identity construction in social media).

In the dynamics of the questionnaire, the mechanism is somewhat different: the *personal identity* goes to meet the *virtual group identity* thanks to the graphically oriented digital gaze; in this way, it interfaces with the *group identity* of the trainees, triggering a process of identity redefinition of the individual between the group and the self, which leads, through self-consciousness, to a renewed *personal identity* (fig. 7).

Since the individual *is* information (*infor*g), it is evident that a change/alteration in the latter inevitably leads to a redefinition in terms of identity (Floridi, 2014): in this sense, the given *informative* datum becomes a *formative* instance, acting on the pedagogical dimension of knowing *how to be*. Without the conceptual and technological infrastructure of the infosphere, which allows the instantaneousness of interactions thanks to the correspondence between enunciation and utterance typical of performative action, such *in-formation* would simply not have taken place.

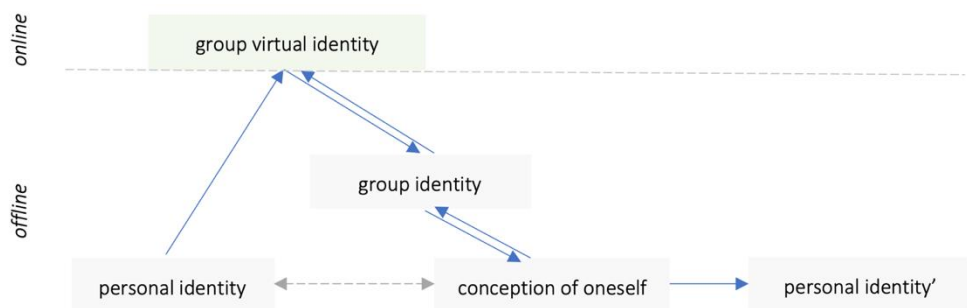


Figure 7 (dynamics of *onlife* identity construction in the questionnaire).

Unlike - again - the functioning mechanisms of social media, in which the social self is progressively and dynamically *constructed* through the various contents

published, in the questionnaire the social/group dimension, the result of a formative instance and not the object of any authorial intentionality, is *revealed* to the individuality thanks to the gaze turned to the digital mirror. Similarly to the child who, in his or her original experience, perceives his or her own body as *fragmented*, made up of separate parts or pieces, which is only recomposed and unified thanks to the encounter with the reflected image during the *mirror* phase (Lacan, 1977), so the trainee, initially isolated and unaware of his preconceptions, through the mirror-image of the graphic reports of the questionnaire, comes to perceive the relationship with the others within the *body/group*, evident in the degree of affinity of the responses of the individuals with the whole.

Exactly as in physical reality, even in the hybrid virtuality of *onlife*, the self projects its own self into a whole, a "generalised other" (Mead, 1972, p. 216): reflecting oneself in the attitude of the *generalised other* becomes the foundation of the identity process according to a *reflexive* logic, i.e. based on the reflection of one's own image in the *social mirror* of the group. The fact of being reflected in the other and being able to modify one's own image thanks to mirroring – already present in Platonic dialogues – means that the self can objectify itself, becoming *something* to be observed and modelled according to the indications obtained from the reflection. The virtual identity, whether individual or group, appears as a *self/group object*, i.e. as something that refers but is simultaneously other than me/us, since it is a representation, a reflection, exactly like that generated by a mirror (Denicolai, 2014).

Reflexivity is to be declined on the educational level as a work of self-analysis aimed at shaping-oneself through the other than oneself (Perfetti & Ponziano, 2017). Searle (2009) points out in this regard how collective intentionality is formed through micro-phenomena occurring in individual brains. Through the digital mirror of the questionnaire, these reflections allowed the trainee to implement a continuous cross-reference between individual and group identity, through a gradual and continuous renegotiation and loss of individual particularities in favour of collective particularities.

The formative repercussions on the transversal dimension of *knowing how to be*, linked to shaping-oneself through the other, inevitably lead to intercepting also the *value dimension* and, through it, the affective component, involved in the questionnaire by the appeal to states of mind. If we mean by *values* "everything to which man is willing to attach such great importance that it constitutes an *ordering* force of his behaviour" (Chiosso 2018, p. 165), "the course within which the individual's choices settle" (Booth & Ainscow, 2014, p. 49), boundary objects that,

by enhancing the characteristics and specificities of each one, make collaboration between different actors and roles possible (Bowker and Star, 1999), their connection with the attitudes and behavioural choices – *on* and *offline* – that the individual also makes in relation to the other, which ultimately define his or her self-concept and identity, then becomes clear.

If, as we have shown, the media dimension can thus be used, through the reflections of the digital mirror, to solicit the dimension of *knowing how to be* and the values connected to it, it becomes clear why "the real problem for Media Education [is] represented precisely by the logics that today preside over the circulation of content and the definition of behaviour and *values*" (Rivoltella, 2020, p. 115). From this perspective, social media can be used by media educators - net of the awareness of the risks inherent in such a choice - as "devices for raising awareness of the *values* of democracy" (Ibid., p. 173), as well as others.

The relationship between the *value* dimension and that of *reflexivity*, highlighted earlier with regard to the functionalities of the virtual mirror, is underlined, in the pedagogical field, by the recent tendency towards "the overcoming of a technical training, [in favour of] a path in which non-technical skills are valued in the educational-didactic sphere" (Aiello, 2019, p. 60), in which reflexive practice (Schön, 1993) allows, through moments of confrontation and dialogue, the emergence (as well as the critique) of tacit knowledge (Polanyi, 1979), making teachers professionals aware of their own *values* and morals, embodied in their teaching actions (Zollo, 2019; Sannipoli & Gaggioli, 2021).

A pedagogical space defined on the *onlife* dimension also allows for an *experiential* mediation and a consequent rapprochement between theory and practice, both of which are considered central aspects for a value-oriented education, so that these do not remain in the background as theoretical concepts but become "values in action", "theory enriched by practical knowledge" (European Agency for Development in Special Needs Education, 2012, p. 24, 30). In the experience of the questionnaire, the authorship of the digital medium connected to the infosphere allowed the trainees to perceive themselves as the origin – individual – of what they observed in the graphs of the reports – group in nature – resulting in an overlapping of the role of reader and producer. In this way, they were able to directly *experience*, in the concrete of the experience mediated by the digital mirror, contents that traditionally would have been proposed to them through a theoretical and conceptual type of reflection.

The commonplaces and preconceptions that the questionnaire seeks to unveil by making them *directly* encountered by the trainees, constitute the raw material of the 'membrane' of the so-called "filter bubble", the informational bubble in which everyone receives only what interests them and confirms their pre-existing opinions (Pariser, 2011; Quattrociocchi & Vicini, 2017). In such a perspective, the digital mirror, capable of restoring the group dimension triggered by individual accounts, acts as a 'pin' - a *bubble pin* - capable of bursting the bubble by revealing its circumstantial and limited nature and short-circuiting the *confirmation bias* - 'only what I like and what confirms my thinking is true' - that was at its origin.

In the educational sphere, it is therefore a matter of operating a sort of 'cultural mediation', a translation of 'high culture' data into the cultural and participatory form comparable, in our case and for certain aspects, to that of the social media; instantaneous, visual, perceptually involving and group-based in nature. As the media become connected, interactive, portable and authorial they necessarily become an inescapable and integral resource for educational and training intervention within a New Media Education (Rivoltella, 2020).

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